RECORD OF DECISION for the *Deepwater Horizon* Oil Spill: Alabama Trustee Implementation Group Final Restoration Plan I and Final Environmental Impact Statement: Provide and Enhance Recreational Opportunities

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RECORD OF DECISION for the *Deepwater Horizon* Oil Spill: Alabama Trustee Implementation Group Final Restoration Plan I and Final Environmental Impact Statement: Provide and Enhance Recreational Opportunities

1 OVERVIEW

The federal and state natural resource Trustees in the Alabama Trustee Implementation Group (AL TIG) for the *Deepwater Horizon* (DWH) oil spill have prepared a Final Restoration Plan and Final Environmental Impact Statement (Final RP/EIS) for the purpose of restoring injured natural resources and services resulting from the spill. The RP was prepared under the authority of the Oil Pollution Act of 1990 (OPA), 33 U.S.C. §§ 2701 *et seq*., and integrated with an EIS in compliance with the federal agency decision-making requirements of the National Environmental Policy Act of 1969 (NEPA), 42 U.S.C. §§ 4321 *et seq*. The Final RP/EIS provides information and analysis concerning the approach proposed by the AL TIG for restoring injured resources and services.

This Record of Decision sets forth the basis for the AL TIG's decision to select six alternatives (described in Final RP/EIS, Section 2.2.4) it has determined best meet both the OPA Evaluation Criteria and the DWH oil spill Trustees' (DWH Trustees') goals and objectives for the "Provide and Enhance Recreational Opportunities" Restoration Type and that would fulfill its mission and responsibilities, giving consideration to economic, environmental, technical, and other factors. These alternatives are selected by the AL TIG because they provide the most effective means, at this time, to meet the RP/EIS purpose of restoring lost shoreline recreational use in the State of Alabama.

Given the potential magnitude and breadth of restoration for injuries resulting from the DWH oil spill, the DWH Trustees prepared a Programmatic Damage Assessment and Restoration Plan/Programmatic Environmental Impact Statement (PDARP/PEIS) under OPA and NEPA to analyze alternative approaches to implementing restoration and to consistently guide future restoration decisions made by each TIG. Based on the DWH Trustees' thorough assessment of impacts to the Gulf's natural resources, a comprehensive, integrated ecosystem restoration approach for restoration implementation was proposed. On February 19, 2016, the DWH Trustee Council issued a Final PDARP/PEIS detailing a specific proposed plan to fund and implement restoration projects across the Gulf of Mexico region over the next 15 years. On March 29, 2016, in accordance with OPA and NEPA, the DWH Trustees published a Notice of Availability of a Record of Decision for the Final PDARP/PEIS in the Federal Register [FR] (81 FR 17438). Based on the DWH Trustees' injury determination established in the Final PDARP/PEIS, the Record of Decision set forth the basis for the DWH Trustees' decision to select Alternative A: Comprehensive Integrated Ecosystem Alternative. The DWH Trustees' selection of Alternative A includes the funding allocations established in the Final PDARP/PEIS. More information about Alternative A can be found in Sections 5.5 and 5.10 of the Final PDARP/PEIS.

The Final PDARP/PEIS also sets forth the process for subsequent restoration planning to select specific projects for implementation, based on the DWH Trustee governance structure detailed in Chapter 7. The Final PDARP/PEIS establishes a distributed governance structure that assigns a TIG for each of the eight Restoration Areas described in Chapter 5. Each TIG makes all restoration decisions for the funding allocated to its Restoration Area. On April 4, 2016, the United States District Court for the Eastern District of Louisiana entered a Consent Decree resolving civil claims by the DWH Trustees against BP Exploration and Production Inc. arising out of the DWH oil spill. This historic settlement resolved the

DWH Trustees' claims against BP for natural resources damages under OPA. Under the Consent Decree, BP agreed to pay a total of $8.1 billion in natural resource damages over a 15-year period, and up to an additional $700 million for adaptive management or to address injuries to natural resources that are presently unknown but may come to light in the future. As part of the settlement, proceeds are allocated to the DWH Trustees to conduct restoration within specific Restoration Areas and for specific Restoration Types, which are identified in the Final PDARP/PEIS.

The total natural resource damage assessment (NRDA) funding for the Alabama Restoration Area is $295,589,305, with a total remaining NRDA allocation of $234,800,000. Of these funds, $25 million was allocated to the Alabama Restoration Area for the "Provide and Enhance Recreational Opportunities" Restoration Type pursuant to the Consent Decree. This is in addition to the $85,505,305 allocated for that purpose during early restoration.

When a PEIS is prepared, the agency(ies) may "tier" subsequent environmental analyses for site-specific plans or projects from that PEIS (40 CFR § 1502.4[b]; 40 CFR § 1508.28). Federal agencies are encouraged to tier subsequent analyses from a PEIS to eliminate repetitive discussions of the same issues and focus on the actual issues ripe for decision at each level of environmental review (40 CFR § 1502.20). The Final PDARP/PEIS describes how the Trustees, via TIGs for each defined Restoration Area, will prepare a series of subsequent restoration plans to propose and select specific projects for implementation, including tiering NEPA analyses for those subsequent restoration plans from the analysis in the PDARP/PEIS. The AL TIG's Final RP/EIS tiers from the Final PDARP/PEIS, and the process outlined in the Final RP/EIS is fully consistent with the goal set out in the Final PDARP/PEIS of providing and enhancing recreational opportunities Gulf-wide, including by increasing beach-going through a combination of ecological restoration and the creation of infrastructure, access, and use opportunities (Final PDARP/PEIS, Section 5.5.14.2). Chapter 2 of the Final RP/EIS describes the screening and identification of a reasonable range of alternatives for evaluation under OPA and NEPA, while Chapter 3 describes the considerations the AL TIG included when performing the OPA evaluation of the alternatives. This evaluation process is informed by the OPA criteria found in 15 CFR § 990.54(a), as well as public comments, including those received on the Notice of Intent (NOI) for the RP/EIS and those received on the Draft RP/EIS. Further discussion of implementation is addressed in Section 8 of this Record of Decision.

The following federal agencies are the designated members of the AL TIG under OPA for this spill:

- The National Oceanic and Atmospheric Administration (NOAA), on behalf of the U.S. Department of Commerce.
- The U.S. Department of the Interior (DOI), as represented by the U.S. Fish and Wildlife Service (USFWS), National Park Service (NPS), and Bureau of Land Management (BLM).
- The U.S. Environmental Protection Agency (EPA).
- The U.S. Department of Agriculture (USDA).

The following state agencies are designated as members of the AL TIG under OPA for the spill:

- Alabama Department of Conservation and Natural Resources (ADCNR).
- Geological Survey of Alabama (GSA).

NOAA serves as the lead federal agency for NEPA compliance for the RP/EIS. Each of the other federal and state co-Trustees is participating as a cooperating agency pursuant to NEPA (40 CFR § 1508.5) and the DWH Trustee Council's Standard Operating Procedures (Section 2.3.3). There are no other cooperating federal, state, or local entities or Indian tribes.

As cooperating agencies, each federal agency on the AL TIG must make its own independent evaluation of the NEPA analysis in support of its AL TIG decision-making responsibilities. In accordance with 40 CFR § 1506.3 (a), each of the three remaining federal agencies participating on the AL TIG has reviewed the Final RP/EIS, found that it meets the standards set forth in its own NEPA-implementing procedures and accordingly has adopted the Final RP/EIS NEPA analysis. The Trustees are issuing this Record of Decision pursuant to NEPA regulations at 40 CFR § 1505.2 and OPA regulations at 15 CFR § 990. This document serves as the NEPA Record of Decision for NOAA, DOI, EPA, and USDA.

2 INTRODUCTION AND PURPOSE AND NEED

2.1 *Deepwater Horizon* Incident

On April 20, 2010, the DWH mobile drilling unit exploded, caught fire, and eventually sank in the Gulf of Mexico, resulting in a massive release of oil and other substances from BP's Macondo well. Tragically, 11 workers were killed and 17 injured by the explosion and fire. Initial efforts to cap the well following the explosion were unsuccessful, and for 87 days after the explosion, the well continuously and uncontrollably discharged oil and natural gas into the northern Gulf of Mexico. Approximately 3.19 million barrels (134 million gallons) of oil were released into the ocean (U.S. v. BP et al. 2015), by far the largest offshore oil spill in the history of the United States. The volume of oil discharged during the DWH spill was equivalent to the Exxon Valdez oil spill re-occurring in the same location every week for 12 weeks.

Oil spread from the deep ocean to the surface and nearshore environment, from Texas to Florida. The oil came into contact with and injured natural resources as diverse as deep-sea coral, fish and shellfish, productive wetland habitats, sandy beaches, birds, endangered sea turtles, and protected marine life. The oil spill prevented people from fishing, going to the beach, and enjoying their typical recreational activities along the Gulf of Mexico. Extensive response actions, including cleanup activities and actions to try to prevent the oil from reaching sensitive resources, were undertaken to try to reduce harm to people and the environment. However, many of these response actions had collateral impacts on the environment. The oil and other substances released from the well, in combination with the extensive response actions, together make up the DWH oil spill incident.

As an oil pollution incident, the DWH spill was subject to the provisions of OPA, which addresses preventing, responding to, and paying for oil pollution incidents in navigable waters, adjoining shorelines, and the exclusive economic zone of the United States. Under the authority of OPA, a council of federal and state "Trustees" was established, on behalf of the public, to assess natural resource injuries resulting from the incident and work to make the environment and public whole for those injuries. As required under OPA, the DWH Trustees conducted a NRDA. The AL TIG then prepared a RP/EIS, which describes its proposed plan to restore for a portion of Alabama's recreational use losses. A Draft RP/EIS was made available for public review and comment, and the AL TIG considered public comments when preparing the Final RP/EIS, as discussed in Chapter 9 of the Final RP/EIS and in Section 6 of this Record of Decision.

2.2 Purpose and Need

The AL TIG has undertaken this restoration planning effort to meet the purpose of restoring those natural resources and services injured as a result of the DWH oil spill. The Final RP/EIS is consistent with the Final PDARP/PEIS, which identifies extensive and complex injuries to natural resources and services across the Gulf of Mexico, as well as a need and plan for comprehensive restoration consistent with

OPA. The Final RP/EIS focuses on the restoration of Alabama's natural resources and services, in particular within the Restoration Type: "Provide and Enhance Recreational Opportunities," using funds made available through the DWH Consent Decree and in early restoration.

Specifically, for the purpose of restoring natural resources and services injured as a result of the DWH oil spill, the DWH Trustees needed to address the associated loss of recreational shoreline uses in Alabama. Therefore, the DWH Trustees propose to implement compensatory restoration projects that would provide the public with additional and enhanced recreational shoreline use services in Alabama in a manner consistent with the Final PDARP/PEIS.

2.3 Alternatives Considered

The range of alternatives was developed through a comprehensive screening process. The goal of the AL TIG's screening process was to identify a set of alternatives that provides a reasonable range of options for compensating the public for Alabama's lost shoreline recreational use caused by the DWH oil spill. The screening process was designed to identify recreational restoration projects with a reasonable likelihood of satisfying the OPA criteria and with no obvious major negative environmental impacts under NEPA, recognizing that this cannot be assured until more thorough OPA/NEPA evaluations are completed. The phased and sequential screening process included the following steps:

1. Initial OPA eligibility screen,
2. Removal of duplicate projects,
3. Removal of previously funded projects, and
4. Final screening based on AL TIG review of additional project information.

A detailed description of the screening process is provided in the Final RP/EIS, Section 2.1.

Alternatives in the Draft RP/EIS were developed following consideration of those comments received during public scoping. The alternatives in the Final RP/EIS were further clarified based on comments received on the Draft RP/EIS. The AL TIG has considered public involvement to be an important component throughout this restoration planning process (Final RP/EIS, Section 1.5.1). Public involvement for this plan and how it was used to develop alternatives is discussed in Section 1.7 of the Final RP/EIS.

All alternatives that were carried forward for detailed analysis are described below, including those that were preferred (alternatives 1, 2, 5, 6, 7, and 9) and those that were non-preferred (Alternatives 3, 4, 8, and the no action alternative). For all alternatives except Bayfront Park Restoration and Improvement, the Final RP/EIS proposes project planning and implementation. In the case of Bayfront Park Restoration and Improvement, only project planning activities (e.g., engineering and design) [E&D]) are being proposed at this time to provide more information to fully evaluate the alternative at a later date. Bayfront Park Restoration and Improvement was analyzed for the purpose of OPA (Final RP/EIS, Chapter 3), but is not carried through the affected environment (Final RP/EIS, Chapter 4) or environmental consequences (Final RP/EIS, Chapter 5) sections because only E&D activities are being considered at this time. The NEPA analysis appropriate for projects considered only for E&D is addressed in the Final PDARP/PEIS (Final PDARP/PEIS, Section 6.4.1.4) and in Chapter 5 of the AL TIG's Final RP/EIS. A description of the no action alternative is also included in this section.

The AL TIG may evaluate additional alternatives that provide and enhance recreational opportunities for implementation in the Alabama Restoration Area, including, as feasible, projects screened in the Final RP/EIS but not determined to be preferred for selection at this time, in subsequent restoration plans.

2.3.1 Baldwin County Projects

- Alternative 1—Gulf State Park Lodge and Associated Public Access Amenities Project. This alternative would (1) partially rebuild the Gulf State Park Lodge, which was destroyed in 2004 by Hurricane Ivan; and (2) develop a host of public access amenities that would connect the lodge to other aspects of the park, create and enhance public use and enjoyment of the beach areas at Gulf State Park for all visitors, and increase access to the non-beach areas within the park for all visitors. Construction of a lodge and conference center at Gulf State Park has already begun with the use of state-controlled, non-NRDA funds, but additional funds are needed to complete that project. In addition to partially funding the completion of lodge construction, the AL TIG project would provide funding to the public access amenities described in the Final RP/EIS. The total cost of the project is $56.3 million. As part of this project, the AL TIG is not funding and is not proposing to fund any portion of the conference center at Gulf State Park.
- Alternative 2—Fort Morgan Pier Rehabilitation. This alternative would fund the rehabilitation of a fishing pier located on Fort Morgan Peninsula in southwestern Baldwin County, Alabama. The existing pier is approximately 500 feet long and is located at the Fort Morgan State Historic Site. Until recently, the Fort Morgan fishing pier was heavily used by recreational fishermen. However, the pier, which is over 40 years old, fell into disrepair, and in 2014 the Alabama Historical Commission closed the pier for safety reasons. The proposed project would rehabilitate the pier on its existing foundations, increasing publicly available opportunities for pier-based fishing in Baldwin County.
- Alternative 3—Fort Morgan Peninsula Public Access Improvements. This alternative would fund Gulf beach access improvements on Fort Morgan Peninsula in southwest Baldwin County, Alabama. The proposed alternative would construct a mix of parking lots, restrooms, showers, and dune walkovers at 11 existing Baldwin County- and state-owned sites. These sites mainly consist of narrow (50 to 100 feet wide) county-owned parcels at the end of county-owned rights-of-way (ROWs). The sites are currently accessible to the public but lack amenities that would enhance existing public use and/or promote additional use of the sites. Educational signage focused on coastal natural resources would also be placed at the sites to promote environmental awareness and stewardship.
- Alternative 4—Gulf Highlands Land Acquisition and Improvements. This alternative would fund the acquisition and transfer of the Gulf Highlands parcel located in southwest Baldwin County to the ADCNR State Parks Division. The property is approximately 113 acres, with more than 2,700 feet of undeveloped Gulf-fronting beach. Once acquired, a parking lot for 40 cars and boardwalk (approximately 1,280 feet long) would be constructed, and educational and interpretive signage would be added. This alternative would increase recreational access to this area, while protecting the area's sensitive resources. This alternative was evaluated under the National Fish and Wildlife Foundation (NFWF) Gulf Environmental Benefit Fund (GEBF) and awarded NFWF GEBF funding; however that funding has not yet been received.
- Alternative 5—Laguna Cove Little Lagoon Natural Resource Protection. This alternative involves the acquisition of two undeveloped tracts of land, totaling approximately 53 acres near Little Lagoon in Gulf Shores, Alabama, by the City of Gulf Shores. The tracts contain coastal wetlands and include portions of shoreline along Little Lagoon. In addition to land acquisition, several improvements are proposed to provide recreational access to the site, including a boardwalk, kayak launch, parking, and restrooms. Educational signage focused on coastal resources would be placed around the site to promote environmental awareness and stewardship. Once acquired, the land would be managed by the City of Gulf Shores.

2.3.2 Mobile County Projects

- Alternative 6—Bayfront Park Restoration and Improvement. This alternative evaluates engineering and design (E&D) activities to examine restoring Bayfront Park and providing additional improvements to the park. Bayfront Park is located in Mobile County, on Dauphin Island Parkway near the Alabama Port community. The proposed E&D work would evaluate the construction of a living shoreline and/or a sandy beach along Bayfront Park's currently armored shoreline along Mobile Bay and the development of additional recreational amenities at the park. The new amenities could include improved restroom and playground facilities, a renovated wetland boardwalk and nature trail, expanded birdwatching opportunities, and a geocaching nature trail. In addition, the E&D work would include developing a plan for the addition of signage and interpretive materials promoting environmental education and stewardship. If this project were selected for implementation, additional NEPA analysis to address project implementation (construction and operation of the project) would occur at that time.
- Alternative 7—Dauphin Island Eco-Tourism and Environmental Education Area. Approximately 100 acres of land would be acquired and managed by the Town of Dauphin Island. The alternative would include developing a parking area and visitor amenities, including a bicycle path, boardwalks, a fishing pier, gazebos, and public restrooms. Boardwalks would be placed above wetland habitat to allow visitors access to these habitats while minimizing environmental impacts. Educational signage would be placed at strategic locations to improve public awareness of environmental resources and enhance learning opportunities. This alternative would increase public access to wetland habitats adjacent to Aloe Bay, where very little public access currently exists.
- Alternative 8—Mid-Island Parks and Public Beach Improvements (Parcels A, B, and C). This alternative involves the acquisition of a total of approximately 10 acres and construction of access improvements on three separate parcels of land. Once acquired, the Town of Dauphin Island would manage the land. These acquisitions and improvements would create new passive recreational opportunities and public access to the Alabama shoreline, as well as enhance the quality of the experiences for visitors who currently use Dauphin Island's public beaches, through the development of new visitor use amenities, including added parking, restroom facilities, and other passive recreational amenities. A portion of this project (acquisition of Parcel A) has been awarded NFWF GEBF funding, although this funding has not yet been received. As further described in Chapter 2 of the Final RP/EIS, this alternative was refined based on public comment on the Draft RP/EIS.
- Alternative 9—Mid-Island Parks and Public Beach Improvements (Parcels B and C). This alternative involves the acquisition and construction of access improvements on two separate parcels of property, which total approximately 2 acres, to collectively offer passive recreational opportunities, public parking, and restroom facilities at Dauphin Island. Once acquired, the Town of Dauphin Island would manage the land. This project is designed to enhance access to the Alabama shoreline, including Gulf-facing beaches. Added parking, restroom facilities, and other passive recreational amenities would increase public access and enhance the quality of visitor experiences. As further described in Chapter 2 of the Final RP/EIS, this alternative was refined based on public comment on the Draft RP/EIS.

2.3.3 No Action Alternative

The alternatives under consideration must include the "no action" alternative as prescribed by 40 CFR § 1502.14. Under the no action alternative, the AL TIG would not, at this time, select and implement the

restoration projects in the RP/EIS to compensate for lost recreational shoreline use services resulting from the DWH oil spill. Under the no action alternative, only recreational use projects selected and/or implemented during early restoration (see the Final Phase III ERP/PEIS and Final Phase IV ERP/EA) (DWH Trustees, 2014; 2015) would compensate the public for lost recreational use in Alabama at this time. Providing additional compensation to the public would be delayed pending the completion of a future restoration plan. Accordingly, the no action alternative would not meet the purpose and need for implementing projects that address lost recreational use as described in Section 5.4.6 of the Final PDARP/PEIS and in Section 1.2 of the AL TIG RP/EIS, because it would not help meet the restoration goals of the "Provide and Enhance Recreational Opportunities" Restoration Type.

The no action alternative represents no change from current management and is considered with respect to the individual project-specific action alternatives. If this plan was not implemented, none of the projects proposed as preferred alternatives would be selected for implementation. If the no action alternative was selected, what represents "the continuation of current management" would be different for each of the projects under consideration. Section 2.2.3 of the Final RP/EIS details what would occur for each project type under the no action alternative.

3 DECISION MADE BY THE ALABAMA TIG

This Record of Decision sets forth the basis for the AL TIG's decision to select six specific restoration alternatives, five for full implementation and one for E&D. The factors considered, rationale for decision, and alternatives selected are discussed below.

3.1 Factors Considered

In reaching its decision, the AL TIG considered the purpose and need for the action as described in Section 2.2 of this Record of Decision, including the evaluation criteria developed for the RP described in Section 2.1 of the Final RP/EIS. The AL TIG also carefully considered public comments. The Final RP/EIS provides the AL TIG's comparison of alternatives (see Final RP/EIS Chapter 5, Section 5.4, Comparison of Alternatives), based on the OPA Evaluation Standards (15 CFR § 990.54[a][1]–[6]) (see Final RP/EIS, Section 3.0), and supported by the consideration of the environmental consequences of the alternatives, summarized in Section 4.1 below.

The AL TIG followed the OPA regulations identifying minimum criteria to evaluate alternatives. The AL TIG evaluated and selected proposed restoration projects based on the following OPA evaluation standards:

- The cost to carry out the alternative.
- The extent to which each alternative is expected to meet the AL TIG's goals and objectives in returning the injured natural resources and services to baseline and/or compensating for interim losses.
- The likelihood of success of each alternative.
- The extent to which each alternative would prevent future injury as a result of the incident and avoid collateral injury as a result of implementing the alternative.
- The extent to which each alternative would benefit more than one natural resource and/or service.
- The effect of each alternative on public health and safety.

3.2 Alternatives Selected and Rationale for Decision

Based on the NEPA and OPA analysis, the AL TIG has selected the following alternatives for implementation at this time, as described in the Final RP/EIS:

- Gulf State Park Lodge and Associated Public Access Amenities Project
- Fort Morgan Pier Rehabilitation
- Laguna Cove Little Lagoon Natural Resource Protection
- Bayfront Park Restoration and Improvement (E&D Only)
- Dauphin Island Eco-Tourism and Environmental Education Area
- Mid-Island Parks and Public Beach Improvements (Parcels B and C)

These alternatives have been selected for implementation because the AL TIG has determined that they best meet both the OPA evaluation criteria (15 CFR § 990.54) and the DWH Trustees' goals and objectives for the "Provide and Enhance Recreational Opportunities" Restoration Type (Final PDARP/EIS, Section 5.5), and that these alternatives would fulfill the AL TIG's mission and responsibilities, giving consideration to economic, environmental, technical, and other factors. Additionally, these alternatives were selected for implementation because they provide the most effective means to meet the Final RP/EIS purpose of restoring lost shoreline use in the State of Alabama.

The OPA analysis indicates that each of these six alternatives would provide recreational benefits with a strong nexus to the shoreline injuries caused by the DWH spill. The alternatives all occur in areas that either were directly oiled by the spill, were the location of response activities, or are in proximity to these areas. Recreational benefits would accrue from land acquisitions that protect valuable habitat and create public access to coastal natural resources and through the development of infrastructure and environmental stewardship resources that enhance shoreline recreation and the appreciation of Alabama's coastal natural resources. These benefits would be broadly available to the public over an extended timeframe.

Although the focus of the alternatives included in the Final RP/EIS is shoreline recreation, these alternatives would also benefit other natural resources and services. Land protection would prevent the negative environmental impacts of development (e.g., habitat loss, impaired water quality). Similarly, infrastructure would be designed and implemented to manage public access in ways that would minimize impacts on valuable habitats and species. These approaches would also ensure that any collateral damage to the environment is minor and mitigated. Furthermore, no adverse impacts on public health are anticipated from any of the selected alternatives.

Based on Trustee experience in Alabama, each of the six alternatives could be implemented at a reasonable cost and would have a high probability of success. The alternatives include provision of funding for both maintenance and monitoring to ensure these benefits would be available over the planned life of the projects. In the case of alternatives that include land acquisition, an appropriate land protection instrument (i.e., deed restriction, conservation easement) will be included to ensure that the purpose of compensating for lost recreational use as described in the Final RP/EIS is maintained for the life of the project.

The AL TIG also evaluated three additional projects as part of the set of reasonable alternatives:

- Fort Morgan Peninsula Public Access Improvements
- Gulf Highlands Land Acquisition and Improvements

- Mid-Island Parks and Public Beach Improvements (Parcels A, B, and C)

The OPA evaluation indicates that these three alternatives have good potential for providing public natural resource benefits, but do not meet the AL TIG's objectives at this time. The Gulf Highlands Land Acquisition and Improvements and Mid-Island Parks and Public Beach Improvements (Parcel A) alternatives have been awarded funding from other restoration funding sources (e.g., NFWF GEBF). This NFWF GEBF funding would accomplish the restoration described in the Final RP/EIS plan and provide similar restoration benefits. Thus, the use of NRDA funds for other efforts not yet identified for funding would best maximize overall restoration in the Alabama Restoration Area. If the approved funding through NFWF GEBF is not finalized, these projects could be reconsidered in a future restoration planning process. Although a portion of the Gulf State Park Lodge and Associated Public Access Amenities Project is being funded with Alabama's oil spill economic damages settlement and BP grant funding, that funding alone is not sufficient to complete the project. Therefore, the project is selected for implementation because, absent funding from DWH NRDA, the project would likely need to be funded privately, and it is not known if the proposed public access amenities would be completed or would be as broadly accessible to the public as is proposed in the Final RP/EIS (see Appendix F of the Final RP/EIS). For these reasons, funding of the Gulf State Park Lodge and Associated Public Access Amenities Project is selected because, unlike the Gulf Highlands Land Acquisition and Improvements and Mid-Islands Parks and Public Beach Improvements (Parcel A) alternatives, it is not known if the restoration benefits of this project could be fully implemented without NRDA funds.

Based on the OPA evaluation, including concerns raised by Baldwin County, it was determined that a third alternative, the Fort Morgan Peninsula Public Access Improvements, is not expected to provide adequate public benefits because it would create overcrowding at the beach access sites and limit the ability of the county to conduct operations in response to hurricanes. Overcrowding and the inability to address hurricane impacts on the beaches could reduce the long-term benefits of the alternative.

Projects not selected (Gulf Highlands Land Acquisition and Improvements, Fort Morgan Peninsula Public Access Improvements, and Mid-Island Parks and Public Beach Improvements [Parcels A, B, and C]) do not best meet the AL TIG's objectives at this time. Per the OPA and NEPA analysis in the Final RP/EIS (Chapters 3 and 5 of the Final RP/EIS, respectively), however, these projects could be viable projects in the future and could be revisited in a future restoration planning effort, as described above, if not otherwise funded by another source.

3.3 The Environmentally Preferable Alternative

As required by the Council on Environmental Quality (CEQ) NEPA implementing regulations, a Record of Decision must identify the alternative or alternatives considered to be environmentally preferable (40 CFR § 1505.2[b]). The environmentally preferable alternative is the alternative that causes the least damage to the biological and physical environment and best protects, preserves, and enhances historical, cultural, and natural resources.

The AL TIG has determined that the six preferred alternatives collectively are the environmentally preferable alternative. In addition to representing the best path to addressing the injuries to natural resource services from the spill, these alternatives provide a comprehensive approach to address restoration of lost shoreline recreational opportunities and have outcomes to address these injuries, while having multiple benefits, such as land acquisition and protection, which both provide recreational enhancements and protect sensitive coastal habitats. Further, each project has an educational component designed to increase public awareness and promote stewardship of the natural resources.

4 COMPARISON OF THE ENVIRONMENTAL CONSEQUENCES OF THE ALTERNATIVES

The AL TIG considered the environmental impacts as part of the decision making described in this Record of Decision. This section summarizes and compares the environmental consequences of the nine proposed alternatives in addition to the no action alternative.

4.1 Summary of Impacts of Alternatives

As part of the EIS, potential long- and short-term physical, biological, and socioeconomic impacts of restoration under the alternatives were evaluated. A site-specific analysis found the proposed alternatives would affect the Gulf Shores or Dauphin Island area during and after their proposed construction times.

Unless specified otherwise, impacts caused during construction are generally considered "short term," and impacts lasting after the completion of the project are generally considered "long term." The methodology for determining impacts and the definitions of thresholds for each resource topic are detailed in Section 6.3.2 of the Final PDARP/PEIS and provided in Table 5-1 of the Final RP/EIS. The Final RP/EIS found beneficial and adverse, and minor, moderate, or major impacts resulting from the proposed alternatives depending on the specific characteristics of the projects, including size, location, design, operation, and other aspects of future project development. However, there are some similarities in impacts across resources. For example, benefits to physical and biological resources are typically long term and result from habitat preservation that results from land acquisition. Adverse impacts are generally short term, such as disturbances associated with construction activities. Long-term, adverse impacts include impacts on geology, substrates, and habitat as a result of conversion of habitat from one type to another that occurs as part of restoration activities, construction of infrastructure, and increased human presence in the area. The impacts of the proposed alternatives evaluated in the Final RP/EIS are consistent with the Final PDARP/PEIS analysis. A full analysis of the impacts can be found in Section 5.0 of the Final RP/EIS, and a summary is provided in Attachment 1 of this Record of Decision.

4.2 Cumulative Impacts

A cumulative impacts analysis was conducted that assessed the impacts of the proposed alternatives when added to other past, present, and reasonably foreseeable future actions. Based on the analysis, the AL TIG concluded that numerous physical, biological, and socioeconomic benefits would be expected to result from the six preferred alternatives, such as improved health of wildlife and fish populations, increased opportunities for wildlife viewing and fishing, and regional benefits from tourism and recreation due to restoration of barrier islands and beaches and other important habitats, among others. None of the alternatives would contribute substantially to cumulative adverse impacts for any of the affected resources analyzed. Based on information available for this analysis, the six alternatives would not contribute substantially to short-term or long-term cumulative adverse impacts to physical, biological, or socioeconomic resources when analyzed in combination with other past, present, and reasonably foreseeable future actions. In many situations, implementing one of the action alternatives would likely help reduce overall long-term, adverse impacts by providing a certain level of offsetting benefits, especially when considered in concert with other actions of a similar nature (e.g., stewardship programs or non-NRDA restoration).

The cumulative impacts analysis is evaluated by affected resource to address potential impacts in more detail and can be found in Section 5.3.5 of the Final RP/EIS.

4.3 Mitigation Measures

In developing and selecting the preferred alternatives and associated best management practices (BMPs) and mitigation measures, the AL TIG ensured that all known and practicable means that could be used to avoid or minimize potential adverse effects when planning and implementing restoration projects were considered and have been adopted by the TIG. Site-specific mitigation measures identified during planning and/or resulting from consultations were considered and adopted (see Section 5 and Appendix J of the Final RP/EIS). As new best practices are established, existing best practices are refined, or new techniques and information are informed by implementation, these measures would be considered and could be adopted as part of ongoing project implementation. In this capacity, the selected projects would have available the current range of best practices to support project design and implementation.

Additionally, all projects implemented under the Final RP/EIS would secure all necessary state and federal permits, authorizations, consultations, or other regulatory processes, including those related to sensitive habitats (e.g., wetlands or essential fish habitat), protected species, and cultural and historic resources, and additional measures to avoid and minimize potential adverse effects would be considered and adopted, as appropriate, based on these future processes and reviews.

Based on the best practices identified in Section 5 and Appendix J to the Final RP/EIS and the AL TIG's decision to adopt additional mitigation measures for the selected projects based on future environmental reviews and compliance and site-specific circumstances, the AL TIG has determined that all practicable means to avoid or minimize environmental harm from the preferred alternatives have been adopted and, as appropriate, would be adopted during future planning and project implementation.

5 COMPLIANCE WITH RELEVANT ENVIRONMENTAL LAWS, REGULATIONS, AND EXECUTIVE ORDERS

Before selecting the preferred alternatives, the AL TIG reviewed the proposed action to ensure that taking such action would be consistent with relevant federal laws, regulations, and Executive Orders. Section 6.0 of the Final RP/EIS details the compliance process.

Federal environmental compliance responsibilities and procedures would follow the *Trustee Council Standard Operating Procedures for Implementation of the Natural Resource Restoration for the Deepwater Horizon (DWH) Oil Spill,* which are laid out in Section 9.4.6 of that document and described in the Environmental Compliance Manual Appendix (DWH Trustees, 2016c). Following these standard operating procedures, the implementing Trustee for each project would ensure that the status of environmental compliance (e.g., completed versus in progress) is tracked through the Restoration Portal. Implementing Trustees would keep a record of compliance documents (e.g., Endangered Species Act [ESA] biological opinions, United States Army Corps of Engineers [USACE] permits) and ensure that they are submitted for inclusion to the Administrative Record.

In addition to OPA and NEPA requirements, requirements of other federal laws may apply to the RP/EIS and projects evaluated in the RP/EIS. The AL TIG considered relevant laws, regulations, and Executive Orders (EOs) with respect to the selected alternatives. Federal laws reviewed as part of the RP/EIS process are: the ESA; the Magnuson-Stevens Fishery Conservation and Management Act; the Marine Mammal Protection Act; the Coastal Zone Management Act (CZMA); the National Historic Preservation Act; the Coastal Barrier Resources Act; the Migratory Bird Treaty Act (MBTA) and Bald and Golden Eagle Protection Act; the Clean Air Act; the Clean Water Act; the Rivers and Harbors Act; the Marine

Protection, Research and Sanctuaries Act; the Archaeological Resource Protection Act; and the Land and Water Conservation Fund. Chapter 5.0 of the Final RP/EIS evaluates the impacts of the alternatives and compliance with the following EOs: EO 11988: Floodplain Management, EO 11990: Protection of Wetlands, EO 12898: Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations, EO 13112: Invasive Species, EO 13175: Consultation and Coordination with Indian Tribal Governments, EO 13186: Responsibilities of Federal Agencies to Protect Migratory Birds, and EO 13693: Planning for Federal Sustainability in the Next Decade. Prior to the completion of regulatory reviews and approvals of subsequent projects tiered from the PDARP/PEIS, the AL TIG would not make any irreversible or irretrievable commitment of resources on that project that has the effect of foreclosing alternative measures to protect trust resources. This does not prohibit the AL TIG from conducting or authorizing nondestructive project planning activities before completion of regulatory reviews and approvals. Documentation related to these compliance processes is also provided in the projects' Administrative Record.

Consultations that are in progress and ongoing are described below. These compliance requirements would be completed before project implementation. Further information on these processes can be found in Chapter 6.0 of the Final RP/EIS.

5.1 Consultations Under the Endangered Species Act

The process to comply with the ESA is detailed in the Final PDARP/PEIS (Section 6.9.1.) and in the *DWH Trustee Council Standard Operating Procedures – Appendix F Environmental Compliance Manual* (DWH Trustees, 2016c). For the alternatives proposed under the Final RP/EIS, the AL TIG is engaged in Section 7 consultation with the appropriate agencies for ESA compliance. All formal and informal consultations required by USFWS or the National Marine Fisheries Service (NMFS) under the ESA have either been initiated and/or completed. The initiation documents are included in Appendix K of the Final RP/EIS. For those not completed, project implementation would not begin until this compliance has been completed.

5.2 Consultation Under the Marine Mammal Protection Act

Although some of the alternatives described in the Final RP/EIS may result in directed or incidental (e.g., entrapment or noise harassment from pile driving) take of marine mammals, directed take (e.g., scientific research and monitoring) is not expected. Incidental takes are those that are unintentional, but not unexpected. Further information on the types of take and compliance required can be found in the Final PDARP/PEIS, Section 6.9.3. For the efforts under the Final RP/EIS that include in-water work (i.e., Fort Morgan Pier Rehabilitation, Laguna Cove Little Lagoon Natural Resource Protection, and Dauphin Island Eco-Tourism and Environmental Education Area), the AL TIG would continue to coordinate with NMFS to determine if the projects require authorization under the Marine Mammal Protection Act. Appropriate BMPs would be implemented to avoid or minimize potential impacts to marine mammals.

5.3 Compliance Under the National Historic Preservation Act

All projects tiered from the Final PDARP/PEIS, including the alternatives selected for implementation, will be reviewed under Section 106 of the NHPA prior to any project activities that would restrict consideration of measures to avoid, minimize, or mitigate any adverse impacts on historic properties located within a project area. Alternatives will be implemented in accordance with all applicable federal and state laws and regulations, including those laws and regulations concerning the protection of cultural and historic resources. NHPA consultation for the alternatives proposed in the RP/EIS has been initiated. As part of the consultation process, the AL TIG will further evaluate existing information in

coordination with the State Historic Preservation Office to determine if proposed activities would have an adverse effect. For the Gulf State Park Lodge, by letter dated April 13, 2015, DOI concurred that the project, as evaluated in the Final Phase III ERP/PEIS, would have no adverse effect on historic properties. Components of the Gulf State Park Lodge and Associated Public Access Amenities Project that were not included in the previous NHPA consultation will be reviewed under Section 106 of the NHPA.

5.4 Compliance with the Migratory Bird Treaty Act and Bald and Golden Eagle Protection Act

USFWS is reviewing the alternatives selected for implementation to ensure that take, pursuant to the MBTA, is not likely to occur. The review process includes the project sponsor documenting species or groups of birds likely to be present in the project area, and the likely behaviors those birds would be exhibiting on or near the project site (i.e., breeding, nesting, feeding, foraging, resting, or roosting). If migratory birds are present in a project area, avoidance measures will be implemented to ensure that these birds (including parts, nests, eggs, or products) are not wounded or killed during construction or use of the project area. Alternatives that will need to be implemented throughout several seasons will utilize BMPs to discourage migratory birds from using an area during construction. BMPs will be coordinated between USFWS and ADCNR.

5.5 Compliance with the Clean Water Act and Rivers and Harbors Act

Selected alternatives that involve the discharge of dredged or fill material into waters of the United States, including wetlands, or work affecting navigable waters will be coordinated with USACE pursuant to the Clean Water Act Section 404 and Rivers and Harbors Act Section 10. Coordination with USACE and final authorization pursuant to the Clean Water Act and Rivers and Harbors Act, where applicable, will be completed prior to project implementation.

5.6 Compliance with the Land and Water Conservation Fund

Certain areas of Gulf State Park have received funding from the Land and Water Conservation Fund for development or acquisition. On October 29, 2015, ADCNR formally requested approval from the Land and Water Conservation Fund State Liaison Officer, the Director of the Alabama Department of Economic and Community Affairs, pursuant to the authority granted to the Alabama Department of Economic and Community Affairs by a January 16, 2014, Guidance Memo issued by NPS, to rebuild the Gulf State Park Lodge and associated conference center. On December 23, 2015, the Director of the Alabama Department of Economic and Community Affairs approved the proposed rebuilding of the Gulf State Park Lodge and associated conference center. Additional documentation supporting this decision was provided to NPS on January 29, 2016, and NPS is currently reviewing the Gulf State Park Lodge and Associated Public Access Amenities Project pursuant to the Land and Water Conservation Fund.

5.7 Compliance with State and Local Laws and Regulations

The AL TIG will ensure compliance with all applicable state and local laws and other applicable federal laws and regulations relevant to the State of Alabama. Additional laws and regulations included in the Final RP/EIS include: the Alabama Department of Environmental Management Division 8 Coastal Program Rules; the Alabama Department of Environmental Management Division 6 Volume 1 Water Quality Program (National Pollutant Discharge Elimination System); and the Alabama Regulations on Game and Fish and Fur Bearing Animals Published Annually (Ala. Adm. Code R. 220-1-1 et seq.). The AL TIG will ensure compliance with all applicable state and local laws.

6 PUBLIC NOTICE, REVIEW, AND COMMENT

OPA and NEPA require the AL TIG to consider public comments on the DWH restoration planning process. Public outreach and involvement have been an integral part of restoration planning in the Alabama Restoration Area since 2010.

6.1 Scoping for the RP/EIS

The DWH Trustees first provided public notice on the need for restoration planning for the DWH oil spill in October 2010 (DOI, 2010; DPS&C, 2010). In addition, during each of the five phases of early restoration planning (discussed in Chapter 5.4.3 of the Final PDARP/PEIS), the DWH Trustees published a draft restoration plan, held public meetings, solicited public comments, and responded to comments in a final restoration plan. Although these comments were targeted at early restoration, much of the input was relevant and incorporated into this restoration planning process.

Since the DWH consent decree was entered into in April 2016, the AL TIG has engaged the public at several different times, including obtaining input during the public scoping comment period, and through a variety of means, including electronically through the DOI's Planning, Environment, and Public Comment (PEPC) online system, by email, or by letter. The AL TIG considered all comments in the development of the RP/EIS and reviewed and considered all comments and project ideas as part of restoration planning and during development of the RP/EIS.

On July 6, 2016, the AL TIG published an NOI to prepare an RP/EIS and conduct public scoping (81 FR 44007). Publication of the NOI initiated a 30-day public scoping period through August 5, 2016, during which members of the public were invited to submit restoration project ideas and other comments regarding the scope, content, and any significant issues that should be considered in the RP/EIS via mail or internet. In addition, ideas submitted to the DWH Trustee Council website, known as the DWH project submission portal, and Alabama project portal were reviewed. Ideas and comments from both of these sources were also considered as part of this restoration planning process.

6.2 Public Review Process for the RP/EIS

The AL TIG encouraged the public to review and comment on the Draft RP/EIS during a 45-day review period that began on December 16, 2016, and ended on January 30, 2017. During this time, the AL TIG held two public meetings to facilitate the public review and comment process; in Dauphin Island and Gulf Shores, AL. The AL TIG considered all relevant comments received during the comment period and revised the RP/EIS as appropriate. A summary of comments received and the AL TIG's responses are included in Chapter 9 of the Final RP/EIS, and all correspondences received are provided in Appendix B of the same document.

7 MONITORING AND ADAPTIVE MANAGEMENT

7.1 Monitoring and Adaptive Management

According to the NRDA regulations for OPA (15 CFR § 990.55), a RP should include "a description of monitoring for documenting restoration effectiveness, including performance criteria that will be used to determine the success of restoration or need for interim corrective action." Given the unprecedented temporal, spatial, and funding scales associated with the RP, the AL TIG recognizes the need for a robust monitoring and adaptive management framework to measure the beneficial impacts of restoration and support restoration decision-making. For consistency with the PDARP/PEIS and Trustee Council SOPs, a

monitoring plan for each project was developed and is included in Appendix C of the Final RP/EIS. Project-specific monitoring data and reports will be provided to the public on, at least, an annual basis. The data and reports will also be provided to the Trustee Council to demonstrate the Trustees' collective progress toward meeting the ecosystem goals described in the PDARP/PEIS, and to determine whether any updates based on newly emerged science and/or restoration procedures and/or Trustees' experience managing and implementing this restoration program are needed.

8 CONCLUSION

Through the Final RP/EIS, and as documented in this Record of Decision, the AL TIG has reviewed the injury to resources in the Alabama Restoration Area, analyzed restoration alternatives to address those injuries to shoreline recreational use losses in the Alabama Restoration Area as determined by the PDARP/PEIS, analyzed environmental impacts associated with those alternatives and the extent to which any adverse impacts could be mitigated, and considered the objectives of the proposed restoration actions. The AL TIG has also considered public and agency comments received during the public review periods. Further, in balancing the analysis and public interest, the AL TIG has decided to select and implement its preferred alternatives:

- Alternative 1: Gulf State Park Lodge and Associated Public Access Amenities Project.
- Alternative 2: Fort Morgan Pier Rehabilitation.
- Alternative 5: Laguna Cove Little Lagoon Natural Resource Protection.
- Alternative 6: Bayfront Park Restoration and Improvements.
- Alternative 7: Dauphin Island Eco-Tourism and Environmental Education Area.
- Alternative 9: Mid-Island Parks and Public Beach Improvements (Parcels B and C).

The AL TIG also concludes that all practicable means to avoid or minimize environmental harm from the alternatives selected have been adopted, and, where consultations are currently incomplete, the AL TIG will commit to additional minimization measures in forthcoming consultations.

9 POINT OF CONTACT

Further information concerning this Record of Decision and associated RP/EIS authorized under this decision may be obtained by contacting:

National Marine Fisheries Service

Office of Habitat Conservation

1315 East-West Hwy

Silver Spring, MD 20910

gulfspill.restoration@noaa.gov

10 EFFECTIVE DATE

This Record of Decision for the AL TIG RP/EIS will be effective for all Trustees when each signatory has signed.

FOR THE DEPARTMENT OF THE INTERIOR:

5/16/17
Date

KEVIN REYNOLDS
Deepwater Horizon NRDAR Case Manager,
Department of the Interior

FOR THE U.S. ENVIRONMENTAL PROTECTION AGENCY:

5/16/17
Date

MARY KAY LYNCH
Alternate to Principal Representative,
U.S. Environmental Protection Agency

FOR THE NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION:

05/16/17
Date

DAVID G. WESTERHOLM
Director
Office of Response and Restoration
National Ocean Service
National Oceanic and Atmospheric Administration

05/16/17
Date

PATRICIA A. MONTANIO
Director
Office of Habitat Conservation
National Marine Fisheries Service
National Oceanic and Atmospheric Administration

05/16/17
Date

CHRISTOPHER D. DOLEY
Principal Representative
National Oceanic and Atmospheric Administration

FOR THE U.S. DEPARTMENT OF AGRICULTURE:

5/16/17
Date

Homer L. Wilkes
HOMER WILKES
Principal Representative for the
U.S. Department of Agriculture

FOR THE STATE OF ALABAMA:

5/16/17
Date

N. GUNTER GUY, JR.
Principal Representative for Alabama Trustees

ATTACHMENT 1: SUMMARY OF IMPACTS

Table 1: Summary of Impacts to Geology and Substrates

Alternative	Summary of Impacts to Geology and Substrates
No Action	Access Improvements Projects on Currently Owned Public Lands: Recreational amenities on these sites would not be developed, and no short- or long-term impacts are expected on geology and substrates. Land Acquisition and Access Improvement Projects: If sites are developed, short- and long-term minor impacts to substrates and short-term minor impacts to geology would be expected. No long-term impacts to geology would be expected. If sites are preserved, no short- or long-term impacts on geology and substrates are expected. Projects Currently Under Construction: Construction of the Gulf State Park Lodge would continue and would be expected to result in short-term, minor, adverse impacts to geology and soils from construction activities. After construction and final grading is completed, bare soils would be revegetated to prevent erosion. Long-term minor impacts to substrates are expected from the presence of new structures. There would be no long-term, adverse impacts on soil resources during operation because no long-term, ground-disturbing activities would occur.
Gulf State Park Lodge and Associated Public Access Amenities Project	Short- and long-term impacts. Adverse, including dune alteration, bedrock drilling, sediment excavation, and erosion. Beneficial including dune enhancement and revegetation.
Fort Morgan Pier Rehabilitation	Short- and long-term impacts. Adverse, including dune alteration, bedrock drilling, sediment excavation, and erosion. Beneficial including dune enhancement and revegetation.
Fort Morgan Peninsula Public Access Improvements	Short- and long-term impacts. Adverse, including dune alteration, bedrock drilling, sediment excavation, and erosion. Beneficial including dune enhancement and revegetation.
Laguna Cove Little Lagoon Natural Resource Protection	Short- and long-term impacts. Adverse, including dune alteration, bedrock drilling, sediment excavation, and erosion. Beneficial including dune enhancement and revegetation.
Gulf Highlands Land Acquisition	Short- and long-term impacts. Adverse, including dune alteration, bedrock drilling, sediment excavation, and erosion. Beneficial including dune enhancement and revegetation.
Dauphin Island Eco-Tourism and Environmental Education Area	Short- and long-term impacts. Adverse, including dune alteration, bedrock drilling, sediment excavation, and erosion. Beneficial including dune enhancement and revegetation.
Mid-Island Parks and Public Beach Improvements (Parcels A, B, and C)	Short- and long-term impacts. Adverse, including dune alteration, bedrock drilling, sediment excavation, and erosion. Beneficial including dune enhancement and revegetation.
Mid-Island Parks and Public Beach Improvements (Parcels B and C)	Short- and long-term impacts. Adverse, including dune alteration, bedrock drilling, sediment excavation, and erosion. Beneficial including dune enhancement and revegetation.

Table 2: Summary of Impacts to Hydrology

Alternative	Summary of Impacts to Hydrology
No Action	Access Improvements Projects on Currently Owned Public Lands: Recreational amenities on these sites would not be developed, and no short- or long-term impacts are expected to hydrology. Land Acquisition and Access Improvement Projects: If sites are developed, short-term minor impacts to hydrology would be expected. Projects Currently Under Construction: Impacts to hydrology would be short term and minor, and BMPs would be employed to minimize discharge into neighboring water bodies. Long-term facility design will be sensitive to the hydrologic process of the surrounding area.
Gulf State Park Lodge and Associated Public Access Amenities Project	Impacts during construction would be short term and minor. Impacts on surface water during the operation of the project would be long term, minor, and adverse.
Fort Morgan Pier Rehabilitation	There would be no short- or long-term impacts.
Fort Morgan Peninsula Public Access Improvements	Short-term impacts from runoff during construction would be adverse, localized, and minor. Long-term impacts would be minor and localized.
Laguna Cove Little Lagoon Natural Resource Protection	Impacts during construction would be short term and minor. Long-term impacts would not occur.
Gulf Highlands Land Acquisition	Impacts from runoff during construction would be adverse but short term, localized, and minor. Long-term impacts would be adverse but minor.
Dauphin Island Eco-Tourism and Environmental Education Area	Short-term impacts on the hydrology of the site would be adverse and minor. The use of pervious pavers and stormwater BMPs would minimize long-term effects and result in minor, adverse long-term impacts.
Mid-Island Parks and Public Beach Improvements (Parcels A, B, and C)	With the correct BMP implementation, impacts on hydrology from construction would be short term, localized and minor. The presence of excessively drained sands, combined with the appropriate BMPs, would result in minor and localized long-term impacts.
Mid-Island Parks and Public Beach Improvements (Parcels B and C)	With the correct BMP implementation, impacts on hydrology from construction would be short term, localized and minor. The presence of excessively drained sands, combined with the appropriate BMPs, would result in minor and localized long-term impacts.

Table 3: Summary of Impacts to Water Quality

Alternative	Summary of Impacts to Water Quality
No Action	Access Improvements Projects on Currently Owned Public Lands: Recreational amenities on these sites would not be developed, and no short- or long-term impacts are expected to water quality in the absence of development. Land Acquisition and Access Improvement Projects: If sites are developed, short-term minor and long-term adverse impacts to water quality would be expected from development, but development would be expected to occur in accordance with all local regulations. If properties were acquired for preservation, no short-term

Alternative	Summary of Impacts to Water Quality
	impacts on water quality are expected because the sites would remain in their current condition. Long-term benefits would occur to water quality because the preserved land would provide infiltration of water through natural habitats. Projects Currently Under Construction: Impacts from wetland disturbance would be short term and minor during ongoing construction. During operation, restoration of wetlands would have long-term benefits.
Gulf State Park Lodge and Associated Public Access Amenities Project	Impacts from construction may be adverse, but localized, short term, and minor. Long-term impacts would be short-term, minor, localized and adverse.
Fort Morgan Pier Rehabilitation	Impacts would be short term, minor and adverse. No long-term impacts would occur.
Fort Morgan Peninsula Public Access Improvements	No short-term impacts would occur. Long-term, minor, and adverse impacts on the neighboring Gulf of Mexico would occur.
Laguna Cove Little Lagoon Natural Resource Protection	Impacts on water quality during construction would be short term and minor. With appropriate measures, long-term impacts on would be minor.
Gulf Highlands Land Acquisition	Impacts from runoff during construction would be adverse but short term, localized, and minor. Impacts from the implementation of long-term stormwater BMPs would be long term, minor, and adverse.
Dauphin Island Eco-Tourism and Environmental Education Area	Impacts during the construction process would be adverse but short term and minor. Any long-term adverse impacts would be negligible.
Mid-Island Parks and Public Beach Improvements (Parcels A, B, and C)	An increase in turbidity of the sub-bay of Graveline Bay may occur during the construction process and impacts would be short term and minor. Due to the lack of surface water on the project parcels and the size of the surrounding waters, adverse impacts would be negligible in the long term.
Mid-Island Parks and Public Beach Improvements (Parcels B and C)	An increase in turbidity of the sub-bay of Graveline Bay may occur during the construction process and impacts would be short term and minor. Due to the lack of surface water on the project parcels and the size of the surrounding waters, adverse impacts would be negligible in the long term.

Table 4: Summary of Impacts to Floodplains

Alternative	Summary of Impacts to Floodplains
No Action	Access Improvements Projects on Currently Owned Public Lands: Recreational amenities on these sites would not be developed, and no short- or long-term impacts are expected to floodplains. Land Acquisition and Access Improvement Projects: If sites are developed, short-term minor and minimal long-term adverse impacts to floodplains would be expected from disturbance to floodplains, but development would be expected to be built in accordance with the CZMA and placed landward of the Coastal Construction Line. If properties were acquired for preservation, no long- or short-term impacts on floodplains are expected because the sites would remain in their current condition. Projects Currently Under Construction: No short- or long-term impacts to floodplains

Alternative	Summary of Impacts to Floodplains
	would occur.
Gulf State Park Lodge and Associated Public Access Amenities Project	No adverse impacts on the floodplain or the coastal zone are anticipated.
Fort Morgan Pier Rehabilitation	No short- or long-term impacts would occur.
Fort Morgan Peninsula Public Access Improvements	No short- or long-term impacts would occur.
Laguna Cove Little Lagoon Natural Resource Protection	The structures would be built above the base flood elevation, no changes to the base flood elevation or the 100-year floodplain would occur and there would be no short-term, adverse impacts. No long-term adverse impacts would occur.
Gulf Highlands Land Acquisition	No short-term, adverse impacts would occur. Long-term, negligible, adverse impacts would occur.
Dauphin Island Eco-Tourism and Environmental Education Area	Construction of the proposed project elements would be in compliance with all required permits and would not result in short-term, adverse impacts. No long-term adverse impacts would occur.
Mid-Island Parks and Public Beach Improvements (Parcels A, B, and C)	No short- or long-term impacts would occur.
Mid-Island Parks and Public Beach Improvements (Parcels B and C)	No short- or long-term impacts would occur.

Table 5: Summary of Impacts to Wetlands

Alternative	Summary of Impacts to Wetlands
No Action	Access Improvements Projects on Currently Owned Public Lands: Recreational amenities on these sites would not be developed, and no short- or long-term impacts are expected to wetlands. Land Acquisition and Access Improvement Projects: If sites are developed, short-term minor and long-term adverse impacts to wetlands would be expected from wetland disturbance and establishment of permanent structures. If properties were acquired for preservation, no long- or short-term impacts on wetlands are expected because the sites would remain in their current condition. Projects Currently Under Construction: Impacts from wetland disturbance would be short term and minor during ongoing construction. During operation, restoration of wetlands would have long-term benefits.
Gulf State Park Lodge and Associated Public Access Amenities Project	Wetlands are being affected by current facility construction, and BMPs, as required by the USACE 404 permit, are being used to minimize impacts. No other impacts would occur from the construction of the public access amenities.
Fort Morgan Pier Rehabilitation	Impacts would be short term and minor. No long-term impacts would occur.

Alternative	Summary of Impacts to Wetlands
Fort Morgan Peninsula Public Access Improvements	No designated wetlands exist within any of the access point sites; therefore, there would be no short-term impacts.
Laguna Cove Little Lagoon Natural Resource Protection	Adverse but short-term and minor impacts during the construction process would include increased turbidity from piling installation and compressed vegetation from construction equipment. There would be minor, long-term, adverse impacts from the presence of the boardwalk.
Gulf Highlands Land Acquisition	Impacts would be avoided and minimized to the maximum extent practicable. Any unavoidable impacts would be offset by appropriate compensatory mitigation, resulting in long-term, no more than minor, adverse impacts on wetlands.
Dauphin Island Eco-Tourism and Environmental Education Area	With the appropriate BMPs in place, short-term adverse impacts on wetlands would be minor. Long-term impacts would be avoided and minimized to the maximum extent practicable. Any impacts would be offset by appropriate compensatory mitigation.
Mid-Island Parks and Public Beach Improvements (Parcels A, B, and C)	The construction of the parking lot on Parcel C would cause minor, increased turbidity to the wetlands. Impacts would be adverse but short term, minor, and negligible. Impacts from appropriate runoff BMPs on Parcel C would be long term, but minor.
Mid-Island Parks and Public Beach Improvements (Parcels B and C)	The construction of the parking lot on Parcel C would cause minor, increased turbidity to the wetlands. Impacts would be adverse but short term, minor, and negligible. Impacts from appropriate runoff BMPs on Parcel C would be long term, but minor.

Table 6: Summary of Impacts to Air Quality and Greenhouse Gas Emissions

Alternative	Summary of Impacts to Air Quality and Greenhouse Gas Emissions
No Action	Access Improvements Projects on Currently Owned Public Lands: Access improvements on currently publicly owned lands would not be implemented, and there would be no short- or long-term impacts on air quality. Land Acquisition and Access Improvement Projects: If properties were acquired for preservation, no long- or short-term impacts on air quality are expected because there would be no construction activities or resulting facility operation. If the properties were developed, impacts on air quality would be long term and adverse because development of infrastructure (e.g., condominiums, parking lots) would result in emissions during construction and operation of this infrastructure. The increase in emissions would be directly related to the intensity and type of development. Projects Currently Under Construction: Construction of the proposed project is expected to have short-term, minor, adverse impacts on air quality. The lodge and conference center would be built to include sustainable design features and would seek LEED Gold certification. Operation of the lodge and conference center would have long-term impacts on air quality that may be measurable, but would be localized and would not exceed the EPA's *de minimis* criteria for a general conformity determination.
Gulf State Park Lodge and Associated Public Access Amenities Project	Construction of all Baldwin County projects are expected to cause greenhouse gas (GHG) emissions and impacts from fugitive dust emissions would be adverse, but minor. The increase in vehicle traffic to the sites is expected to have long-term negligible to minor adverse impacts. Operation of the proposed projects would

Alternative	Summary of Impacts to Air Quality and Greenhouse Gas Emissions
	cause long-term impacts, but would not exceed minor and adverse.
Fort Morgan Pier Rehabilitation	Construction of all Baldwin County projects are expected to cause GHG emissions and impacts from fugitive dust emissions would be adverse, but minor. The increase in vehicle traffic to the sites is expected to have long-term negligible to minor adverse impacts. Operation of the proposed projects would cause long-term impacts, but would not exceed minor and adverse.
Fort Morgan Peninsula Public Access Improvements	Construction of all Baldwin County projects are expected to cause GHG emissions and impacts from fugitive dust emissions would be adverse, but minor. The increase in vehicle traffic to the sites is expected to have long-term negligible to minor adverse impacts. Operation of the proposed projects would cause long-term impacts, but would not exceed minor and adverse.
Laguna Cove Little Lagoon Natural Resource Protection	Construction of all Baldwin County projects are expected to cause GHG emissions and impacts from fugitive dust emissions would be adverse, but minor. The increase in vehicle traffic to the sites is expected to have long-term negligible to minor adverse impacts. Operation of the proposed projects would cause long-term impacts, but would not exceed minor and adverse.
Gulf Highlands Land Acquisition	Construction of all Baldwin County projects are expected to cause GHG emissions and impacts from fugitive dust emissions would be adverse, but minor. The increase in vehicle traffic to the sites is expected to have long-term negligible to minor adverse impacts. Operation of the proposed projects would cause long-term impacts, but would not exceed minor and adverse.
Dauphin Island Eco-Tourism and Environmental Education Area	Long-term impacts to air quality would be minor and adverse. Because of the small scale and use of energy saving measures when applicable, GHG emissions would be small.
Mid-Island Parks and Public Beach Improvements (Parcels A, B, and C)	Long-term impacts to air quality would be minor and adverse. Because of the small scale and use of energy saving measures when applicable, GHG emissions would be small.
Mid-Island Parks and Public Beach Improvements (Parcels B and C)	Long-term impacts to air quality would be minor and adverse. Because of the small scale and use of energy saving measures when applicable, GHG emissions would be small.

Table 7: Summary of Impacts to Noise

Alternative	Summary of Impacts to Noise
No Action	Access Improvement Projects on Currently Publicly Owned Lands: Access improvements on currently publicly owned lands would not be implemented, and there would be no long- or short-term impacts on noise. Land Acquisition and Access Improvement Projects: If properties were acquired for preservation, no long- or short-term impacts on noise are expected because no construction activities or resulting operation and maintenance of recreational amenities would occur. If the properties were developed, there would be short- and long-term, adverse impacts on noise because development of infrastructure (e.g., condominiums, parking lots) would result in noise from construction as well as operation of this infrastructure. The increase in noise would be directly related to the intensity and type of development.

Alternative	Summary of Impacts to Noise
	Projects Currently Under Construction. Short-term, localized, and minor impacts would occur during construction. Operation of the proposed project would result in long-term, minor impacts. The lodge and conference center would increase noise that could attract attention, but its contribution to the soundscape would be localized and minor and is not expected to affect current user activities. Some of the additional amenities may also be constructed but because of their small scale and size, they are not expected to contribute noise impacts in the short or long term.
Gulf State Park Lodge and Associated Public Access Amenities Project	Impacts from noise during construction would be no more than short term, minor, and adverse.
Fort Morgan Pier Rehabilitation	Impacts from noise during construction would be no more than short term, minor, and adverse. Impacts from operations would be long term, negligible to minor, and adverse.
Fort Morgan Peninsula Public Access Improvements	Impacts from noise during construction would be no more than short term, minor, and adverse. Impacts from operations would be long term, negligible to minor, and adverse.
Laguna Cove Little Lagoon Natural Resource Protection	Impacts from noise during construction would be no more than short term, minor, and adverse. Impacts from operations would be long term, negligible to minor, and adverse.
Gulf Highlands Land Acquisition	Impacts from noise during construction would be no more than short term, minor, and adverse. Impacts from operations would be long term, negligible to minor, and adverse.
Dauphin Island Eco-Tourism and Environmental Education Area	Impacts from noise during construction would be no more than short term, minor, and adverse. Impacts from operations would be long term, negligible to minor, and adverse.
Mid-Island Parks and Public Beach Improvements (Parcels A, B, and C)	Impacts from noise during construction would be no more than short term, minor, and adverse. Impacts from operations would be long term, negligible to minor, and adverse.
Mid-Island Parks and Public Beach Improvements (Parcels B and C)	Impacts from noise during construction would be no more than short term, minor, and adverse. Impacts from operations would be long term, negligible to minor, and adverse.

Table 8: Summary of Impacts to Habitats

Alternative	Summary of Impacts to Habitats
No Action	Access Improvements Projects on Currently Owned Public Lands: Recreational amenities on these sites would not be developed, and no short- or long-term impacts are expected to habitats. Land Acquisition and Access Improvement Projects: If sites are developed, short-term minor to moderate impacts and long-term adverse impacts to habitats would be expected. If acquisition occurs with other Gulf restoration funding mechanisms and recreational amenities are not constructed, there would be no short-term impacts on habitat because these sites would remain in their current conditions. Projects Currently Under Construction: Construction of the Gulf State Park Lodge

Alternative	Summary of Impacts to Habitats
	would continue, and short-term, minor impacts and any long-term, adverse impacts would be negligible.
Gulf State Park Lodge and Associated Public Access Amenities Project	Impacts from the pedestrian trail and construction would be short term, minor, and adverse. The proposed lodge would have long-term and beneficial impacts on wetland and dune habitats and associated native vegetation from the expansion and enhancement of wetland habitat. Any adverse long-term impacts would be negligible.
Fort Morgan Pier Rehabilitation	Short-term impacts would be minor and adverse. Any potential long-term, adverse impacts are expected to be negligible, and habitats would naturally rehabilitate over time.
Fort Morgan Peninsula Public Access Improvements	Site conditions, combined with the implementation of BMPS at all construction sites would result in short-term, minor, adverse impacts on vegetation. Overall, impacts on habitats in these areas would be long term, minor, and adverse from removal of habitat, with long-term benefits from concentrating public access.
Laguna Cove Little Lagoon Natural Resource Protection	Impacts from construction would be short term, minor and adverse because BMPs would be employed to minimize impacts, and all habitats are expected to return to normal functioning following construction. Acquisition of land would greatly benefit habitats because the parcel had large development plans that would no longer occur, allowing the majority of the site to remain undisturbed, resulting in overall long-term beneficial impacts.
Gulf Highlands Land Acquisition	All short-term impacts on vegetation are expected to be minor and adverse. While some long-term, minor, adverse impacts could occur from permanent removal of habitat as a result of development, the preservation of this large and important site would result in overall long-term, beneficial impacts.
Dauphin Island Eco-Tourism and Environmental Education Area	There would be long-term beneficial impacts with the acquisition of land and short-term, minor and adverse impacts on habitats from disturbance during construction.
Mid-Island Parks and Public Beach Improvements (Parcels A, B, and C)	BMPs would minimize impacts and all habitat areas are expected to naturally rehabilitate after construction, impacts from construction to habitats would be short term, minor, and adverse. While some habitat may be lost, the facilities would be established in a way that would allow the remaining habitat to continue to function, resulting in long-term, minor, adverse impacts.
Mid-Island Parks and Public Beach Improvements (Parcels B and C)	BMPs would minimize impacts and all habitat areas are expected to naturally rehabilitate after construction, impacts from construction to habitats would be short term, minor, and adverse. While some habitat may be lost, the facilities would be established in a way that would allow the remaining habitat to continue to function, resulting in long-term, minor, adverse impacts.

Table 9: Summary of Impacts to Wildlife Species

Alternative	Summary of Impacts to Wildlife Species
No Action	Access Improvements Projects on Currently Owned Public Lands: Recreational amenities on these sites would not be developed, and no short- or long-term impacts are expected to wildlife species. Land Acquisition and Access Improvement Projects: If sites are developed, short-

Alternative	Summary of Impacts to Wildlife Species
	term minor and long-term adverse impacts to wildlife species would be expected. If acquisition occurs with other Gulf restoration funding mechanisms and no improvements are implemented, there would be no short-term impacts, but overall beneficial impacts from the preservation of large areas of habitat and areas for wildlife. Projects Currently Under Construction: Construction of the lodge and conference center would continue and result in short- and long-term, minor impacts.
Gulf State Park Lodge and Associated Public Access Amenities Project	Construction may result in short-term, minor, adverse impacts on wildlife species inhabiting the proposed project site and nearby vicinity. Temporary disturbance to wildlife during construction from noise and temporary displacement (including less mobile species such as invertebrates, mammals, and migratory birds) may occur. Long-term, adverse impacts on wildlife species, and their habitats, which are known to occur or may potentially occur at the Gulf State Park Lodge and Associated Public Access Amenities Project site are characterized in the Final Phase III ERP/PEIS (Section 11.7.6.7).
Fort Morgan Pier Rehabilitation	Construction may result in short-term, minor, adverse impacts on wildlife species inhabiting the proposed project site and nearby vicinity. Temporary disturbance to wildlife during construction from noise and temporary displacement (including less mobile species such as invertebrates, mammals, and migratory birds) may occur. Overall impacts on wildlife during construction would be short term, minor, and adverse. New or additional displacement of wildlife from utilization of the site is not expected to occur. Any adverse impacts are expected to be long term and minor.
Fort Morgan Peninsula Public Access Improvements	Construction may result in short-term, minor, adverse impacts on wildlife species inhabiting the proposed project site and nearby vicinity. Temporary disturbance to wildlife during construction from noise and temporary displacement (including less mobile species such as invertebrates, mammals, and migratory birds) may occur. Impacts on all other species would be adverse, short term and minor. While some long-term, minor, adverse impacts could occur from species avoiding areas, overall, impacts would be long term and beneficial from reducing the amount of disturbance in these areas.
Laguna Cove Little Lagoon Natural Resource Protection	Construction may result in short-term, minor, adverse impacts on wildlife species inhabiting the proposed project site and nearby vicinity. Temporary disturbance to wildlife during construction from noise and temporary displacement (including less mobile species such as invertebrates, mammals, and migratory birds) may occur. While some minor impacts could occur from species avoiding areas, overall, impacts would be long term and beneficial from placing the majority of the site into conservation and preserving species and their habitat in this area.
Gulf Highlands Land Acquisition	Construction may result in short-term, minor, adverse impacts on wildlife species inhabiting the proposed project site and nearby vicinity. Temporary disturbance to wildlife during construction from noise and temporary displacement (including less mobile species such as invertebrates, mammals, and migratory birds) may occur. Construction would not interfere with the overall movement of wildlife species around the project site due to the limited area of disturbance Human use of the site could result in long-term, adverse impacts. Long-term benefits would occur from removing the development potential of this land and preserving it as open space with limited access improvements.
Dauphin Island Eco-Tourism and	Construction may result in short-term, minor, adverse impacts on wildlife species inhabiting the proposed project site and nearby vicinity. Temporary disturbance to

Alternative	Summary of Impacts to Wildlife Species
Environmental Education Area	wildlife during construction from noise and temporary displacement (including less mobile species such as invertebrates, mammals, and migratory birds) may occur. While some minor impacts could occur from species avoiding areas, overall, impacts would be long term and beneficial from placing the majority of the site into conservation and preserving species and their habitat in this area.
Mid-Island Parks and Public Beach Improvements (Parcels A, B, and C)	Construction may result in short-term, minor, adverse impacts on wildlife species inhabiting the proposed project site and nearby vicinity. Temporary disturbance to wildlife during construction from noise and temporary displacement (including less mobile species such as invertebrates, mammals, and migratory birds) may occur. While some minor, adverse impacts could occur from species avoiding areas, overall, impacts would be long term and beneficial from placing the majority of the site into conservation and preserving species and their habitat in this area.
Mid-Island Parks and Public Beach Improvements (Parcels B and C)	The short-term impacts of this project would be the similar to Mid-Island Parks and Public Beach Improvements (Parcels A, B, and C); however, it would be less adverse because no construction would occur on the beach where Parcel A is located. Short-term impacts would be minor and adverse. The long-term impacts of this project would be the same as those described for Mid-Island Parks and Public Beach Improvements (Parcels A, B, and C).

Table 10: Summary of Impacts to Marine and Estuarine Fauna

Alternative	Summary of Impacts to Marine and Estuarine Fauna
No Action	Access Improvements Projects on Currently Owned Public Lands: Recreational amenities on these sites would not be developed, and no short- or long-term impacts are expected to marine and estuarine fauna. Land Acquisition and Access Improvement Projects: If sites are developed, short-term minor to moderate and long-term moderate to major adverse impacts to protected species would be expected depending on the extent of the development If acquisition occurs with other Gulf restoration funding mechanisms with no or limited associated access infrastructure, there would be long-term benefits from the preservation of large areas of habitat, including habitat for marine species. Projects Currently Under Construction: No short- or long-term impacts would occur.
Gulf State Park Lodge and Associated Public Access Amenities Project	No in-water work would be part of this alternative, and no impacts on marine habitats would occur.
Fort Morgan Pier Rehabilitation	The rehabilitation of the pier may have minor, adverse and short-term impacts on marine mammals, such as manatees (discussed under protected species below) and dolphins; nearshore fish, such as redfish, trout, flounder, ground mullet, speckled trout, and Spanish mackerel; and shellfish, such as oysters, shrimp, and crab; and sea turtles. Impacts include bottom sediment disturbance causing an increase in turbidity and underwater noise which would disturb habitat and displace fish. Long-term impacts would revert back to when the pier was in full use.
Fort Morgan Peninsula Public Access Improvements	No short- or long-term impacts would occur.
Laguna Cove Little Lagoon Natural Resource Protection	Construction would potentially cause adverse impact fish in the lagoon, such as speckled trout, redfish, and flounder, as well as shellfish such as shrimp and crab due to bottom sediments being disturbed and underwater noise which would disturb

Alternative	Summary of Impacts to Marine and Estuarine Fauna
	habitat and displace fish. Any adverse impacts would be short term and minor. The fishing pier located on the eastern side of the property could cause minor adverse impacts on species being fished.
Gulf Highlands Land Acquisition	No short- or long-term impacts would occur.
Dauphin Island Eco-Tourism and Environmental Education Area	Construction of the fishing pier would cause minor adverse impacts on species that inhabit nearshore environments. Species displaced by disturbance are expected to return to the site shortly after the construction period. Any adverse impacts would be short term and minor. The fishing pier would cause adverse impacts on species being fished and as a result of bycatch; however, these adverse effects are expected to be minor due to the abundance of most fish species in the vicinity of the pier and the abundance of other habitat near to the fishing pier that are utilized by fish species.
Mid-Island Parks and Public Beach Improvements (Parcels A, B, and C)	No short- or long-term impacts would occur.
Mid-Island Parks and Public Beach Improvements (Parcels B and C)	No short- or long-term impacts would occur.

Table 11: Summary of Impacts to Protected Species

Alternative	Summary of Impacts to Protected Species
No Action	Access Improvements Projects on Currently Owned Public Lands: Recreational amenities on these sites would not be developed, and no short- or long-term impacts are expected to protected species. Land Acquisition and Access Improvement Projects: If sites are developed, short-term minor to moderate impacts to protected species would be expected depending on the extent of the development. If acquisition occurs with other Gulf restoration funding mechanisms, these sites would remain in their current conditions or have limited access infrastructure similar to the alternatives proposed in the Final RP/EIS, resulting in minor, long-term adverse impacts from loss of habitat, but overall beneficial impacts from the preservation of large areas of habitat and areas for protected species. Projects Currently Under Construction: Construction of the Gulf State Park Lodge would continue and would result in short- and long-term, minor impacts.
Gulf State Park Lodge and Associated Public Access Amenities Project	Short- and long-term, adverse impacts on protected species and their habitats are known to occur or may potentially occur at the Gulf State Park project site. Impacts of additional project elements would be long term, minor, and adverse.
Fort Morgan Pier Rehabilitation	Rehabilitation of the pier would cause temporary disturbances to both terrestrial and marine protected species, due noise and the presence of construction equipment and crews. Due to the small construction footprint, impacts are expected to be short term, adverse and minor. Long-term, adverse impacts would be similar to previous conditions at the site, when the pier was in full use and could include bycatch impacts associated with pier operation.
Fort Morgan Peninsula	Construction of proposed project amenities would cause short-term, adverse, but

Alternative	Summary of Impacts to Protected Species
Public Access Improvements	minor impacts on protected species. Potential impacts would include soil compaction, nest disturbance, temporary noise and the presence of construction equipment and crews. The installation of lighting associated with some proposed amenities could adversely impacts nesting sea turtles over the long term. Overall, long-term impacts on protected species would be adverse but minor.
Laguna Cove Little Lagoon Natural Resource Protection	Construction would result in temporary disturbances to protected species due to noise and the presence of construction equipment and crews. This could temporarily displace Alabama beach mice or migratory birds (including piping plover and red knot), if present during construction. Overall, short-term impacts on protected species would be adverse but minor. Long-term impacts are expected to be adverse, but minor due to the small size of the project and the large amount of adjacent habitat.
Gulf Highlands Land Acquisition	Construction of the parking lot and boardwalk would result in temporary disturbances to protected species due to noise and the presence of construction equipment and crews. Potential impacts are anticipated to be adverse, but short term and minor. Methods would be used to minimize potential impacts resulting in minor, adverse, short-term impacts. The increase in human presence could cause adverse impacts on protected species such as sea turtles, Alabama beach mice, and birds (including piping plover and red knot) over the long term.
Dauphin Island Eco-Tourism and Environmental Education Area	Construction of the proposed amenities would result in adverse, but short-term and minor impacts to protected species due to noise and the presence of construction equipment and crews. This could temporarily displace migratory birds (including piping plover, red knot, and wood stork), if present during construction. Long-term impacts from increased visitation and pedestrian traffic would be adverse but minor.
Mid-Island Parks and Public Beach Improvements (Parcels A, B, and C)	Impacts to from noise from the presence of construction equipment and crews could temporarily displace migratory birds (including piping plover, red knot, and wood stork) or manatees, if present during construction. These impacts would be adverse, but short term and minor. Construction of dune walkovers on Parcel A would cause short-term, minor, and adverse impacts to the nesting sites for loggerhead and/or Kemp's ridley sea turtles; however, BMPs would be used to minimize potential impacts. Long-term impacts from increased visitation and pedestrian traffic would be adverse but minor. The acquisition of Parcel A would prevent future development, resulting in long-term, beneficial impacts on protected species.
Mid-Island Parks and Public Beach Improvements (Parcels B and C)	Construction could result in short-term, adverse, and minor impacts to protected species from noise and the presence of construction equipment and crews. This could temporarily displace migratory birds (including piping plover and red knot) or manatees, if present during construction. Long-term impacts would be adverse and minor because of the small footprint and the relatively low quality of habitat on Parcels B and C.

Table 12: Summary of Impacts to Socioeconomics and Environmental Justice

Alternative	Summary of Impacts to Socioeconomics and Environmental Justice
No Action	Access Improvements Projects on Currently Owned Public Lands: Recreational amenities on these sites would not be developed, and no short- or long-term impacts are expected to socioeconomics. No communities that would quality for an environmental justice analysis exist within the vicinity of these sites. Land Acquisition and Access Improvement Projects: If sites are developed, short-term beneficial impacts to socioeconomics would be expected during the

Alternative	Summary of Impacts to Socioeconomics and Environmental Justice
	construction phase. If the sites are not developed, the sites would remain in their existing state, and no short- or long-term impacts would be expected. Projects Currently Under Construction: Construction of the Gulf State Park Lodge would continue and would include short-term, beneficial impacts from employment generated during construction. Additionally, some of the public amenities associated with the lodge could be constructed and would have similar beneficial impacts. Construction of the Gulf State Park Lodge would continue, and long-term, beneficial socioeconomic impacts as a result of increased visitation, spending, and employment opportunities are expected.
Gulf State Park Lodge and Associated Public Access Amenities Project	The construction and operations of the Gulf State Park Lodge and Associated Public Access Amenities Project would lead to short and long-term employment opportunities for local residents and businesses and would result in short-term, beneficial socioeconomic impacts for the local communities.
Fort Morgan Pier Rehabilitation	There would not be disproportionately adverse impacts on minority or low-income populations during the construction period, and no effect. Implementation of the alternative could provide short- and long-term employment for local residents, socioeconomic impacts on the community in the short term would be beneficial.
Fort Morgan Peninsula Public Access Improvements	Potential short-term employment benefits would occur for local residents from the construction of the parking lots, restrooms, and dune walkovers. Socioeconomic impacts, including increased visitations to the area, safe-free beach access, and enhanced protection of the walkovers would long term and beneficial to the local community.
Laguna Cove Little Lagoon Natural Resource Protection	The project would not have disproportionately adverse impacts on minority or low-income populations and would benefit local communities through employment opportunities, enhance recreational use, and safe access. Therefore, the short- and long-term socioeconomic benefits would be beneficial.
Gulf Highlands Land Acquisition	Potential short-term employment benefits would occur for local residents from the construction of the parking lots, restrooms, and dune walkovers. Socioeconomic impacts, including increased visitations to the area, safe-free beach access, and enhanced protection of the walkovers would long term and beneficial to the local community.
Dauphin Island Eco-Tourism and Environmental Education Area	Construction of the proposed alternative would provide construction employment opportunities. Short-term impacts are expected to be beneficial for the local community. Impacts from eco-tourism attractions would have long term and beneficial impacts for the community.
Mid-Island Parks and Public Beach Improvements (Parcels A, B, and C)	Potential short-term employment benefits would occur for local residents during the construction period. Socioeconomic impacts, including increased visitations to the area, safe-free beach access, and enhanced protection of the walkovers would be long term and beneficial to the local community. Maintenance of the facility would ensure that the recreational experience is sustained and the beneficial impacts on local businesses would continue.
Mid-Island Parks and Public Beach Improvements (Parcels B and C)	The short- and long-term impacts expected from this alternative are the same as those described for the Mid-island Parks and Public Beach Improvements (Parcels A, B, and C).

Table 13: Summary of Impacts to Cultural Resources

Alternative	Summary of Impacts to Cultural Resources
No Action	Access Improvements Projects on Currently Owned Public Lands: Recreational amenities on these sites would not be developed, and no short- or long-term impacts are expected to cultural resources. Land Acquisition and Access Improvement Projects: If sites are developed, short- and long-term impacts to cultural resources could occur if archeological resources are disturbed. If acquisition occurs with other Gulf restoration funding mechanisms, there would be no impacts on cultural resources because these sites would remain in their current conditions, and any amenities developed would avoid cultural resources. Projects Currently Under Construction: Construction of the Gulf State Park Lodge would continue, and no short- or long-term impacts would occur.
Gulf State Park Lodge and Associated Public Access Amenities Project	During the Phase III ERP/EIS, consultation with the State Historic Preservation Office was conducted for this effort. That consultation concluded that it is unlikely that any buried intact archaeological sites, deposits, or artifacts are located in the area, and the effort is not expected to have any effect on historic properties. Additional project elements would likely have no impacts.
Fort Morgan Pier Rehabilitation	If any culturally or historically important resources are identified during project preparations or predevelopment surveys, such areas would be avoided during construction. A complete review of this alternative under Section 106 of the NHPA is ongoing and would be completed prior to any activities that would restrict consideration of measures to avoid, minimize or mitigate any adverse effects on historic properties located within the project area.
Fort Morgan Peninsula Public Access Improvements	If any culturally or historically important resources are identified during project preparations or predevelopment surveys, such areas would be avoided during construction. A complete review of this alternative under Section 106 of the NHPA is ongoing and would be completed prior to any activities that would restrict consideration of measures to avoid, minimize or mitigate any adverse effects on historic properties located within the project area.
Laguna Cove Little Lagoon Natural Resource Protection	If any culturally or historically important resources are identified during project preparations or predevelopment surveys, such areas would be avoided during construction. A complete review of this alternative under Section 106 of the NHPA is ongoing and would be completed prior to any activities that would restrict consideration of measures to avoid, minimize or mitigate any adverse effects on historic properties located within the project area.
Gulf Highlands Land Acquisition	If any culturally or historically important resources are identified during project preparations or predevelopment surveys, such areas would be avoided during construction. A complete review of this alternative under Section 106 of the NHPA is ongoing and would be completed prior to any activities that would restrict consideration of measures to avoid, minimize or mitigate any adverse effects on historic properties located within the project area.
Dauphin Island Eco-Tourism and Environmental Education Area	If any culturally or historically important resources are identified during project preparations or predevelopment surveys, such areas would be avoided during construction. A complete review of this alternative under Section 106 of the NHPA is ongoing and would be completed prior to any activities that would restrict consideration of measures to avoid, minimize or mitigate any adverse effects on historic properties located within the project area.

Alternative	Summary of Impacts to Cultural Resources
Mid-Island Parks and Public Beach Improvements (Parcels A, B, and C)	If any culturally or historically important resources are identified during project preparations or predevelopment surveys, such areas would be avoided during construction. A complete review of this alternative under Section 106 of the NHPA is ongoing and would be completed prior to any activities that would restrict consideration of measures to avoid, minimize or mitigate any adverse effects on historic properties located within the project area.
Mid-Island Parks and Public Beach Improvements (Parcels B and C)	If any culturally or historically important resources are identified during project preparations or predevelopment surveys, such areas would be avoided during construction. A complete review of this alternative under Section 106 of the NHPA is ongoing and would be completed prior to any activities that would restrict consideration of measures to avoid, minimize or mitigate any adverse effects on historic properties located within the project area.

Table 14: Summary of Impacts to Infrastructure

Alternative	Summary of Impacts to Infrastructure
No Action	Access Improvements Projects on Currently Owned Public Lands: Recreational amenities on these sites would not be developed, and no short- or long-term impacts are expected to utilities. No short-term impacts to transportation would be expected, with long-term minor adverse impacts from the continued informal access at these sites. Land Acquisition and Access Improvement Projects: If sites are developed, short-term impacts to land and marine management would be expected as a result of the land change, with the intensity varying depending on the level of development. If lands are acquired for preservation, short- and long-term minor adverse impacts would occur because development would be expected to be minimal and the sites would see an increase in visitation. Projects Currently Under Construction: Construction of the Gulf State Park Lodge and conference center would continue, and short-term minor impacts on utilities would still occur.
Gulf State Park Lodge and Associated Public Access Amenities Project	It is anticipated that there would be adequate capacity for the new demand on the utilities services and that the conservation measures would result in long-term minor adverse impacts. Long-term moderate impacts from increased traffic would be expected; however, the addition of the tram system would minimize these impacts, possibly reducing the adverse impact to minor.
Fort Morgan Pier Rehabilitation	Because there would be negligible increase in local daily traffic volumes during construction, impacts would be adverse, but short term and minor. Any long-term, adverse impacts on traffic and transportation would be negligible.
Fort Morgan Peninsula Public Access Improvements	Because there would be negligible increase in local daily traffic volumes during construction, impacts would be adverse, but short term and minor. Long-term beneficial impacts would also result from providing formalized parking, which would remove current on street parking that is occurring and improve safety conditions along the roadway.
Laguna Cove Little Lagoon Natural Resource Protection	Because there would be negligible increase in local daily traffic volumes during construction, impacts would be adverse, but short term and minor. There would be localized traffic increase from vehicles accessing the parking and new site amenities. This type of use and traffic already occurs in this areas and it is not expected that the level of traffic would change beyond a minimal level and any long-term adverse

Alternative	Summary of Impacts to Infrastructure
	impacts on traffic would be minor.
Gulf Highlands Land Acquisition	Because there would be negligible increase in local daily traffic volumes during construction, impacts would be adverse, but short term and minor. There would be localized traffic increase from vehicles accessing the parking and beach access. This type of use and traffic already occurs in this areas and it is not expected that the level of traffic would change beyond a minimal level and any long-term impacts adverse to traffic would be minor.
Dauphin Island Eco-Tourism and Environmental Education Area	Because there would be negligible increase in local daily traffic volumes during construction, impacts would be adverse, but short term and minor. There would be localized traffic increase from vehicles accessing the parking and beach access. This type of use and traffic already occurs in this areas and it is not expected that the level of traffic would change beyond a minimal level and any long-term impacts adverse to traffic would be minor.
Mid-Island Parks and Public Beach Improvements (Parcels A, B, and C)	Because there would be negligible increase in local daily traffic volumes during construction, impacts would be adverse, but short term and minor. There would be localized traffic increase from vehicles accessing the parking and beach access. This type of use and traffic already occurs in this areas and it is not expected that the level of traffic would change beyond a minimal level and any long-term adverse impacts on traffic would be minor. Beneficial impacts would also result from providing formalized parking.
Mid-Island Parks and Public Beach Improvements (Parcels B and C)	Because there would be negligible increase in local daily traffic volumes during construction, impacts would be adverse, but short term and minor. There would be localized traffic increase from vehicles accessing the parking and beach access. This type of use and traffic already occurs in this areas and it is not expected that the level of traffic would change beyond a minimal level and any long-term adverse impacts on traffic would be minor. Beneficial impacts would also result from providing formalized parking.

Table15: Summary of Impacts to Land and Marine Management

Alternative	Summary of Impacts to Land and Marine Management
No Action	Access Improvements Projects on Currently Owned Public Lands: Recreational amenities on these sites would not be developed, and these sites would remain in their current condition, resulting in no short- or long-term impacts. Land Acquisition and Access Improvement Projects: If sites are developed, short-term impacts to land and marine management would be expected as a result of the land change, with the intensity varying depending on the level of development. If lands are acquired for preservation, short- and long-term beneficial impacts would occur. Projects Currently Under Construction: Construction of the Gulf State Park Lodge and conference center would continue and would result in short-term, minor impacts. Long-term, adverse impacts would be minor because use would change but would be compatible with the lodge and conference center surroundings.
Gulf State Park Lodge and Associated Public Access Amenities Project	Land formerly available for informal use would no longer be available. As a result, construction would result in adverse but short-term and minor impacts. Changes in land use during construction would be temporary and would not require a zoning change or amendment or affect overall use and management beyond the local area. Long-term, the project would be consistent with the CZMA and recreational land

Alternative	Summary of Impacts to Land and Marine Management
	uses in the area.
Fort Morgan Pier Rehabilitation	Some short-term, minor, adverse impacts could result during construction as a result of potential site closures and subsequent reduced access to existing recreational opportunities from the presence of construction equipment, materials staging, and other associated construction activities. The rehabilitation of the pier would improve public access to the site, restore uses previously available, and enhance recreational opportunities, including fishing, wildlife observation, and beach activities. Long-term impacts on land use from the alternative would be beneficial.
Fort Morgan Peninsula Public Access Improvements	Short-term, minor, adverse impacts could occur as a result of construction activities and equipment and materials staging. Impacts would be long term and beneficial as a result of enhanced public access and recreational opportunities, consistency with zoning regulations of the site as outdoor recreation, and consistency with existing site land uses.
Laguna Cove Little Lagoon Natural Resource Protection	Short-term, minor, adverse impacts from construction and equipment and materials for enhancements would occur, similar to those noted above. Enhancement of access to recreation within, and appreciation of, coastal wetlands and uplands would result in long-term, beneficial impacts.
Gulf Highlands Land Acquisition	Short-term, minor, adverse impacts from construction and equipment and materials for enhancements would occur. Impacts would be long term, beneficial impacts as a result of increased habitat protection, public access, and recreational opportunities.
Dauphin Island Eco-Tourism and Environmental Education Area	Short-term, minor, adverse impacts from construction and equipment and materials for enhancements would occur. Impacts would be long term, beneficial impacts as a result of increased habitat protection, public access, and recreational opportunities.
Mid-Island Parks and Public Beach Improvements (Parcels A, B, and C)	Short-term, minor, adverse impacts from construction and equipment and materials for enhancements would occur. Long-term and beneficial impacts would occur as a result of increased public access and recreational opportunities and would be consistent with local ordinances and surrounding land uses.
Mid-Island Parks and Public Beach Improvements (Parcels B and C)	Short-term, minor, adverse impacts from construction and equipment and materials for enhancements would occur. Long-term and beneficial impacts would occur as a result of increased public access and recreational opportunities and would be consistent with local ordinances and surrounding land uses.

Table 16: Summary of Impacts to Tourism and Recreational Use

Alternative	Summary of Impacts to Tourism and Recreational use
No Action	Access Improvements Projects on Currently Owned Public Lands: Recreational amenities on these sites would not be developed, and no change in use would occur, resulting in no short- or long-term impacts to tourism and recreational use. Land Acquisition and Access Improvement Projects: If sites are developed, short-and long-term minor impacts to tourism and recreational would be expected because access to these sites could be restricted. If acquisition occurs with other Gulf restoration funding mechanisms, there could be either no short-term, beneficial impacts or no adverse impacts on tourism because these sites could either be opened to the public (resulting in a beneficial impact) or acquired and protected in a manner that excludes public use similar to their current condition as private property (resulting in adverse impacts on tourism and recreational use). Projects Currently Under Construction: Construction of the Gulf State Park Lodge

Alternative	Summary of Impacts to Tourism and Recreational use
	and conference center would continue and would result in short-term, minor impacts from restricted access. Long-term impacts would be beneficial from the addition of recreational use amenities.
Gulf State Park Lodge and Associated Public Access Amenities Project	Impacts on visitor use and experience during construction, while potentially adverse, would be localized, short term and minor. Because of the variety of new and enhanced opportunities, it is anticipated long-term benefits to tourist operations in the local area, in addition to Gulf State Park specific tourism would occur.
Fort Morgan Pier Rehabilitation	During rehabilitation of the pier, the public would not be able to access the site but because the site is currently closed, this would not represent a change from existing conditions. These impacts would be short term and minor because the area where the improvements would occur are only on a portion of the site, and other areas of the site would be accessible. Long-term beneficial impacts from the rehabilitation of the currently closed pier are expected and would provide the public with recreational benefits in the form of increased and enhanced recreational fishing in coastal Alabama.
Fort Morgan Peninsula Public Access Improvements	Impacts on visitor use and experience during construction, while potentially adverse, would be localized, short term and minor. Providing access improvements at 11 sites on the Fort Morgan Peninsula would enhance beach visits and other beach-based recreational activities in this area and would result in long-term benefits to recreational use and tourism.
Laguna Cove Little Lagoon Natural Resource Protection	Impacts on visitor use and experience during construction, while potentially adverse, would be localized, short term and minor. Little Lagoon is culturally valuable for its serene beauty and would provide long-term benefits to recreational use and tourism.
Gulf Highlands Land Acquisition	Impacts on visitor use and experience during construction, while potentially adverse, would be localized, short term and minor. Preserving this site and providing access improvements would provide long-term benefits to tourism and recreation in this area.
Dauphin Island Eco-Tourism and Environmental Education Area	Impacts on visitor use and experience during construction, while potentially adverse, would be localized, short term and minor. Public access to wetland habitats by constructing a parking area and boardwalks would increase and result in long-term benefits.
Mid-Island Parks and Public Beach Improvements (Parcels A, B, and C)	Impacts on visitor use and experience during construction, while potentially adverse, would be localized, short term and minor. Increased visitation from provided public parking, restroom/shower facilities, and eco-friendly beach access to Mississippi Sound waters would result in long-term benefits.
Mid-Island Parks and Public Beach Improvements (Parcels B and C)	Impacts on visitor use and experience during construction, while potentially adverse, would be localized, short term and minor. Increased visitation from provided public parking, restroom/shower facilities, and eco-friendly beach access to Mississippi Sound waters would result in long-term benefits.

Table 17: Summary of Impacts to Aesthetics and Visual Resources

Alternative	Summary of Impacts to Aesthetics and Visual Resources
No Action	Access Improvements Projects on Currently Owned Public Lands: Recreational amenities on these sites would not be developed, and no short-term impacts are expected to visual resources. In the long term, visual resources would be

Alternative	Summary of Impacts to Aesthetics and Visual Resources
	negatively affected from the continued deterioration of Fort Morgan fishing pier. Land Acquisition and Access Improvement Projects: If sites are developed, short- and long-term moderate adverse impacts to visual resources would be expected. If the properties are purchased for preservation, short- and long-term beneficial impacts are expected to visual resources. Projects Currently Under Construction: Construction of the Gulf State Park Lodge would continue and would result in long-term, minor and adverse impacts by the presence of large structures that could block the view of the beach from the road.
Gulf State Park Lodge and Associated Public Access Amenities Project	Ongoing construction activities have affected the visual resources of the site with the presence of construction equipment, fences, and partially completed structures, resulting in short-term, minor, adverse impacts. The increase of natural aesthetic of the coastal area would result in long-term, beneficial impacts.
Fort Morgan Pier Rehabilitation	During construction, impacts on visual resources at the proposed alternative site would be short term, minor, and adverse. Even though existing viewsheds would be temporarily affected, impacts would not dominate the view or detract from current user activities or experiences. The pier rehabilitation would incorporate new decking and a sidewalk, which would improve the aesthetics of the existing area. Long-term impacts from the rehabilitation of the pier would be considered minor and beneficial.
Fort Morgan Peninsula Public Access Improvements	During construction, impacts on visual resources at the proposed alternative site would be short term, minor, and adverse. Even though existing viewsheds would be temporarily affected, these impacts would not dominate the view or detract from current user activities or experiences. The proposed facilities would be constructed with appropriate materials and include a muted color scheme that would fit the overall beach feel of the area. Long-term impacts from the proposed alternative would be considered minor and adverse to some visitors and beneficial to others.
Laguna Cove Little Lagoon Natural Resource Protection	During construction, impacts on visual resources at the proposed alternative site would be short term, minor, and adverse. The proposed facilities would be constructed with appropriate materials and include a muted color scheme that would fit the overall beach feel of the area. Long-term impacts from the proposed alternative would be considered minor and adverse to some visitors and beneficial to others.
Gulf Highlands Land Acquisition	During construction, impacts on visual resources at the proposed alternative site would be short term, minor, and adverse. Existing views that would change most would be the views from the beach looking north and from the road looking south towards the Gulf. Impacts of the changes in the visual environment may be beneficial because appropriate materials and a muted color scheme would be used. Long-term impacts from the rehabilitation of the pier would be considered minor and beneficial.
Dauphin Island Eco-Tourism and Environmental Education Area	During construction, impacts on visual resources at the proposed alternative site would be short term, minor, and adverse. Existing views that would change most would be the views from the road looking north and west towards the bay. Impacts of the changes in the visual environment may be beneficial because appropriate materials and a muted color scheme would be used. Long-term impacts from the rehabilitation of the pier would be considered minor and beneficial.

Alternative	Summary of Impacts to Aesthetics and Visual Resources
Mid-Island Parks and Public Beach Improvements (Parcels A, B, and C)	During construction, impacts on visual resources at the proposed alternative site would be short term, minor, and adverse. Existing views that would change most would be the views from the roads looking in either direction (north or south) to the separate parcels, and for those residing in nearby homes. Impacts of the changes in the visual environment may be beneficial because appropriate materials and a muted color scheme would be used. Long-term impacts from the rehabilitation of the pier would be considered minor and beneficial.
Mid-Island Parks and Public Beach Improvements (Parcels B and C)	During construction, impacts on visual resources at the proposed alternative site would be short term, minor, and adverse. Existing views that would change most would be the views from the roads looking in either direction (north or south) to the separate parcels, and for those residing in nearby homes. Impacts of the changes in the visual environment may be beneficial because appropriate materials and a muted color scheme would be used. Long-term impacts from the rehabilitation of the pier would be considered minor and beneficial.

Table 18: Summary of Impacts to Public Health and Safety

Alternative	Summary of Impacts to Public Health and Safety
No Action	Access Improvements Projects on Currently Owned Public Lands: Recreational amenities on these sites would not be developed, and no short- or long-term impacts are expected to public health and safety. Land Acquisition and Access Improvement Projects: If sites are developed, no short- or long-term impacts would be expected because development would adhere to local codes. If the sites are not developed, no short- or long-term impacts to public health and safety would be expected. Projects Currently Under Construction: Construction of the Gulf State Park Lodge would continue, and there would be no impacts on public health and safety because the site includes no known hazardous materials. Operations would be maintained to minimize soil erosion. As a result, no impacts on shoreline erosion are anticipated
Gulf State Park Lodge and Associated Public Access Amenities Project	The majority of the additional project elements (i.e., a tram stop at the lodge site, public educational programs, and a bicycle sharing program) would be located within the footprint of disturbance analyzed in the Final Phase III ERP/PEIS. No additional impacts are expected from the pedestrian trail due to the extent of footprint expansion being minimal in relation to a larger 22-acre site.
Fort Morgan Pier Rehabilitation	Construction is not anticipated to result in adverse impacts on public health and safety as long as identified safety protocols are enforced when such activities are ongoing. There would be no increased risk of exposure to potential hazards from construction. No long-term impacts are expected.
Fort Morgan Peninsula Public Access Improvements	Impacts from construction on public health would be short term, minor, and adverse because construction would not cause soil, groundwater, and/or surface contamination or exceedances in state water quality standards, and erosion of soil material would be minimized. No long-term impacts are expected.
Laguna Cove Little Lagoon Natural Resource Protection	Construction is not anticipated to result in adverse impacts on public health and safety as long as identified safety protocols are enforced when such activities are ongoing. Impacts from construction on public health would be short term, minor, and adverse because construction would not cause soil, groundwater, and/or surface contamination or exceedances in state water quality standards, and erosion of soil material would be minimized. No long-term impacts are expected.

Alternative	Summary of Impacts to Public Health and Safety
Gulf Highlands Land Acquisition	Construction is not anticipated to result in adverse impacts on public health and safety as long as identified safety protocols are enforced when such activities are ongoing. Impacts from construction on public health would be short term, minor, and adverse because construction would not cause soil, groundwater, and/or surface contamination or exceedances in state water quality standards, and erosion of soil material would be minimized. No long-term impacts are expected.
Dauphin Island Eco-Tourism and Environmental Education Area	Construction is not anticipated to result in adverse impacts on public health and safety as long as identified safety protocols are enforced when such activities are ongoing. Impacts from construction on public health would be short term, minor, and adverse because construction would not cause soil, groundwater, and/or surface contamination or exceedances in state water quality standards, and erosion of soil material would be minimized. No long-term impacts are expected.
Mid-Island Parks and Public Beach Improvements (Parcels A, B, and C)	Construction is not anticipated to result in adverse impacts on public health and safety as long as identified safety protocols are enforced when such activities are ongoing. Impacts from construction on public health would be short term, minor, and adverse because construction would not cause soil, groundwater, and/or surface contamination or exceedances in state water quality standards, and erosion of soil material would be minimized. No long-term impacts are expected.
Mid-Island Parks and Public Beach Improvements (Parcels B and C)	Construction is not anticipated to result in adverse impacts on public health and safety as long as identified safety protocols are enforced when such activities are ongoing. Impacts from construction on public health would be short term, minor, and adverse because construction would not cause soil, groundwater, and/or surface contamination or exceedances in state water quality standards, and erosion of soil material would be minimized. No long-term impacts are expected.

Deepwater Horizon Oil Spill
Alabama Trustee Implementation Group
Final Restoration Plan I and
Environmental Impact Statement:
Provide and Enhance Recreational Opportunities

APRIL 2017

ABSTRACT

Title: Alabama Trustee Implementation Group Restoration Plan I and Environmental Impact Statement: Provide and Enhance Recreational Opportunities (RP/EIS)

Lead Agency and Cooperating Agencies: The Alabama Trustee Implementation Group (AL TIG) includes two state trustee agencies and four federal trustee agencies: the Alabama Department of Conservation and Natural Resources; the Geological Survey of Alabama; the United States Department of Commerce, represented by the National Oceanic and Atmospheric Administration (NOAA); the United States Department of the Interior, represented by the United States Fish and Wildlife Service and National Park Service; the United States Department of Agriculture; and the United States Environmental Protection Agency (collectively the AL TIG). NOAA serves as the lead federal agency for National Environmental Policy Act (NEPA) compliance. Each of the other federal and state co-Trustees are participating as a cooperating agency pursuant to NEPA (40 Code of Federal Regulations § 1508.5). There are no other cooperating federal, state, or local entities or Indian tribes.

Summary: The AL TIG has undertaken this restoration planning effort to meet the purpose of restoring those natural resources and services injured as a result of the Deepwater Horizon (DWH) oil spill. For the purpose of restoring natural resources and services injured as a result of the DWH oil spill, the AL TIG needs to address the associated loss of recreational shoreline uses in Alabama. Specifically, the Trustees propose to implement compensatory restoration projects that would provide the public with additional and enhanced recreational shoreline use services in Alabama. This RP/EIS considers alternatives to restore recreational use services injured or lost along the Alabama shoreline as a result of the DWH oil spill incident and is consistent with findings presented in the Final Programmatic Damage Assessment and Restoration Plan and Final Programmatic Environmental Impact Statement. The RP/EIS was prepared as part of the natural resource damage assessment process and presents restoration planning efforts to the public in the wake of the DWH oil spill. These efforts include the evaluation of 10 restoration alternatives (including the no action alternative) under the Oil Pollution Act. The RP/EIS also evaluates the environmental consequences of the 10 restoration alternatives under NEPA. The AL TIG proposes to undertake further restoration planning and project implementation of the six projects identified as preferred alternatives in this RP/EIS as part of a comprehensive approach to best address the shoreline recreational loss injuries that were incurred in Alabama from the DWH oil spill. The discussed preferred restoration alternatives take place in Baldwin and Mobile counties in southern Alabama.

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EXECUTIVE SUMMARY

On April 20, 2010, the Deepwater Horizon (DWH) mobile drilling unit exploded, caught fire, and eventually sank in the Gulf of Mexico, resulting in a massive release of oil and other substances from British Petroleum's (BP) Macondo well and causing loss of life and extensive natural resource injuries. Initial efforts to cap the well following the explosion were unsuccessful, and for 87 days after the explosion, the well continuously and uncontrollably discharged oil and natural gas into the northern Gulf of Mexico. Approximately 3.19 million barrels (134 million gallons) of oil were released into the ocean (*U.S. v. BP et al.*, 2015). Oil spread from the deep ocean to the surface and nearshore environment from Texas to Florida. The oil came into contact with and injured natural resources as diverse as deep-sea coral, fish and shellfish, productive wetland habitats, sandy beaches, birds, endangered sea turtles, and protected marine life. The oil spill prevented people from fishing, going to the beach, and enjoying typical recreational activities along the Gulf of Mexico. Extensive response actions, including cleanup activities and actions to try to prevent the oil from reaching sensitive resources, were undertaken to try to reduce harm to people and the environment. However, many of these response actions had collateral impacts on the environment and on natural resource services. The oil and other substances released from the well in combination with the extensive response actions together make up the DWH oil spill.

As an oil pollution incident, the DWH oil spill was subject to the provisions of the Oil Pollution Act (OPA) of 1990, which addresses preventing, responding to, and paying for oil pollution incidents in navigable waters, adjoining shorelines, and the exclusive economic zone of the United States. Under the authority of OPA, a council of federal and state "Trustees" was established on behalf of the public to assess natural resource injuries resulting from the incident and work to make the environment and public whole for those injuries. As required under OPA, the Trustees conducted a natural resource damage assessment (NRDA) and prepared the Final Programmatic Damage Assessment and Restoration Plan/Programmatic Environmental Impact Statement (Final PDARP/PEIS).

The primary goal of OPA is to make the environment and public whole for injuries to natural resources and services resulting from an incident involving an oil discharge (or substantial threat of an oil discharge). Under OPA regulations, the natural resource injuries for which responsible parties are liable include injuries resulting from the oil discharge and those resulting from response actions or substantial threat of a discharge. OPA specifies that Trustees responsible for representing the public's interest (in this case, state and federal agencies) must be designated to act on behalf of the public to assess the injuries and to address those injuries. The DWH oil spill Trustees (the DWH Trustees) for the affected natural resources conducted a NRDA to:

- Assess the impacts of the DWH oil spill on natural resources in the Gulf of Mexico and the services those resources provide.
- Determine the type and amount of restoration needed to compensate the public for these impacts.

Following the assessment, the DWH Trustees determined that the injuries caused by the DWH oil spill could not be fully described at the level of a single species, a single habitat type, or a single region. Rather, the injuries affected such a wide array of linked resources over such an enormous area that the effects of the DWH oil spill must be described as constituting an ecosystem-level injury. Consequently, the DWH Trustees' preferred alternative for restoration planning employs a comprehensive, integrated ecosystem approach to best address these ecosystem-level injuries.

Given the broad ecological scope of the injuries, restoration planning requires a broad ecosystem perspective to restore the vast array of resources and services injured by the DWH oil spill. Thus, the DWH Trustees proposed a comprehensive, integrated ecosystem restoration plan with a portfolio of Restoration Types that addresses the diverse suite of injuries that occurred at both regional and local scales. The DWH Trustees identified the need for a comprehensive restoration plan at a programmatic level to guide and direct the massive restoration effort, based on the following five overarching goals:

- Restore and conserve habitat.
- Restore water quality.
- Replenish and protect living coastal and marine resources.
- Provide and enhance recreational opportunities.
- Provide for monitoring, adaptive management, and administrative oversight to support restoration implementation.

These five goals work both independently and together to restore injured resources and services.

Final Restoration Plan and Environmental Impact Statement

This document, the "Alabama Trustee Implementation Group Restoration Plan I and Environmental Impact Statement: Provide and Enhance Recreational Opportunities" (RP/EIS), was prepared by the Alabama Trustee Implementation Group (AL TIG) pursuant to OPA and is consistent with the DWH Trustees' findings in the Final PDARP/PEIS. The AL TIG includes two state trustee agencies and four federal trustee agencies: the Alabama Department of Conservation and Natural Resources (ADCNR); the Geological Survey of Alabama; the United States Department of Commerce, represented by the National Oceanic and Atmospheric Administration (NOAA); the United States Department of the Interior (USDOI), represented by the United States Fish and Wildlife Service (USFWS) and National Park Service (NPS); the United States Department of Agriculture (USDA); and the United States Environmental Protection Agency (USEPA) (collectively the AL TIG).

The AL TIG prepared this RP/EIS to inform the public about DWH NRDA restoration planning efforts and to seek public comment on the six preferred alternatives (five preferred restoration alternatives proposed for implementation and one preferred restoration alternative proposed for engineering and design [E&D]).

In identifying proposed projects for this RP/EIS, the AL TIG considered the OPA screening criteria, the Restoration Goals and other criteria identified by the DWH Trustees in the Final PDARP/PEIS, input from the public, and the current and future availability of funds under the DWH oil spill NRDA settlement payment schedule.

Under the Consent Decree discussed in Section 1.1 of this RP/EIS, the majority of NRDA funds that will be made available to the AL TIG for restoration in the Alabama Restoration Area —over $110 million— are to be used for the "Provide and Enhance Recreational Opportunities" Restoration Type. Because of the significant injury to recreational use services as a result of the oil spill, the AL TIG chose to prioritize restoration projects under this Restoration Type in this RP/EIS. In particular, the RP/EIS focuses on implementation of projects to compensate for lost shoreline recreational use because, overall, the majority of the recreational use loss in Alabama affected shoreline use.

This restoration planning activity is occurring, in part, in accordance with the February 16, 2016, decision in *Gulf Restoration Network v. Jewell et al.*, Case 1:15-cv-00191-CB-C (S.D. Ala.). In that decision, the court prohibited the use of $58.5 million in early restoration funds until additional analysis was

completed under NEPA and OPA. This RP/EIS fulfills the federal and state natural resources trustees' responsibilities under this court order. It also looks more broadly at the potential to provide restoration for lost recreational use within Alabama by evaluating nine project alternatives that are intended to compensate for a part of Alabama's shoreline recreational use injury. Out of those nine projects, the AL TIG proposes moving forward with the following recreational use projects within the “Provide and Enhance Recreational Opportunities” Restoration Type:

- Gulf State Park Lodge and Associated Public Access Amenities Project – $56,300,000
- Fort Morgan Pier Rehabilitation – $3,075,000
- Laguna Cove Little Lagoon Natural Resource Protection – $4,400,000
- Bayfront Park Restoration and Improvement (E&D only) – $1,000,000
- Dauphin Island Eco-Tourism and Environmental Education Area – $4,000,000
- Mid-Island Parks and Public Beach Improvements (Parcels B and C) – $1,900,000

The total funding proposed in this RP/EIS is $70,675,000.

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LIST OF ACRONYMS

ADA	Americans with Disabilities Act
ADCNR	Alabama Department of Conservation and Natural Resources
ADEM	Alabama Department of Environmental Management
AL TIG	Alabama Trustee Implementation Group
AQI	Air Quality Index
BFE	base flood elevation
BMP	best management practice
BP	British Petroleum
CAA	Clean Air Act
CBMPP	Construction Best Management Practices Plan
CBRA	Coastal Barrier Resources Act
CEQ	Council on Environmental Quality
CFR	Code of Federal Regulations
cm TL	centimeters total length
CO_2	carbon dioxide
CO_2e	carbon dioxide equivalent
CWA	Clean Water Act
CZMA	Coastal Zone Management Act
DWH	Deepwater Horizon
E&D	engineering and design
EFH	Essential Fish Habitat
EO	Executive Order
E&S	erosion and sedimentation
ESA	Endangered Species Act
FEMA	Federal Emergency Management Agency
Final PDARP/ PEIS	Programmatic Damage Assessment and Restoration Plan and Final Programmatic Environmental Impact Statement
Final Phase III ERP/PEIS	Phase III Early Restoration Plan and Programmatic Environmental Impact Statement
FMP	Fisheries Management Plan
FR	Federal Register
GEBF	Gulf Environmental Benefit Fund

GHG	greenhouse gas
GMFMC	Gulf of Mexico Fishery Management Council
HCP	habitat conservation plan
LEED	Leadership in Energy and Environmental Design
LOS	level of service
$\mu g/m^3$	micrograms per cubic meter
MBTA	Migratory Bird Treaty Act
MMPA	Marine Mammal Protection Act of 1972
NAAQS	National Ambient Air Quality Standards
NEPA	National Environmental Policy Act
NFWF	National Fish and Wildlife Foundation
NHPA	National Historic Preservation Act
NMFS	National Marine Fisheries Service
NOAA	National Oceanic and Atmospheric Administration
NOI	Notice of Intent
NPDES	National Pollutant Discharge Elimination System
NPS	National Park Service
NRCS	United States Department of Agriculture-Natural Resources Conservation Service
NRDA	natural resource damage assessment
NRHP	National Register of Historic Places
NWI	National Wetlands Inventory
OPA	Oil Pollution Act of 1990
OSHA	Occupational Safety and Health Administration
PCEs	primary and constituent elements
PEPC	Planning, Environment and Public Comment System
$PM_{2.5}$	particles with a diameter less than or equal to a nominal 2.5 micrometers
PM_{10}	particles with a diameter less than or equal to a nominal 10 micrometers
ppb	parts per billion
ppm	parts per million
PWEI	Population Weighted Emissions Index
QCI	Qualified Credentialed Inspector
RESTORE Act	Resources and Ecosystems Sustainability, Tourist Opportunities, and Revived Economies of the Gulf Coast States Act

RHA	Rivers and Harbors Act
ROD	Record of Decision
ROW	right-of-way
RP	Restoration Plan
RP/EIS	Restoration Plan/Environmental Impact Statement
SAFMC	South Atlantic Fishery Management Council
SAV	submerged aquatic vegetation
SITES	Sustainable Sites Initiative
TCP	traditional cultural property
TIG	Trustee Implementation Group
USACE	United States Army Corps of Engineers
U.S.C.	United States Code
USDOC	United States Department of Commerce
USDOI	United States Department of the Interior
USEPA	United States Environmental Protection Agency
USDA	United States Department of Agriculture
USFWS	United States Fish and Wildlife Service
USGS	United States Geological Survey
YOY	young of year

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DOCUMENT ORGANIZATION

This document is organized as follows:

- Chapter 1: Introduction—describes why this RP/EIS was written and under what authorities. It also discusses the purpose and need for action, provides a brief description of the alternatives being considered, and details the public involvement in the planning process and opportunities for public comment.
- Chapter 2: Project Screening and Alternatives—provides an overview of the screening process for potential alternatives, and the alternatives both carried forward for detailed analysis and those considered but not carried forward for detailed analysis.
- Chapter 3: OPA Evaluation of Recreational Use Alternatives—provides the OPA evaluation of the recreational use restoration alternatives.
- Chapter 4: NEPA Affected Environment—provides an overview of the Alabama coastal ecosystem and its diverse natural resources and associated services to provide context for the environmental consequences. Resources are considered at the county as well as site-specific level.
- Chapter 5: Environmental Consequences—pursuant to NEPA, provides the environmental consequences of the proposed projects, including cumulative impacts.
- Chapter 6: Compliance with Other Laws and Regulations—summarizes the body of laws, regulations, executive orders, and other applicable laws that the DWH Trustees considered in the Final PDARP/PEIS and that the AL TIG reviewed for applicability to this plan.
- Chapter 7: Monitoring and Adaptive Management Plan—describes how a robust monitoring and adaptive management plan was developed for each project in the final RP/EIS. Each of these plans is provided as an appendix to the RP/EIS (Appendix C).
- Chapter 8: Additional Considerations in Planning—addresses NEPA required analyses that apply to all alternatives considered in an EIS, including the Relationship Between Short-term Use of the Human Environment and Long-term Productivity; Irreversible and Irretrievable Commitment of Resources; Unavoidable Adverse Impacts; and Consideration of Incomplete or Unavailable Information.
- Chapter 9: Response to Public Comments—provides a summary of the comments received on the draft RP/EIS and responses to these comments from the AL TIG. Copies of all correspondence received are provided in Appendix B.
- Chapter 10: List of Repositories
- Chapter 11: List of Preparers, Agencies, and Persons Consulted
- Chapter 12: Literature Cited

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1.0 INTRODUCTION

The Alabama Trustee Implementation Group (AL TIG) has prepared this Alabama Trustee Implementation Group Restoration Plan I and Environmental Impact Statement: Provide and Enhance Recreational Opportunities (RP/EIS) to address the restoration of lost recreational use in the State of Alabama as a result of the *Deepwater Horizon* (DWH) oil spill. The AL TIG is responsible for restoring the natural resources and services within the Alabama Restoration Area that were injured by the DWH oil spill. The purpose of restoration, as discussed in this document and detailed more fully in the Final Programmatic Damage Assessment and Restoration Plan/Programmatic Environmental Impact Statement (Final PDARP/PEIS[1]), is to make the environment and the public whole for injuries resulting from the incident by implementing restoration actions that return injured natural resources and services to baseline conditions and compensate for interim losses, in accordance with the Oil Pollution Act of 1990 (OPA) and associated natural resource damage assessment (NRDA) regulations. This section describes the oil spill incident, as well as the recreational use injury and the purpose and need for the restoration actions proposed in this RP/EIS.

On April 20, 2010, the DWH mobile drilling unit exploded, caught fire, and eventually sank in the Gulf of Mexico, resulting in a massive release of oil and other substances from British Petroleum's (BP) Macondo well and causing loss of life and extensive natural resource injuries. Initial efforts to cap the well following the explosion were unsuccessful and, for 87 days after the explosion, the well continuously and uncontrollably discharged oil and natural gas into the northern Gulf of Mexico. Approximately 3.19 million barrels (134 million gallons) of oil were released into the ocean (*U.S. v. BP et al.*, 2015). Oil spread from the deep ocean to the surface and nearshore environment from Texas to Florida. The oil came into contact with and injured natural resources as diverse as deep-sea coral, fish and shellfish, productive wetland habitats, sandy beaches, birds, endangered sea turtles, and protected marine life. The oil spill prevented people from fishing, going to the beach, and enjoying typical recreational activities along the Gulf of Mexico. Extensive response actions, including cleanup activities and actions to try to prevent the oil from reaching sensitive resources, were undertaken to try to reduce harm to people and the environment. However, many of these response actions had collateral impacts on the environment and on natural resource services. The oil and other substances released from the well in combination with the extensive response actions together make up the DWH oil spill (DWH Trustees, 2016a).

The Alabama TIG includes two state trustee agencies and four federal trustee agencies: the Alabama Department of Conservation and Natural Resources (ADCNR); the Geological Survey of Alabama; the United States Department of Commerce (USDOC), represented by the National Oceanic and Atmospheric Administration (NOAA); the United States Department of the Interior (USDOI), represented by the United States Fish and Wildlife Service (USFWS) and National Park Service (NPS); the United States Department of Agriculture (USDA); and the United States Environmental Protection Agency (USEPA) (collectively the AL TIG). NOAA serves as the lead federal agency for National Environmental Policy Act (NEPA) compliance. Each of the other federal and state co-Trustees are participating as a cooperating agency pursuant to NEPA (40 CFR § 1508.5). There are no other cooperating federal, state, or local entities or Indian tribes.

NEPA authorizes a federal agency to adopt another agency's EIS provided that the statement meets the standards for an adequate statement under the NEPA regulations (40 CFR § 1506.3). Further, a federal

[1] The Final PDARP/PEIS and Record of Decision (ROD) can be found at http://www.gulfspillrestoration.noaa.gov/restoration-planning/gulf-plan/.

agency participating in the NEPA process as a cooperating agency may adopt the EIS of a lead agency without recirculating the statement when, after an independent review of the statement, the cooperating agency concludes that its comments and suggestions have been satisfied. USDOI, USDA, and USEPA are participating in the development of the RP/EIS as cooperating federal agencies for purposes of NEPA. Upon completion of the final RP/EIS, each agency intends to independently determine if the EIS component of the RP/EIS is sufficient for the purposes of informing that agency's decision and hence adopt the EIS in accordance with 40 CFR § 1506.3 and its agency-specific NEPA procedures. USDOI, USDA, and USEPA may adopt this EIS in a Record of Decision (ROD) for this EIS.

1.1 BACKGROUND AND SUMMARY OF THE SETTLEMENT

On April 4, 2016, the United States District Court for the Eastern District of Louisiana entered a Consent Decree resolving civil claims by the DWH oil spill Trustees (DWH Trustees) against BP Exploration and Production Inc. arising out of the DWH oil spill. (See *United States v. BPXP et al.,* Civ. No. 10-4536*, centralized in* MDL 2179*, In re: Oil Spill by the Oil Rig "Deepwater Horizon" in the Gulf of Mexico, on April 20, 2010* (E.D. La.)). This historic settlement resolves the DWH Trustees' claims against BP for natural resources damages under OPA.

Under the Consent Decree, BP agreed to pay over a 15-year period a total of $8.1 billion in natural resource damages (which includes $1 billion that BP previously committed to pay for early restoration projects), and up to an additional $700 million (some of which will be in the form of accrued interest) for adaptive management or to address injuries to natural resources that are presently unknown but may come to light in the future. As part of the settlement, the settlement proceeds are allocated to the DWH Trustees to conduct restoration within specific Restoration Areas and for specific Restoration Types (DWH Trustees, 2016b; USDOJ, 2016).

Table 1-1 below[2] outlines the settlement of NRDA claims, including the final allocation for the AL TIG under NRDA. The total NRD funding for the Alabama Restoration Area is $295,589,305, with a total remaining NRDA allocation (including the $58.5 million in early restoration funds enjoined by the court in *Gulf Restoration Network v. Jewell et al.*) of $234,800,000.[3] Of these funds, $25 million was allocated to the Alabama Restoration Area for the "Provide and Enhance Recreational Opportunities" Restoration Type. This is in addition to the $85,505,305 allocated for that purpose during early restoration.

More details on the background of the DWH oil spill, the impact of the spill on the Gulf of Mexico ecosystem, and additional context for the settlement and allocation of funds can be found in Chapter 2 of the Final PDARP/PEIS.

[2] Table 1-1 is a modified version of Table 5.10-1 of the Final PDARP/PEIS.

[3] $2,216,388 of the $58.5 million was spent on lodge design, engineering, and construction management fees prior to the Court's injunction (for more information on *Gulf Restoration Network v. Jewell et al.* see Section 1.6.1). The remaining approximately $56.3 million is being considered for expenditure, alongside the additional $25 million allocated to the "Provide and Enhance Recreational Opportunities" Restoration Type pursuant to the Consent Decree, in this RP/EIS.

Table 1-1: Settlement of NRDA Claims; NRDA Final Allocation

Restoration Categories	Alabama
1. Restore and Conserve Habitat	
Wetlands, Coastal and Nearshore Habitats	$65,000,000
Habitat Projects on Federally Managed Lands	$3,000,000
Early Restoration (through Phase IV)	$28,110,000
2. Restore Water Quality	
Nutrient Reduction (nonpoint source)	$5,000,000
3. Replenish and Protect Living Coastal and Marine Resources	
Sea Turtles	$5,500,000
Marine Mammals	$5,000,000
Birds	$30,000,000
Early Restoration Birds	$145,000
Oysters	$10,000,000
Early Restoration Oysters	$3,329,000
4. Provide and Enhance Recreational Opportunities	$25,000,000
Early Restoration of Recreational Loss	$85,505,305
5. Monitoring, Adaptive Management, Administrative Oversight	
Monitoring and Adaptive Management	$10,000,000
Administrative Oversight and Comprehensive Planning	$20,000,000
TOTAL NRD FUNDING	**$295,589,305**

1.2 DWH OIL SPILL TRUSTEES

The DWH Trustees are the government entities authorized under OPA to act as trustees on behalf of the public to assess the natural resource injuries resulting from the DWH oil spill and develop and implement a restoration plan to compensate for those injuries. Collectively, these Trustees comprise the DWH Trustee Council. The following federal and state agencies are the designated DWH Trustees under OPA for the DWH oil spill:

- NOAA
- USDOI
- USEPA
- USDA
- ADCNR and the Geological Survey of Alabama
- The State of Florida's Department of Environmental Protection and Fish and Wildlife Conservation Commission

- The State of Louisiana's Coastal Protection and Restoration Authority, Oil Spill Coordinator's Office, Department of Environmental Quality, Department of Wildlife and Fisheries, and Department of Natural Resources
- The State of Mississippi's Department of Environmental Quality
- The State of Texas' Parks and Wildlife Department, General Land Office, and Commission on Environmental Quality

For purposes of discussion, the following definitions are helpful:

- **Trustees**: As specified in OPA, natural resource trustees are designated to act on behalf of the public to assess and recover damages, develop implementation plans, and implement restoration plans (see Section 7.1 of the Final PDARP/PEIS for further detail).

  Trustees fulfill these responsibilities by developing restoration plans, providing the public with meaningful opportunities to review and comment on proposed plans (including the information that supports that purpose), implementing and monitoring restoration projects, managing natural resource damage funds, documenting trustee decisions through a public Administrative Record (including those that involve the use of recovered damages), and providing for public involvement and transparency in keeping with the public responsibilities with which they have each been entrusted under OPA.
- **Trustee Implementation Groups (TIGs)**: Are established by the DWH Settlement agreement and are composed of Individual Trustee Agency representatives. The TIGs develop plans for, choose, and implement specific restoration actions under the Final PDARP/PEIS. Each TIG makes all restoration decisions for the funding allocated to its Restoration Area, and ensures its actions are fully consistent with the Final PDARP/PEIS and Standard Operating Procedures.

1.3 AUTHORITIES AND REGULATIONS

1.3.1 OPA and NEPA Compliance

As an oil pollution incident, the DWH oil spill is subject to the provisions of OPA, 33 United States Code [U.S.C.] § 2701 et seq. A primary goal of OPA is to make the environment and public whole for injuries to natural resources and services resulting from an incident involving an oil discharge or substantial threat of an oil discharge. Under OPA, each party responsible for a vessel or facility from which oil is discharged, or which poses the substantial threat of a discharge, is liable for, among other things, removal costs and damages for injury to, destruction of, loss, or loss of use of natural resources, including the reasonable cost of assessing the damage.

This process of injury assessment and restoration planning is referred to as NRDA. Under the authority of OPA, a council of federal and state trustees was established to assess natural resource injuries resulting from the incident and to work to make the environment and public whole for those injuries. NRDA is described under Section 1006 of OPA (33 U.S.C. § 2706). Under the OPA NRDA regulations (15 CFR Part 990), the NRDA process consists of three phases: (1) Preassessment; (2) Assessment and Restoration Planning; and (3) Restoration Implementation. The DWH Trustees are currently in the Restoration Implementation phase of the NRDA. As part of the initiation of restoration implementation, this RP/EIS identifies a reasonable range of restoration alternatives, evaluates those alternatives under various criteria, and proposes a suite of preferred alternatives.

Restoration activities under OPA are intended to return injured natural resources and services to their baseline condition (primary restoration) and to compensate the public for interim losses from the time of the incident until the time resources and services recover to baseline conditions (compensatory

restoration). To meet these goals, the restoration activities need to produce benefits that are related to or have a nexus (connection) to natural resource injuries and service losses resulting from the spill.

Under the OPA regulations, federal trustees must comply with NEPA, 42 U.S.C. § 4321 et seq., and its regulations, 40 CFR § 1500 et seq., when planning restoration projects. NEPA requires federal agencies to consider the potential environmental impacts of planned actions. NEPA provides a mandate and framework for federal agencies to determine if their proposed actions have significant environmental effects and related social and economic effects, consider these effects when choosing between alternative approaches, and inform and involve the public in the environmental analysis and decision-making process.[4]

More information about OPA and NEPA, as well as their application to DWH oil spill restoration planning, can be found in Chapters 5 and 6 of the Final PDARP/PEIS.[5]

1.3.2 Final PDARP/PEIS and Record of Decision

Given the potential magnitude and breadth of restoration for injuries resulting from the DWH oil spill, the DWH Trustees prepared a PDARP/PEIS under OPA and NEPA to analyze alternative approaches to implementing restoration and to consistently guide restoration decisions. Based on the DWH Trustees' thorough assessment of impacts to the Gulf's natural resources, a comprehensive, integrated ecosystem restoration approach for restoration implementation was proposed. On February 19, 2016, the DWH Trustee Council issued a Final PDARP/PEIS detailing a specific proposed plan to fund and implement restoration projects across the Gulf of Mexico region over the next 15 years. On March 29, 2016, in accordance with OPA and NEPA, the DWH Trustees published a Notice of Availability of a ROD for the Final PDARP/PEIS in the *Federal Register* [FR] (81 FR 17438). Based on the DWH Trustees' injury determination established in the Final PDARP/PEIS, the ROD set forth the basis for the DWH Trustees' decision to select Alternative A: Comprehensive Integrated Ecosystem Alternative. The DWH Trustees' selection of Alternative A includes the funding allocations established in the Final PDARP/PEIS.

More information about Alternative A can be found in Sections 5.5 and 5.10 of the Final PDARP/PEIS.

The Final PDARP/PEIS also sets forth the process for subsequent restoration planning to select specific projects for implementation, based on the DWH Trustee governance structure detailed in Chapter 7. The Final PDARP/PEIS establishes a distributed governance structure that assigns a TIG for each of the eight Restoration Areas described in Chapter 5. Each TIG makes all restoration decisions for the funding allocated to its Restoration Area.

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[4] Under Section 309 of the Clean Air Act, USEPA reviews and comments publicly on federal proposals subject to NEPA's EIS requirement. USEPA provided a review of the draft RP/EIS, and in a letter dated January 30, 2017, stated that it had a Lack of Objections and that USEPA does not anticipate any significant environmental impacts associated with implementation of any of the preferred alternatives. This correspondence is appended to the Final RP/EIS.

[5] Chapters 5 and 6 of the Final PDARP/PEIS are available at http://www.gulfspillrestoration.noaa.gov/sites/default/files/wp-content/uploads/Chapter-5_Restoring-Natural-Resources_508.pdf and http://www.gulfspillrestoration.noaa.gov/sites/default/files/wp-content/uploads/Chapter-6_Environmental-Consequences_508.pdf.

1.3.3 Relationship of this Restoration Plan to the Final PDARP/PEIS

As a programmatic restoration plan, the Final PDARP/PEIS provides direction and guidance for identifying, evaluating, and selecting future restoration projects to be carried out by the TIGs (Section 5.10.4 and Chapter 7 of the Final PDARP/PEIS). The DWH Trustees elected to prepare a PEIS to support analysis of the environmental consequences of the selected Restoration Types, to consider the multiple related actions that may occur because of restoration planning efforts, and to allow for a better analysis of cumulative impacts of potential actions. The programmatic approach was taken to assist the TIGs in their development and evaluation and to assist the public in its review of future restoration projects.

For the Final PDARP/PEIS, the DWH Trustees developed a set of Restoration Types for inclusion in programmatic alternatives, consistent with the desire to seek a diverse set of projects providing benefits to a broad array of injured resources and services. Ultimately, this process resulted in the inclusion of 13 Restoration Types in the 5 major Restoration Goals evaluated for restoration, including:

1. Wetlands, Coastal, and Nearshore Habitats
2. Habitat Projects on Federally Managed Lands
3. Nutrient Reduction (Nonpoint Source)
4. Water Quality (e.g., Stormwater Treatments, Hydrologic Restoration, Reduction of Sedimentation)
5. Fish and Water Column Invertebrates
6. Sturgeon
7. Submerged Aquatic Vegetation (SAV)
8. Oysters
9. Sea Turtles
10. Marine Mammals
11. Birds
12. Mesophotic and Deep Benthic Communities
13. Provide and Enhance Recreational Opportunities

For this RP/EIS, the AL TIG used the direction and the guidance of the Final PDARP/PEIS when evaluating proposed projects. The AL TIG considered and evaluated projects within the “Provide and Enhance Recreational Opportunities” Restoration Type.

Chapter 5 of the Final PDARP/PEIS analyzes different restoration approaches to address resource injuries for each Restoration Type. The alternatives included in this RP/EIS are consistent with the following restoration approaches described for the “Provide and Enhance Recreational Opportunities” Restoration Type, as described in Section 5.5.14.2 of the Final PDARP/PEIS:

- **Enhance public access to natural resources for recreational use.** This restoration approach focuses on creating new or improved access to natural resources for recreational purposes by enhancing existing or constructing new infrastructure. Providing or improving water access in publicly owned areas through the construction and operation of boat ramps, piers, or other infrastructure could also improve public access. Larger-scale infrastructure improvements such as a ferry service or the construction or improvement of roads and bridges could also serve to improve access to natural resources. Enhancing public access would include targeted acquisition of land parcels to serve as public access points.

- **Enhance recreational experiences.** This restoration approach focuses on enhancing the public's recreational experiences. The quality of activities such as swimming, boating, diving, bird watching, beach-going, and fishing can vary depending on the appearance and functional condition of the surrounding environment in which they occur. A variety of restoration techniques could be used individually or in combination as potential restoration projects.
- **Promote environmental stewardship, education, and outreach.** This restoration approach involves providing and enhancing recreational opportunities through environmental stewardship, education, and outreach activities. Multiple restoration techniques could be used individually, or in combination, as potential restoration projects.

Chapter 2 of this RP/EIS summarizes the screening process used to develop a reasonable range of alternatives, which is consistent with the DWH Trustees' selected programmatic alternative in the Final PDARP/PEIS, the Consent Decree and OPA. The AL TIG also prepared a NEPA environmental consequences analysis for the reasonable range of alternatives (Chapter 5 of this document) which "tiers" from the Final PDARP/PEIS programmatic NEPA analysis.

One of the objectives of the Final PDARP/PEIS was the ability to use it to "tier" the NEPA analysis in the subsequent restoration plans prepared by the TIGs (40 CFR 1502.20 and Final PDARP/EIS, Chapter 6). A tiered environmental analysis is a project-specific analysis that focuses on project-specific issues and summarizes or references (rather than repeats) the broader issues discussed in the PEIS. This RP/EIS is consistent with the Final PDARP/PEIS and ROD and provides NEPA analysis for each proposed project, tiering from the PEIS where applicable. For this RP/EIS, the DWH Trustees considered the extent to which additional NEPA analyses may be necessary for the proposed projects that tier their NEPA analyses from the Final PDARP/PEIS. These considerations include whether the analyses of relevant conditions and environmental effects described in the Final PDARP/PEIS are still valid and whether project impacts have already been fully analyzed in the Final PDARP/PEIS.

The applicable sections of the Final PDARP/PEIS are incorporated by reference into this plan (40 CFR § 1502.21). The Final PDARP/PEIS can be found at http://www.gulfspillrestoration.noaa.gov (DWH Trustees, 2016a).

1.3.4 Summary of Injuries Addressed in this RP/EIS

The DWH NRDA evaluated injury to natural resources and their services as a result of the DWH oil spill. A number of different resource categories were evaluated, including losses to recreational users. Impacts to recreational users occur when oil degrades the quality of a natural resource and impairs an individual's ability to interact with it. During the DWH oil spill, some beaches were closed due to oiling or cleanup activities while others remained open with posted advisories. The oil spill affected recreation in the Gulf of Mexico as a result of people cancelling recreational trips; choosing alternate sites for recreation; modifying planned activities; and experiencing a reduction in the quality of their recreational activities (see Final PDARP/PEIS, Section 4.10.1). Both direct oiling and the expectation of oiling caused individuals to cancel planned trips to coastal areas.

The DWH NRDA explicitly measured the lost value to recreational users as a result of the oil spill by combining information on the number of lost trips with economic models that measure the value of lost and affected trips. The assessment was structured to only measure lost value to trips whose primary purpose was coastal recreation. There are other economic damages associated with reductions in recreational trips to the coast such as declines in business profit or lost wages, however, those losses are outside the scope of the NRDA and this restoration plan.

The DWH lost recreational use injury assessment covered two broad categories of recreation: shoreline use and boating. Shoreline use refers to recreational activities conducted by individuals at locations near beaches and other shoreline areas and includes swimming, sunbathing, surfing, walking, kayaking, and fishing from the shore or shoreline structures (i.e., piers). It also includes fishing at sites that are considered coastal but are not directly on the beach. Specifically excluded from the shoreline use assessment are recreational boating, commercial activities, and oil spill response.

The second broad category, boating, includes individuals engaged in recreational boating activities that begin at sites providing access to salt water near the Gulf Coast. The term "sites" encompasses a wide variety of locations providing boat access to coastal waters, including marinas, unimproved launches, and private residences. Excluded from this category are non-recreational boating activities, including commercial fishing, law enforcement/safety, and oil spill response.

The DWH Trustees considered all aspects of the lost recreational use injury assessment in restoration planning to offset the losses, including:

- Spill impacts for shoreline activities in the North Gulf lasted for many months, starting in May 2010 and continuing through November 2011.
- Recreational losses as a result of the spill affected sites in Texas, Louisiana, Mississippi, Alabama, and Florida. Residents throughout the contiguous United States were included as part of the affected public.
- The DWH Trustees conducted a number of studies to measure the lost recreational value to the public as a result of the spill. The DWH Trustees estimated that 16,857,116 boating, fishing, and other shoreline activity user days were lost throughout the five affected states. Total recreational use damages because of the spill are estimated to be $693.2 million, with uncertainty ranging from $527.6 million to $858.9 million (see Final PDARP/PEIS, Section 4.10).
- As a result of the spill, the public lost over 16 million user days of boating, fishing, and beach-going experiences (see Final PDARP/PEIS, Section 4.10).

Overall, the majority of recreational use loss in Alabama affected shoreline use. Therefore, this RP/EIS focuses on restoring shoreline recreational losses, and the two goals for the "Provide and Enhance Recreational Opportunities" Restoration Type have been refined, as follows, to provide a more direct focus on recreational projects designed to replace lost shoreline use:

- increase recreational opportunities such as shore fishing, beach-going, camping, and near-shore boating with a combination of ecological restoration and creation of infrastructure, access, and use opportunities, and
- use education and outreach to promote engagement in restoration and stewardship of natural resources, which could include education programs, social media, and print materials.

A subsequent restoration plan focused on recreational use may address additional losses, such as those related to boating (see Final PDARP/PEIS, Section 4.10).

1.4 PURPOSE AND NEED

The AL TIG has undertaken this restoration planning effort to meet the purpose of restoring those natural resources and services injured as a result of the DWH oil spill. This RP/EIS is consistent with the Final PDARP/PEIS (2016), which identifies extensive and complex injuries to natural resources and services across the Gulf of Mexico, as well as a need and plan for comprehensive restoration consistent with OPA. This RP/EIS focuses on the restoration of injuries to Alabama's natural resources and

services—in particular to Restoration Type: "Provide and Enhance Recreational Opportunities," using funds made available through the DWH Consent Decree (see Final PDARP/PEIS, Chapter 4) and in Early Restoration.

For the purpose of restoring natural resources and services injured as a result of the DWH oil spill, the DWH Trustees need to address the associated loss of recreational shoreline uses in Alabama. Specifically, the DWH Trustees propose to implement compensatory restoration projects that would provide the public with additional and enhanced recreational shoreline use services in Alabama in a manner consistent with the Final PDARP/PEIS.

1.5 PROPOSED ACTION: ALABAMA RECREATIONAL USE PLAN

To address the programmatic and Restoration Type goals described above, the DWH Trustees propose to undertake the restoration planning and project implementation of the six projects identified as preferred alternatives in this RP/EIS to provide compensatory restoration of lost recreational shoreline use in Alabama, using funds made available in the DWH Consent Decree as well as funds enjoined as part of the *Gulf Restoration Network v. Jewell et al.* lawsuit (described in Section 1.6.1). Alternatives for consideration in this plan are described briefly below and detailed in Chapter 2. The AL TIG will continue to propose additional recreational use projects in Alabama, as well as projects to address Alabama's other injury categories and Restoration Types, in subsequent restoration plans.

1.5.1 Alternatives Considered in the Plan

Projects incorporated in the range of alternatives considered in this RP/EIS were developed through review of public comment, including all public comments on the DWH restoration planning process since initiating restoration planning in 2010. Alternatives were further refined based on the comments received on the draft RP/EIS. The DWH Trustees have considered public involvement to be an important component of restoration planning from the beginning (Final PDARP/PEIS, Section 1.7). Public involvement for this plan and how it was used to develop alternatives is discussed in Section 1.7.

The AL TIG may select alternatives included in this plan for a phased approach, meaning that a project in this plan may appear to be viable but requires additional information and therefore is proposed only for engineering and design (E&D) activities in this plan. Alternatives that include only E&D activities may require additional NEPA analyses in the future. Other alternatives are proposed for all phases of work, including E&D, planning, implementation, maintenance, and monitoring. Below is a brief description of each alternative. A more detailed description of each alternative is provided in Chapter 2. The location of these proposed alternatives is shown in Figure 1-1.

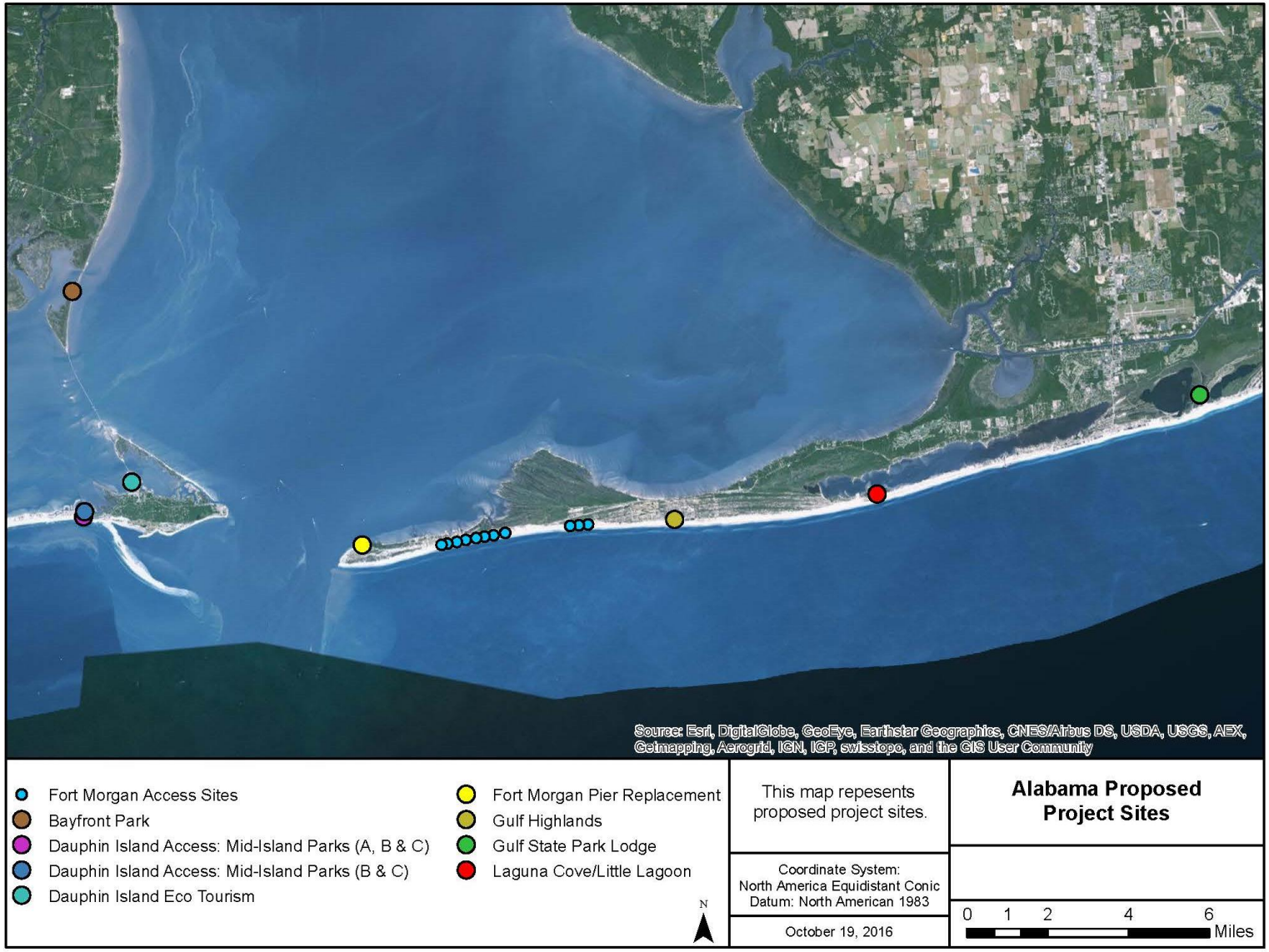

Figure 1-1: Proposed Alternative Locations

1.5.2 Baldwin County Projects

1. **Gulf State Park Lodge and Associated Public Access Amenities Project.** This alternative would provide funding to (1) use toward partial construction of the Gulf State Park Lodge in Baldwin County, Alabama, and (2) develop a host of public access amenities including an educational/interpretive lobby, public education programs, expansive viewing porches, public beach access, public restrooms and post-beach shower facilities, a bike share program, and a public tram system at Gulf State Park. These public access amenities would connect the lodge to other aspects of the park, and thus create and enhance public use and enjoyment of the beach areas at Gulf State Park for visitors not staying at the lodge, and increase access to the non-beach areas within Gulf State Park to all visitors. Building design and construction at Gulf State Park have been undertaken with the goal of certification under the Leadership in Energy and Environmental Design (LEED) Gold and Sustainable Sites Initiative (SITES) Platinum programs. Further, the lodge would offer access to public lands and amenities similar to that provided at existing National Park System lodges. The lobby and other public spaces in and around the lodge would serve as focal points for environmental education, with exhibits and programs addressing coastal Alabama ecosystems and sustainable development practices in the coastal zone. In addition, the lobby and other public spaces would provide amenities that would facilitate extended daily access to the Gulf State Park beaches. The lodge rooms would further provide the opportunity for on-site, overnight access at the beach at Gulf State Park, thus giving visitors a unique way to experience that public resource. A park tram will connect visitors from the lodge to other areas of Gulf State Park. Overall, the project is designed to be an integral part of the restoration and public utilization of Gulf State Park, furthering the restoration efforts conducted as part of the Gulf State Park Enhancement Project during Phase III of Early Restoration (see Section 1.6.1).
2. **Fort Morgan Pier Rehabilitation**. This alternative would fund the rehabilitation of a fishing pier located on Fort Morgan Peninsula in extreme southwestern Baldwin County, Alabama. The existing pier is approximately 500 feet long and is located at the Fort Morgan State Historic Site. Until recently, the Fort Morgan fishing pier was heavily used by recreational fisherman. However, the pier, which is over 40 years old, fell into disrepair, and in 2014 the Alabama Historical Commission closed the pier for safety reasons. The proposed project would rehabilitate the pier on its existing foundations, increasing publicly available opportunities for pier-based fishing in Baldwin County.
3. **Fort Morgan Peninsula Public Access Improvements.** This alternative would fund Gulf beach access improvements on the Fort Morgan Peninsula in southwest Baldwin County, Alabama. The proposed alternative would construct a mix of parking lots, restrooms, showers, and dune walkovers at 11 existing Baldwin County- and state-owned sites. These sites mainly consist of narrow (50 to 100 feet wide) county-owned parcels at the end of county-owned rights-of-way (ROWs). The sites are currently accessible by the public but lack amenities that would enhance existing public use and/or promote additional use of the sites. Educational signage focused on coastal natural resources would also be placed at the sites to promote environmental awareness and stewardship.
4. **Gulf Highlands Land Acquisition and Improvements.** This proposed alternative would fund the acquisition and transfer of the Gulf Highlands parcel located in southwest Baldwin County to the ADCNR State Parks Division. The property is approximately 113 acres with more than 2,700 feet of undeveloped Gulf-fronting beach. Once acquired, a parking lot for 40 cars and boardwalk

(approximately 1,280 feet long) would be constructed, and educational and interpretive signage would be added. This alternative would increase recreational access to this area, while protecting the area's sensitive resources. This alternative is also being evaluated under the National Fish and Wildlife Foundation (NFWF) Gulf Environmental Benefit Fund (GEBF). The acquisition has been awarded NFWF GEBF funding, although that funding has not yet been received.

5. **Laguna Cove Little Lagoon Natural Resource Protection.** This alternative involves the acquisition of two undeveloped tracts of land, totaling approximately 53 acres near Little Lagoon in Gulf Shores, Alabama, by the City of Gulf Shores. The tracts contain coastal wetlands and include portions of shoreline along Little Lagoon. In addition to land acquisition, several improvements are proposed to provide recreational access to the site, including a boardwalk, kayak launch, parking, and restrooms. Educational signage focused on coastal resources would be placed around the site to promote environmental awareness and stewardship. Once acquired, the land would be managed by the City of Gulf Shores.

1.5.3 Mobile County Projects

1. **Bayfront Park Restoration and Improvement.** This alternative evaluates E&D activities to examine restoring Bayfront Park and providing additional improvements to the park. Bayfront Park is located in Mobile County, on Dauphin Island Parkway near the Alabama Port community. The proposed E&D work would evaluate the construction of a living shoreline and/or a sandy beach along Bayfront Park's currently armored shoreline along Mobile Bay and the development of additional recreational amenities at the park. The new amenities could include improved restroom and playground facilities, a renovated wetland boardwalk and nature trail, expanded birdwatching opportunities, and a geocaching nature trail. In addition, the E&D work would include developing a plan for the addition of signage and interpretive materials promoting environmental education and stewardship. If this project were selected for implementation, additional NEPA analysis to address project implementation (construction and operation of the project) would occur at that time.
2. **Dauphin Island Eco-Tourism and Environmental Education Area.** Approximately 100 acres of land would be acquired and managed by the Town of Dauphin Island. The alternative would include developing a parking area and visitor amenities, including a bicycle path, boardwalks, a fishing pier, gazebos, and public restrooms. Boardwalks would be placed above wetland habitat to allow visitors access to these habitats while minimizing environmental impacts. Educational signage would be placed at strategic locations to improve public awareness of environmental resources and enhance learning opportunities. This alternative would increase public access to wetland habitats adjacent to Aloe Bay, where very little public access currently exists.
3. **Mid-Island Parks and Public Beach Improvements (Parcels A, B, and C).** This alternative involves the acquisition of a total of approximately 10 acres and construction of access improvements on three separate parcels of land that would collectively offer visitors to Dauphin Island passive recreational opportunities including access to an expanded public beach area, improved access to the existing beach, additional public parking, and restroom facilities. Once acquired, the Town of Dauphin Island would manage the land. These acquisitions and improvements would create new passive recreational opportunities and public access to the Alabama shoreline, as well as enhance the quality of the experiences for visitors who currently use Dauphin Island's public beaches, through the development of new visitor use amenities, including added parking, restroom facilities, and other passive recreational amenities. A portion

of this project (acquisition of Parcel A) is also being considered for funding under NFWF. As further described in Chapter 2, this alternative was refined based on public comment on the RP/EIS.

4. **Mid-Island Parks and Public Beach Improvements (Parcels B and C).** This alternative involves the acquisition and construction of access improvements on two separate parcels of property, which total approximately 2 acres, to collectively offer passive recreational opportunities, public parking, and restroom facilities at Dauphin Island. Once acquired, the Town of Dauphin Island would manage the land. This project is designed to enhance access to the Alabama shoreline, including Gulf-facing beaches. Added parking, restroom facilities, and other passive recreational amenities would increase public access and enhance the quality of visitor experiences. As further described in Chapter 2, this alternative was refined based on public comment on the RP/EIS.

Additional details on each of these projects, as well as all projects considered as part of this RP/EIS process, are discussed in Chapter 2.

The AL TIG will evaluate additional alternatives that provide and enhance recreational opportunities for implementation in the Alabama Restoration Area, including, as feasible, projects screened in this RP/EIS but not selected as within the reasonable range of alternatives at this time, in subsequent restoration plans.

1.6 RELATIONSHIP TO OTHER PLANS, POLICIES, OR ACTIONS

1.6.1 Relationship of the RP/EIS to Gulf Restoration Network v. Jewell et al.

Due to the magnitude of the DWH oil spill, the DWH Trustees began planning for and implementing Early Restoration projects with funding from BP before the oil spill's injury assessment was complete and prior to the entry of the Consent Decree. Early Restoration occurred in 5 separate phases, during which Early Restoration plans were prepared and associated NEPA compliance was completed. These actions are a subset of the extensive, continuing effort needed to address complete restoration of injuries to natural resources resulting from the DWH oil spill.

During Early Restoration, in June 2014, the DWH Trustees issued the Final Programmatic and Phase III Early Restoration Plan and Programmatic Environmental Impact Statement[6] (Phase III ERP/PEIS), selecting, among a variety of other projects, the Gulf State Park Enhancement Project (Phase III ERP/PEIS, Chapter 11, Section 11.6). This project contains five elements: (1) rebuilding the Gulf State Park Lodge and Conference Center; (2) building an interpretive center; (3) building a research and education center; (4) enhancing visitor amenities, including trail improvements and extensions, overlooks, interpretive kiosks and signage, rest areas, bike racks, bird-watching blinds, or other visitor enhancements; and (5) restoring and enhancing degraded dune habitat. The Gulf State Park Lodge and Conference Center component of the Gulf State Park Enhancement Project provided partial funding ($58.5 million) for the lodge and conference center construction with DWH Early Restoration funds. The remaining elements (items 2–5) of the Gulf State Park Enhancement Project were to be fully funded with DWH Early Restoration funds. The additional funding to complete the lodge and conference center at Gulf State Park was to come from non-NRDA sources.

The Phase III decision to fund a portion of the Gulf State Park Lodge and Conference Center using NRDA funds was challenged in court. Specifically, on October 23, 2014, the Gulf Restoration Network filed a

[6] The Phase III ERP/PEIS can be found at https://www.doi.gov/deepwaterhorizon/nrda/phase-iii-plan.

lawsuit arguing that the DWH Trustees did not properly consider all reasonable alternatives to the lodge and conference center portion of the project[7] (see *Gulf Restoration Network v. Jewell et al.,* Case No. 1:15-cv-00191-CB-C (S.D. Ala.)). The Court ultimately entered an order directing the DWH Trustees to subject the lodge and conference center component of the Early Restoration project to a broader analysis of alternatives under OPA and NEPA to ensure the project is compliant with these laws before NRDA funds could be used on that portion of the project. In the meantime, construction and implementation of the remaining project elements (items 2–5) are proceeding as originally approved and are funded by DWH Early Restoration funds.[8]

This RP/EIS fulfills the DWH Trustees' responsibilities under the court order in the Gulf Restoration Network litigation, while also looking more broadly at the potential to provide restoration for lost recreational shoreline use in Alabama. Accordingly, this initial recreational use restoration planning activity proposes a number of restoration alternatives for restoring Alabama's recreational use injury caused by the DWH oil spill.

1.6.2 Coordination with Other Gulf Restoration Programs

As discussed in Section 1.5.6 of the Final PDARP/PEIS, the AL TIG is committed to coordination with other Gulf of Mexico restoration programs to maximize the overall ecosystem impact of DWH NRDA restoration efforts. This coordination will ensure that funds are allocated for critical restoration projects across the affected regions of the Gulf of Mexico and within Alabama.

During the course of the restoration planning process, the AL TIG has coordinated and will continue to coordinate with other DWH oil spill and Gulf of Mexico restoration programs, including the Resources and Ecosystems Sustainability, Tourist Opportunities, and Revived Economies of the Gulf Coast States (RESTORE) programs and the NFWF GEBF. In so doing, the AL TIG has reviewed the implementation of projects in other coastal restoration programs and is striving to develop synergies with those programs to ensure the most effective use of available funds for the maximum coastal benefit.

In November 2016, two projects proposed in this RP/EIS were approved for funding through NFWF GEBF—Gulf Highlands Land Acquisition and Improvements and the acquisition of Parcel A of Mid Island Parks and Public Beach Improvements (Parcels A, B, and C). Funding for both of these projects through NFWF GEBF is still pending; therefore, these projects were retained in the final RP/EIS.

1.7 PUBLIC INVOLVEMENT

Beginning in 2010, the DWH Trustees established websites to provide the public with information about injury and restoration processes[9] and to solicit ideas for restoration projects. The DWH Trustees have received hundreds of proposals, all of which can be viewed at several web pages.

For this RP/EIS, ideas submitted to the DWH Trustee Council website, known as the DWH public comment portal, and Alabama project portals were reviewed.[10] These comments and ideas include

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[7] Gulf Restoration Network did not challenge the other components (items 2–5) of the Gulf State Park Enhancement Project.

[8] Construction of a portion of the lodge and conference center component is also currently underway using non-NRDA funds (see No Action Alternative in Section 2.1.3).

[9] http://www.gulfspillrestoration.noaa.gov/restoration-planning/gulf-plan.

[10] Alabama Department of Conservation and Natural Resources, NRDA Projects, available at http://www.alabamacoastalrestoration.org, NOAA portal at: http://www.gulfspillrestoration.noaa.gov/restoration/give-us-your-ideas/.

those gathered during all phases of Early Restoration, the development of the Final PDARP/PEIS, and the public scoping conducted for this document.

On July 6, 2016, the AL TIG published a Notice of Intent (NOI) to prepare an RP/EIS and conduct public scoping (81 FR 44007). Publication of the NOI initiated a 30-day public scoping period during which members of the public were invited to submit restoration project ideas and other comments regarding the scope, content, and any significant issues that should be considered in the RP/EIS via mail or internet. These ideas and comments were also considered as part of this restoration planning process.

1.7.1 Summary of Scoping Input

Members of the public were asked to provide their thoughts on project ideas to address lost recreational use in Alabama and submit public comments regarding the scope and content of a restoration plan and environmental impact statement, and any other significant issues the AL TIG should consider. The AL TIG requested members of the public to submit scoping comments between July 6 and August 5, 2016, through a variety of means, including electronically through the USDOI's Planning, Environment, and Public Comment (PEPC) online system, by email, or by letter. In total, 49 correspondences were received during the comment period containing multiple comments in each correspondence. Correspondence and comments are defined as follows:

- **Correspondence**: The entire document received from a commenter. It can be in the form of a PEPC submission, letter, or email.
- **Comment**: A portion of the text within a correspondence that addresses a single subject. It could include such information as an expression of support or opposition to a specific project or project type, issues that should be considered in the EIS process, or other elements the public felt should be considered in the process.

Comments received during scoping ranged from presenting new project ideas to suggesting issues and impacts that should be considered in the development of the RP/EIS. Recommendations included projects to acquire lands for conservation and recreation; improve water quality; improve recreational fisheries; improve/expand coastal experiences; create artificial reefs; and provide new/additional lodging, living shorelines, and educational opportunities. With these suggestions, commenters also voiced support or opposition to these types of projects. Commenters requested that projects serve multiple purposes, including providing for recreation and ecological restoration. Commenters also requested that the RP/EIS detail how a project would be evaluated under OPA, how it would show nexus to the injury, and how project financing and monitoring would occur. Regarding the impacts of the proposed projects, commenters noted that cumulative impacts should be considered, including how the proposed projects would interact with those being implemented under Early Restoration, and suggested that comparable metrics/measures be used across alternatives. Some commenters noted the importance of a robust and frequent public outreach process during the RP/EIS planning, and requested that environmental justice be considered. The AL TIG considered all comments in the development of the RP/EIS. For those comments that suggested projects for consideration, those project and the reasons why they were or were not carried forward for detailed analysis are presented in Chapter 2 of this RP/EIS. Comments regarding nexus are addressed by the OPA analysis in Chapter 3. Comments regarding the affected environment and potential impacts are addressed in Chapter 4 and Chapter 5, respectively.

Topics/ideas noted by the public are included in Table 1-2. The full scoping report is included as Appendix A.

Table 1-2: Summary of Public Comment Distribution

Topic/Idea	% of Total Comments[a]
Project Recommendation: New/additional lodging	33%
Project Recommendation: Improved/expanded coastal experiences	11%
Project Recommendation: Land acquisition	9%
Miscellaneous Topics: General comments	6%
Project Selection: Multiple/dual purpose projects	6%
Impact Analysis: Adequacy of environmental analysis	5%
Project Recommendation: Water quality	5%
Nexus to injury	4%
Project Recommendation: Recreational fisheries	4%
Impact Analysis: Long-term project monitoring and financing	2%
Environmental justice-related concerns	2%
Project Recommendation: Living shorelines	2%
Public engagement in the plan development process	2%
Impact Analysis: Adequacy against NRDA criteria	2%
Project Selection: Streamlining the process	1%
Impact Analysis: Distribution of restoration across ecosystem setting/affected area	1%
Project Selection: Project metrics/utilizing comparable measures across alternatives	1%
Project Selection: Importance of leveraging opportunities	1%
Project Recommendation: Educational opportunities	1%
Project Recommendation: Artificial reefs	1%
Total	100%

Note: [a] The definition of "comment" is provided before the table.

1.7.2 Public Review Process for this RP/EIS

In accordance with NEPA and OPA, the draft RP/EIS was made available for public review and comment for 45 days. The public was encouraged to review and comment on the draft plan and proposed alternatives. The AL TIG held two public meetings to facilitate the public review and comment process. At the close of the public comment period, the AL TIG considered all relevant comments received during the comment period and revised the RP/EIS as appropriate. A summary of comments received and the Trustees' responses are included in Chapter 9 of this final document and all correspondence received are provided in Appendix B.

1.7.3 Next Steps

Following appropriate OPA and NEPA regulatory procedures and timing, after public release of this final RP/EIS, the AL TIG intends to prepare a ROD that formally selects one or more alternatives for implementation.

1.7.4 Administrative Record

The DWH Trustees opened a publicly available Administrative Record for the NRDA for the DWH oil spill, including restoration planning activities, concurrently with publication of the 2010 NOI (pursuant to 15 CFR § 990.45). USDOI is the lead federal Trustee for maintaining the Administrative Record, which can be found at http://www.doi.gov/deepwaterhorizon/adminrecord. This administrative record site is also used by the AL TIG for DWH restoration planning.

Information about restoration project implementation is being provided to the public through the Administrative Record and other outreach efforts, including at http://www.gulfspillrestoration.noaa.gov.

1.8 OVERVIEW OF PUBLIC COMMENTS ON THE DRAFT RP/EIS AND KEY CHANGES IN THE FINAL RP/EIS

The AL TIG provided opportunities for the public to comment as described in Section 1.7. During the comment period, the AL TIG received a total of 91 individual submissions from private citizens; businesses; federal, state, and local agencies; nongovernmental organizations; and others. The AL TIG received comments via public meetings, web-based submissions, email, and mailed-in submissions.

1.8.1 Overview of Public Comments on the Draft RP/EIS

The AL TIG received general comments on the draft RP/EIS and comments on specific proposed projects. With respect to the NEPA analysis, no issues of significant environmental controversy were identified in the public comments. Comments received generally fell into categories that followed the proposed projects.

Chapters 1, 2 and 3—Purpose and Need, Alternatives, and OPA Analysis

- General comments
  - Support for the RP/EIS.
  - Recommendations to incorporate sustainability elements in the infrastructure projects.
  - Recommendations for restoration to be coordinated, synergistic, and have multiple benefits.
  - Recommendations for restoration project to be implemented with minimal impacts and a do no harm approach, and, where impacts would occur, for mitigation to be identified, planned for, and funded.
  - Recommendation that all costs for a project be known prior to project approval.
  - Comments regarding the public involvement and engagement process.
  - Requests for technical corrections and clarifications.
  - Suggestions that the final RP/EIS clarify how public scoping comments were considered in the plan.

- Range of Restoration Alternatives
  - Requests to consider additional projects to those considered in the AL RP/EIS, which were suggested through public comments and the project portals.
  - Comments regarding the lack of clarity in the methodology used to develop the range of alternatives and requests for clarification.
  - Suggestions that the range of alternatives focus on ecological restoration.
- Fort Morgan Pier Rehabilitation
  - General support for the proposed project.
  - Recommendations to use sea turtle-friendly lighting.
  - Requests for clarification on the costs for the project.
- Gulf Highlands Land Acquisition and Improvements
  - General support for the proposed project.
- Laguna Cove Little Lagoon Natural Resource Protection
  - General support for the proposed project.
  - Requests for additional parking on the south side of Highway 182.
- Bayfront Park Restoration and Improvement
  - General support for the proposed project.
  - Questions about the need for additional studies at Bayfront Park as well as the need for the project under NRDA.
- Dauphin Island Eco-Tourism and Environmental Education Area
  - General support for the proposed project, including the land acquisition component.
  - Questions on the design features.
  - Recommendations that the site be purchased for preservation rather than recreational development.
- Mid-Island Parks and Public Beach Improvements (Parcels A, B, and C)
  - General opposition to the proposed project because of potential traffic and parking issues, with specific concerns related to the development of a boat ramp on Parcel C.
  - Support for the acquisition of Parcel A.
  - Suggestions to add educational elements.
  - Recommendations that Parcel A not be developed due to the potential impacts on natural resources.
- Alternatives: Mid-Island Parks and Public Beach Improvements (Parcels B and C)
  - General opposition to the proposed project because of the potential traffic and parking issues.
  - Concerns with the establishment of a boat ramp on Parcel C and the associated potential impacts. Suggestions that a kayak launch is more appropriate.

  - Recommendations to reconsider the number of parking spaces.
  - Suggestions that the funds allocated to the project be used for other purposes.
- Gulf State Park Lodge and Associated Public Access Amenities Project
  - General support and opposition for the proposed project.
  - Comments that the proposed project does not have a nexus to the DWH oil spill.
  - Comments that the project is pre-decisional.
  - Recommendations for an alternative that considers the construction of the public access amenities only and does not include the lodge component of the project.
  - Recommendations that, if no other projects are determined to be suitable for restoration, the no action alternative be selected rather than the proposed project.
  - Suggestions that other funds could be used for the proposed project and that NRDA funds not be used.
  - Comments that impacts from the proposed project would cause harm and would not restore natural resources to the public, and that the project is a means to compensate for economic, not natural resource, impacts.
  - Comments that the RP/EIS does not provide an analysis of revenues and how they would be allocated for the proposed project.
  - Recommendations that the TIG examines other means to create revenues that do not involve the lodge and conference center.
  - Requests for clarification on how the conference center would be funded.
  - Comments on the lack of a contract with an operator of the lodge.
  - Comments that that the visitation numbers provided by the Trustees do not support the statement that the proposed project would increase recreational use access and that other projects would better serve this need.
  - Suggestions that the project should have LEED certification and generate power to provide back to the City of Gulf Shores.
  - Comments that several projects and suites of projects suggested by the public could provide the same or broader benefits.
  - Observations regarding the need for a comparative analysis to establish clear, data-driven metrics for evaluating project proposals.
  - Recommendations that coordination continue between other DWH and Gulf of Mexico restoration programs, including updates on the progress of restoration at public meetings.

Chapter 4 and 5—Affected Environment and Environmental Consequences

- General
  - Requests for technical corrections and clarifications.
  - Suggestion that that scientific information generated from restoration projects be publicly available.

- Alternatives: Mid-Island Parks and Public Beach Improvements (Parcels B and C)
  - Concerns regarding stormwater runoff impacts; pedestrian and bike safety; economic impacts, including lower property values; quality of life issues, including impacts on residents' privacy; and increase in crime and trash.
  - Comments about natural resource impacts that are not accounted for in the analysis, including impacts on shorebirds.
- Gulf State Park Lodge and Associated Public Access Amenities Project
  - Concerns regarding impacts on a variety of resources such as wildlife, beach habitat, and traffic, and requests for clarification on how the impacts will be addressed.
  - Concerns that the project creates barriers to public access.

Chapter 6—Compliance with Other Laws and Regulations

- Comments that the NEPA analysis for the Gulf State Park and Associated Public Access Amenities Project is not sufficient, and does not take a "hard look" at the range of alternatives considered.

Chapter 7—Draft Monitoring and Adaptive Management Plan

- Recommendations to ensure that local, state, and federal agencies are responsible for environmental protection measures and have the resources and capacity to carry them out.

1.8.2 Key Changes in the Final RP/EIS

The AL TIG revised the draft RP/EIS to prepare this final RP/EIS, after considering the public comments received. Revisions to the RP/EIS also included those needed to address minor editorial and technical revisions. None of the revisions affected the AL TIG's conclusions about the impacts of the proposed projects or the identification of the preferred alternatives. An overview of the changes made to the draft RP/EIS in this final RP/EIS is included below. The AL TIG added Chapter 9 to this final RP/EIS, which includes statements of concern summarizing the comments received and the AL TIG's response to those comments.

Overview of Revisions to Chapter 1:

- The majority of the changes to Chapter 1 were editorial to improve clarity and flow of the chapter.
- The AL TIG made minor revisions reflecting that this document is now a final document (instead of a draft) and to indicate that the public comment process has been completed.
- In Chapter 1, Section 1.8 was added to provide an overview of the comments received on the draft RP/EIS and to summarize the revisions made between the draft RP/EIS and final RP/EIS.
- The AL TIG concludes that no issues of significant controversy related to environmental consequences were raised.

Overview of Revisions to Chapter 2:

- The majority of the changes to this chapter were editorial text changes to improve clarity and flow.
- The total number of projects screened was incorrectly stated in the draft RP/EIS as 558, and the final RP/EIS has been corrected to reflect that the actual number of projects screened was 474. This change has been made wherever 558 occurred in the draft RP/EIS.
- Additional project detail was added to some of the project descriptions to respond to public comments.
- Clarifications were made to some of the project location maps to improve readability.
- For the Dauphin Island Mid-Islands Parks and Public Beach Improvements Project, these alternatives were refined based on public comment on the RP/EIS, and text was added to clarify that the NRDA project does not include a boat ramp and the deed restriction for the acquired property would not allow a boat ramp without further review and approval by the TIG, including public comment. The project description was further amended to allow for certain passive, land-based recreational opportunities at Parcel C, including the use of an existing sandy beach area on the parcel as a primitive kayak launch.

Overview of Revisions to Chapter 3:

- Mainly editorial text changes were made to this chapter to improve clarity and flow.
- Text was added regarding the scale of benefits to the Gulf State Park Lodge and Associated Public Access Amenities Project to provide clarification and respond to public comments.

Overview of Revisions to Chapter 4:

- The majority of the changes to this chapter were editorial text changes to improve clarity and flow.
- Based on public comments, the description of the location of utilities at the Laguna Cove Little Lagoon site was clarified.

Overview of Revisions to Chapter 5:

- The majority of the changes to this chapter were editorial text changes to improve clarity and flow.
- The cumulative impacts section was edited to remove the potential for a boat ramp at the Dauphin Island Mid-Island Parks site and to include actions related to implementation of the Gulf State Park Master Plan.

Overview of Revisions to Chapter 6:

- The majority of the changes to this chapter were editorial text changes to improve clarity and flow.
- Chapter 6 was updated to reflect the current compliance status for each of the proposed projects.

Overview of Revisions to Chapter 7:

- Updates were provided on the development of the monitoring plans. Working draft monitoring plans were added to the RP/EIS as Appendix C.

Overview of Revisions to Chapter 8:

- Only editorial text changes were made to this chapter to improve clarity and flow.

Overview of Revisions to Chapter 9:

- Chapter 9 was added to provide a summary of and response to public comments on the draft RP/EIS.

1.9 DECISIONS TO BE MADE

This document is intended to provide the public and decision makers with information and analysis on the AL TIG's proposal to proceed with the selection and implementation (which may include selection for E&D only or selection for construction) of one or more of the alternatives proposed in this RP/PEIS.[11]

1.10 PROJECT SELECTION/PREFERRED ALTERNATIVE(S)

In this RP/EIS, the AL TIG proposes to select six specific restoration alternatives for either E&D only or for full implementation. The alternatives selected in this plan are expected to cost approximately $70,675,000. As discussed in more detail in Section 2.1.4, the proposed restoration projects presented in this RP/EIS are independent of each other and may be selected independently by the AL TIG. A decision not to select one or more of the proposed projects in the RP/EIS should not affect the AL TIG's selection of the remaining projects.

[11]The public, governmental agencies and other entities have identified and continue to identify a large number of potential restoration projects for consideration during the DWH restoration planning process. Projects not identified for inclusion in the final RP/EIS may continue to be considered for inclusion in future AL TIG restoration plans.

2.0 PROJECT SCREENING AND ALTERNATIVES

As described in Chapter 1, this RP/EIS continues the restoration planning process begun prior to the settlement of the DWH oil spill litigation. Previous steps in this process included assessing the injury from the DWH oil spill, developing pre-settlement restoration projects as part of the Early Restoration program undertaken jointly by the DWH Trustees and BP, and planning for programmatic restoration as part of the Final PDARP/PEIS (DWH Trustees, 2016a). Upon completion of the settlement with BP, the DWH Trustees created the AL TIG to implement comprehensive DWH restoration planning in Alabama. This RP/EIS is the first AL TIG restoration plan.

As detailed in Section 1.2, the AL TIG is focusing this initial phase of its restoration planning process on lost shoreline recreational use. Shoreline recreational loss is a very large component of the overall injury from the DWH oil spill, and in particular a large component of Alabama's overall injury. The DWH Trustees conducted a number of studies to measure the lost recreational value resulting from the spill, and these studies found that 16,857,116 boating, fishing, and other shoreline activity user-days were lost across the five affected Gulf states. Total recreational use injuries attributable to the DWH oil spill are estimated to have been $693.2 million (with an uncertainty range of from $527.6 million to $858.9 million). The assessment results further suggest that the vast majority of the lost recreational value was attributable to reductions in general shoreline recreational use. Specifically, approximately 98 percent of lost recreational user days Gulf-wide were general shoreline user days, with the remaining recreational injury attributed to lost boating days. In Alabama, recreational losses predominantly affected visitors to the state's sandy beaches fronting the Gulf of Mexico (see Final PDARP/PEIS, Section 4.10).

The AL TIG has implemented a restoration planning process for this RP/EIS designed to identify and evaluate a reasonable range of alternatives for compensating the public for the lost shoreline recreational uses caused by the DWH oil spill. This RP/EIS tiers off of the Final PDARP/PEIS, and the process outlined in this EIS is fully consistent with the goal set out in the Final PDARP/PEIS of providing and enhancing recreational opportunities Gulf-wide, including by increasing beach-going through a combination of ecological restoration and the creation of infrastructure, access, and use opportunities (Final PDARP/PEIS, Section 5.5.14.2). The AL TIG's restoration planning process, which is described in this plan, includes (1) comprehensive screening under OPA and NEPA to identify a reasonable range of alternatives, (2) a detailed evaluation of these alternatives under OPA and NEPA, and finally (3) selection of preferred alternative(s) recommended for implementation or for additional E&D by the AL TIG. This chapter provides a discussion of the screening process the AL TIG used between July and December 2016 to develop the reasonable range of alternatives analyzed in this plan, followed by detailed descriptions of the alternatives selected for more complete analysis under OPA and NEPA. Subsequent chapters of the RP/EIS discuss the detailed analysis under OPA (Chapter 3) and NEPA (Chapter 5), as well as the selection of the preferred alternative(s).

2.1 SCREENING FOR POTENTIAL ALTERNATIVES

The goal of the AL TIG's screening process was to identify a set of alternatives that provides a reasonable range of options for compensating the public for Alabama's lost shoreline recreational use caused by the DWH oil spill. The screening process was designed to identify recreational restoration projects with a reasonable likelihood of satisfying the OPA criteria and with no obvious major negative environmental impacts under NEPA, recognizing that this cannot be assured until more thorough OPA/NEPA evaluations are completed. The phased and sequential screening process included the following steps:

1. Initial OPA eligibility screen,
2. Removal of duplicate projects,

3. Removal of previously funded projects, and
4. Final screening based on AL TIG review of additional project information.

Each of these steps and its outcome is discussed below in greater detail, and the outcome shown in Figure 2-1.

2.1.1 Initial OPA Eligibility Screen

The intent of the initial eligibility screen was to identify those alternatives that could reasonably be expected to provide substantial recreational benefits and that have a strong nexus to the shoreline injury that occurred in Alabama. In effect, the initial eligibility screen looked only at one of the OPA criteria—*the extent to which each alternative is expected to meet the Trustees' goals and objectives in returning the injured natural resources and services to baseline and/or compensating for interim losses*.[12] Under OPA, alternatives should demonstrate a clear relationship to the resources and services injured, in this case lost recreational use. Alternatives located in the area affected by the DWH spill were identified and, due to the magnitude of the shoreline use loss in Alabama, projects focusing on that specific component of the injury were highlighted.

To begin the screening process, the AL TIG assembled a master database of potential restoration projects for the range of alternatives and applied a basic eligibility screening process to the full set of 474 projects included in the database (provided in Appendix D). Projects were compiled from four sources.

- The DWH public comment portal established soon after the spill to allow the public to submit projects for the DWH Trustees' consideration (DWH Trustees, n.d.),[13]
- A similar web-based portal created in 2014 by the State of Alabama (Alabama Project Portal) (ADCNR, 2016a),[14]
- Projects developed by the DWH Trustees for possible inclusion in the Early Restoration program that were never implemented, and
- The set of projects submitted in response to the NOI issued at the beginning of the AL TIG's restoration planning process in July 2016 (see Section 1.6.1).

The initial eligibility screen was based on classification by the AL TIG of the projects in the master database. Based on the descriptions provided by the project proponents, each submitted project was classified into one of the following six categories:

1. Recreation major objective,
2. Ecological projects with substantial recreational benefits,
3. Primarily ecological,
4. Economic development,
5. Planning/research and development/monitoring, and
6. Non-recreational infrastructure.

[12] The full set of OPA criteria is discussed in detail in Chapter 3, which describes the detailed OPA evaluation process for the alternatives.

[13] http://www.gulfspillrestoration.noaa.gov/restoration/give-us-your-ideas/.

[14] http://www.alabamacoastalrestoration.org.

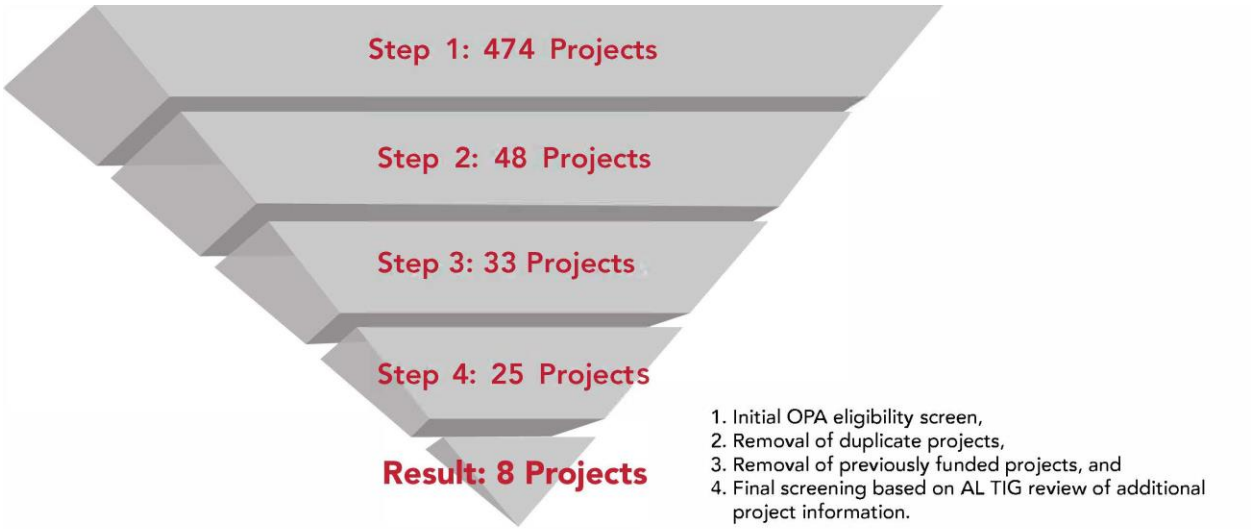

Figure 2-1: Graphical Summary of Alabama Trustee Implementation Group Recreation Project Screening

Projects that mentioned recreational benefits as primary objectives were included in the first category. Ecological projects that might be expected to generate substantial recreational benefits, such as certain marsh protection or land acquisition proposals, were included in the second category. These two categories of projects were then moved forward for further consideration during the eligibility screening phase, as described below.

All recreational projects—either those with recreation as a primary objective or ecological projects expected to provide substantial recreational benefits—were classified in terms of the type of recreational benefits they would provide: (1) shoreline use, including activities such as beach use, shore-fishing, hiking, biking, kayaking, and birding; (2) boating; (3) boat fishing; (4) education and/or stewardship; (5) public parks without substantial sandy beach recreation, including upper bay urban parks; (6) historical; and (7) tourism promotion. Projects were also coded to denote whether they represented a site-specific initiative or a project proposal that was more general in nature (e.g., proposals for broad scale land acquisition).

Finally, all recreational projects were categorized based on their geographic nexus to the shoreline injury caused by the DWH oil spill. As noted above, the Final PDARP/PEIS assessment of lost shoreline use in Alabama identified most of the recreational injury as occurring along the barrier island and ocean-facing beaches of Alabama (i.e., Dauphin Island, Fort Morgan, Orange Beach, and Gulf Shores). All recreational projects proposed in these areas or very close to them were categorized as having a strong nexus to the DWH oil spill since restoration would occur in the locations where shoreline visits were lost or impaired.

The initial eligibility screen was implemented by sorting the database to identify the set of site-specific projects that were expected to (1) provide recreational benefits—either as a primary objective or as a substantial outcome of a project with ecological objectives; (2) focus primarily on shoreline use benefits; and (3) have a strong geographic nexus to the DWH oil spill. Table 2-1, which summarizes the results for all four steps of the screening process, indicates that for this first step, 48 of the 474 projects met all 3 of these criteria. The 48 projects are broken out below in Tables 2-2 through 2-5, based on their final screening determination.

2.1.2 Recreational Considerations for Projects Primarily Designed to Produce Ecological Services

The AL TIG conducted a further review of all projects in category 3 above (Primarily Ecological) to determine whether there might be sufficient indirect benefits to recreational use to warrant their inclusion in category 2 (Ecological Projects with Substantial Recreational Benefits). Projects were candidates for reclassification in situations where it could be determined that (1) they would provide substantial ecological service uplift in a manner that benefits recreation, or (2) where minor modifications to the project plan would provide meaningful recreational benefits.

The first subset (1) included projects such as living shoreline construction, water quality improvements, or marsh creation. These projects have the potential to benefit recreational use by improving water quality (measured either through improved water clarity or a reduction in bacteria or contaminants that affect human health such as fecal coliform), improving recreational angling catch rates, or improving/preserving land that has notable aesthetic quality, among other options. Each of these benefits and their relationship to recreational use are known and acknowledged by the DWH Trustees. The second subset (2) included land preservation or marsh creation projects that could be augmented to provide increased recreational use access, through the addition of parking areas, boardwalks, or other recreational-use features.

In many cases, the AL TIG chose not to carry these types of projects forward because it became apparent that modifications to the proposals to improve recreational use were inconsistent with the original project's ecological restoration goals. However, if a project could be successfully modified to augment recreational use, it was re-categorized under category 2.

In addition, in deciding whether projects in category 3 should be re-categorized and carried forward for further evaluation, the AL TIG considered the magnitude of recreational benefits associated with each proposal. This measure was determined by a combination of anticipated utilization and the degree that users would benefit from the project. For instance, a marsh creation project that serves as nursery fish habitat can generate substantial recreational use benefits if it is expected to cause a demonstrable increase in catch rates to a suitably large population of recreational anglers. Additionally, from a shoreline recreational use perspective, projects to improve water quality can convey substantial recreational use benefits, if they reduce the number of days where water quality is sufficiently impaired to generate human-health warnings.

Applying these considerations, the AL TIG gave further consideration to projects initially categorized as "Primarily Ecological" to assess whether they could be reclassified or modified in a way to produce measurable lost recreational use benefits. Many projects did not merit further evaluation because the recreational use benefits were either uncertain, of limited magnitude, or inappropriate given the project's primary goals. Specifically, projects to improve water quality (ADEM, n.d.), which were categorized as "Primarily Ecological," were not moved through the eligibility screen because water quality is not generally impaired in the areas identified in the Final PDARP/PEIS assessment where most of Alabama's recreational use injury occurred (i.e., Dauphin Island, Fort Morgan, Orange Beach, and Gulf Shores). Thus, there is not sufficient need for this type of restoration.

In sum, the TIG's exclusion of "Primarily Ecological" projects during the eligibility screening phase of this plan was based on those projects' inability to sufficiently compensate for the DWH lost recreational use injury. The eligibility screening phase of this plan is not an evaluation of these projects' ability to provide substantial ecological benefits. As a result, these projects may best be considered in forthcoming restoration plans developed by the AL TIG, which will focus on compensating for the ecological injuries caused by the DWH oil spill within the state.

2.1.3 Removal of Duplicate Projects

Because the screening process started with the Trustee Council and State of Alabama project submission databases and because submissions occurred over an extended timeframe, there were many duplicate and similar projects when the submittals from each database were combined. Therefore, after the initial eligibility screen, the AL TIG eliminated projects that were identical or largely duplicative. When projects were largely duplicative, the project deemed to best represent the recreational restoration concept was retained on the screening list, and similar potentially duplicative or substantially overlapping proposals were removed. This resulted in the removal of 15 projects from the 48 that met the initial eligibility criteria—see Table 2-1. The duplicate projects are identified in Table 2-2 along with the primary project that was retained.

2.1.4 Removal of Previously Funded Projects

Because a number of years have passed since many projects were submitted to the public databases, a number of the eligible projects have already received funding. These projects were removed from further consideration. This resulted in the elimination of eight additional projects—see Table 2-1. These projects are listed in Table 2-3 below, along with some additional documentation on their completion status.

2.1.5 Final Screening Based on TIG Review of Additional Project Information

For the remaining 25 projects, the AL TIG conducted a more detailed evaluation of the extent to which each project was likely to meet the goals and objectives of this RP/EIS. In most cases, this analysis required the AL TIG to collect or develop additional information on the projects. The AL TIG carefully reviewed each project, and where decisions were made to not include a project in the range of reasonable alternatives for further OPA/NEPA evaluation, the rationale for that decision is provided in Table 2-4 below. Seventeen of the 25 projects that (1) passed the basic eligibility screen, (2) were not duplicative, and (3) had not already been funded were not moved on to the final reasonable range of alternatives evaluated in this RP/EIS. As a general rule, the reasons for not moving projects forward were project-specific and site-specific (e.g., additional information frequently indicated that a project would not provide significant benefits to the types of shoreline users directly injured by the DWH oil spill).

Table 2-1: Summary of Alabama Trustee Implementation Group Recreation Project Screening

Process Step	# of Projects Screened	# of Projects Eliminated	# of Projects remaining	Notes
Step 1: OPA Appropriateness Evaluation (PDARP 5D)	474	426	48	**Factors considered**: Potential for recreational benefits, geographic nexus to the DWH oil spill **Kept**: All projects with potential for more than minor recreational benefits and strong geographic nexus to the DWH oil spill **Eliminated**: Primarily ecological projects, monitoring, research and development, planning-only projects, non-recreational infrastructure projects (e.g., wastewater treatment plants), and economic development projects
Step 2: Screening to Remove Duplicates and Similar Projects	48	15	33	**Factors considered**: Regional connectivity, leveraging, multiple trustee engagement, and PDARP consistency **Kept**: The set of unique projects **Eliminated**: Projects that are direct duplicates or essentially similar
Step 3: Removal of Completed Projects	33	8	25	**Factors considered**: Current project status **Kept**: All projects that are either not completed or not already funded **Eliminated**: Completed projects and those already funded
Step 4: Screening for Trustee Goals and Objectives	25	17	8	See attached Table 2-4 discussing selection decisions for projects not meeting the AL TIG's objectives

Notes: The preliminary reasonable range of alternatives includes: Gulf State Park Lodge and Associated Public Access Amenities, Dauphin Island Eco-Tourism and Environmental Education Area, Mid-Island Parks and Public Beach Improvements, Gulf Highlands Land Acquisition and Improvements, Fort Morgan Pier Rehabilitation, Fort Morgan Peninsula Public Access Improvements, Laguna Cove Little Lagoon Natural Resource Protection, and Bayfront Park Restoration and Improvement.

Table 2-2: Duplicate Projects

Project Name	Project ID[a]	Organization	Project Cost	Notes / Identification of Projects Retained on Screening List (Table 2-4)
Cedar Point	Fed-431	NA	NA	Overlap with Fed-660: Cedar Point Restoration and Enhancement Project
Our Road Tract Acquisition	AL-205	Alabama Coastal Heritage Trust	$7,498,000	Duplicate of AL-170: BLM Fort Morgan "Our Road" Acquisition
Dauphin Island Causeway Habitation Restoration and Public Access	Fed-5107	Mississippi-Alabama Sea Grant Consortium	$9,000,000	Will create new beach areas--several others duplicate projects
Repairs to the Fort Morgan Fishing Pier	AL-151	Alabama Historical Commission	$1,000,000	Overlap with DCNR-3: Fort Morgan Fishing Pier and Boat Ramp Improvements
Restore Our East End Beaches	Fed-10051	Dauphin Island Park and Beach Board	NA	Overlap with AL-82: Dauphin Island Audubon Bird Sanctuary Shoreline Restoration and Management
Habitat Acquisition and Conservation for Neotropical Migratory Birds	AL-104	Pelican Coast Conservancy	$891,217	Overlap with Fed-11223: Habitat Acquisition and Conservation of Neotropical Migratory Birds
Gulf Highlands/Gulf Shores AL Public Beach	Fed-4053	Gulf Highlands LLC	$35,000,000	Duplicate of AL-132: Gulf Highlands
Restoration Barrier Island	Fed-11619	Property Owner	NA	Overlap with Fed-11503: Town of Dauphin Island Beach and Barrier Island Restoration Project Alternative 3
South Shoreline of Dauphin Island	Fed-11500	NA	NA	Overlap with Fed-11503: Town of Dauphin Island Beach and Barrier Island Restoration Project Alternative 3
Dauphin Island Parkway Salt Marsh, Finfish and Shellfish Habitat Restoration	Fed-206	Volkert, Inc.	$10,800,000	Overlap with AL-199: Bayfront Park. This proposed project is focused primarily on erosion protection for the Dauphin Island Parkway, with limited recreational benefits.

Project Name	Project ID[a]	Organization	Project Cost	Notes / Identification of Projects Retained on Screening List (Table 2-4)
Dauphin Island Parkway, Bayfront Park, and Heron Bay Cut-Off Shoreline and Habitat Restoration and Public Access Enhancements	Fed-701	Mobile County Commission	$5,000,000	Overlap with AL-199: Bayfront Park
West End Beach and Barrier Island Restoration Project	AL-92	Town of Dauphin Island	$58,601,000	Overlap with Fed-11503: Town of Dauphin Island Beach and Barrier Island Restoration Project Alternative 3
Dauphin Island Acquisition	AL-224	Dauphin Management, LLC	$2,400,000	Overlap with AL-295: Mid-Island Parks
Aloe Bay Harbour Town	AL-79	Town of Dauphin Island	$14,346,382	Overlap with Fed-879: Dauphin Island Eco-Tourism and Environmental Education Area
Town of Dauphin Island Beach and Barrier Island Restoration Project	AL-594	Town of Dauphin Island	$68,000,000	Overlap with Fed-11503: Town of Dauphin Island Beach and Barrier Island Restoration Project Alternative 3

Notes: NA – Not available

[a] Project ID numbers represent a unique identifier each project was given when they were entered by the public into the DWH Public Comment Portal and the Alabama Project Portal. Projects with a DCNR identifier are not part of either portal and were projects developed by the AL TIG for early restoration that were carried over for consideration.

Table 2-3: Previously Funded Projects

Project Name	Project ID[a]	Organization	Project Cost	Notes
Nearshore and Snorkeling Reef Project	Fed-396	State of Alabama/City of Orange Beach	$500,000	ADCNR Marine Resources Division is carrying this out as part of artificial reefs NFWF grant.
Dauphin Island Park and Beach Board (Audubon Bird Sanctuary)	Fed-10168	Dauphin Island Park and Beach Board	NA	Project Title: Dauphin Island Bird Sanctuary – Dauphin Island Park and Beach Board (DIPBB) NOAA Award: 12NOA4190173 Project Cost: $55,000 ($27,500 federal / $27,500 match by DIPBB) Completed: September 2014
Dauphin Island Campground Expansion	Fed-11050	Dauphin Island Park and Beach Board	NA	Additional camping spots (pads) are not needed at this time due to space and utility constraints.
Lagoon Pass Parking	Fed-704	City of Gulf Shores	$1,600,000	Completed by City of Gulf Shores
10th Street Access	Fed-728	City of Gulf Shores	NA	Project Title: West 10th Street Public Access – City of Gulf Shores NOAA Award: 14NOS4190124 Project Cost: $100,000 ($50,000 federal / $50,000 match by Gulf Shores) Completed: March 2016
Dauphin Island Park and Beach Board (Public Beach Parking)	Fed-11051	Dauphin Island Park and Beach Board		Project Title: Dauphin Island Public Beach Site Improvements – Dauphin Island Park and Beach Board (DIPBB) NOAA Award: 13NOS4190116 Project Cost: $27,000 ($13,500 federal / $13,500 match by DIPBB) Completed: September 2014
Orange Beach/Gulf State Park/Gulf Shores Beach Restoration	Fed-11509	City of Orange Beach	$14,700,000	The 16.3-mile-long engineered beach across three jurisdictions (Gulf Shores, Orange Beach, and Gulf State Park) is treated as one project with three partners. In the last 15 years, three joint beach nourishment projects have been conducted. After Hurricane Ivan in 2005, a repair project was conducted. In 2005/2006 after an active hurricane season (Arlene, Cindy, Dennis, Katrina, and the effects of Rita and Wilma), nourishment was conducted. The third and most recent project was conducted in 2013/2014 (City of Orange Beach, 2016).

Project Name	Project ID[a]	Organization	Project Cost	Notes
Dauphin Island Audubon Bird Sanctuary Shoreline Restoration and Management	AL-82	Dauphin Island Park & Beach Board	$9,525,000	Project Title: Dauphin Island Shoreline Stabilization Project (AL-28) was CIAP Grant: F12AF00751 Project Cost: $7,500,000 ($5,200,000 CIAP/ $2,300,000 GOMESA) Completed: Spring 2016

Notes: NA – Not available

[a] Project ID numbers represent a unique identifier each project was given when they were entered by the public into the DWH Public Comment Portal and the Alabama Project Portal. Projects with a DCNR identifier are not part of either portal and were projects developed by the AL TIG for early restoration that were carried over for consideration.

Table 2-4: Projects Not Carried Forward for Further Analysis

Projects Not Carried Forward for Alternatives Analysis	Project Description	Project Cost	Reason Not Carried Forward
Wolf Creek Park Expansion (City of Foley)	The City owns Wolf Creek Park, a 25-acre property that contains coastal habitat with recreational and educational opportunities for the community and tourists. Wolf Creek Park is the northern boundary of the proposed acquisition. Acquisition of this property would expand the park, specifically expanding the coastal bird rookery habitat along the creek and interior cove. With this expansion, visitors could access coastal habitats for bird watching, fishing, and kayaking. Educational signage would inform visitors of the natural ecosystem and native species. The City would include the property as part of the nature parks system for management, maintenance, restoration (removal of invasive exotic plant species), water quality monitoring, and eco-tourism marketing.	$325,000	Not carried forward due to lack of geographic nexus. Although this project is in close proximity to the beaches and barrier islands, it is not located along a major thoroughfare leading to sand beaches. Accordingly, it was determined that this project would not provide sufficient benefit to general shoreline recreational use or the users affected by the DWH oil spill.

Projects Not Carried Forward for Alternatives Analysis	Project Description	Project Cost	Reason Not Carried Forward
Wolf Bay Wetland Nature Preserve: A Coastal Resource Recovery Land Acquisition Project (Alabama Forest Resource Center)	This project is a fee simple resource recovery land acquisition project. The 569 acre Wolf Bay Nature Preserve Tract is within the Alabama Coastal Area. The Wolf Bay Coastal Area has been designated as a Geographic Area of Particular Concern in the Alabama Coastal Area Management Plan. This tract is recognized as a Gulf Ecological Management Site (Gulf of Mexico Program). In 2007, the Alabama Department of Environmental Management (ADEM) and USEPA designated Wolf Bay as an Outstanding Alabama Water. The parcel consists of 458 acres of wetlands and 111 acres of upland property. The 111 acres of uplands would allow for a large development to occur on this site. The tract has been nominated to Forever Wild.	$3,000,000	Not carried forward because of a lack of geographic nexus. Although this project is in close proximity to the beaches and barrier islands, it is not located along a major thoroughfare leading to sand beaches. Accordingly, it was determined that this project would not provide sufficient benefit to general shoreline recreational use or the users affected by the DWH oil spill.
Perdido Pass Seawall Replacement (Alabama Department of Transportation)	The proposed project would replace a severely damaged seawall along Perdido Pass, at Alabama Point in Orange Beach, Alabama. The seawall and attendant parking area serves as a fishing access and sight-seeing location. Access to the pass from this location is currently closed because of the unstable asphalt surface of the parking lot and walking/fishing access areas. The reconstruction project would consist of installing a new seawall immediately behind the existing seawall. The existing tiebacks would be used. Once the new sheets are installed, the existing sheets would be removed. A new concrete cap would be placed on top of the new wall.	$7,359,816	This project was considered because the work would open a shoreline access point that is currently closed to the public for safety reasons and could potentially provide for limited shoreline fishing opportunities. Opening this access would not provide significant restoration for lost shoreline uses because the primary use at this location is parking and boat ramp access for water-dependent recreational uses.

Projects Not Carried Forward for Alternatives Analysis	Project Description	Project Cost	Reason Not Carried Forward
Gulf Place Development (City of Gulf Shores)	In an effort to improve access for the public to a beach area at the intersection of State Highway 59 and State Highway 182, eyebrow parking along State Highway 182 would be developed. This would allow the existing public parking areas in the vicinity of The Hangout to be developed into open space and provide the general public use of this area while enjoying the beaches. The project would also include construction of dune walkovers from the new parking over the vegetated dunes to the beach, allowing access to the beaches without destroying the vegetation and dunes established along State Highway 182. New restroom facilities at this site for the general public would also be constructed.	$2,500,000	The City of Gulf Shores is currently implementing Phase 1A of this project. The remainder of the project could be considered for future rounds of recreational use restoration funding by the AL TIG; however, the AL TIG would have to consider significant public safety and traffic considerations if this project were proposed in the future.
Habitat Acquisition and Conservation for Neotropical Migratory Birds (Dauphin Island Bird Sanctuaries, Inc.)	This project would acquire many (15) small tracts of land for bird conservation on Dauphin Island, Mobile County, Alabama. Dauphin Island has been recognized as one of the most important migratory songbird stopover locations on the northern Gulf of Mexico. These tracts are critical resting and foraging habitat for migratory songbirds. The number of acres and tracts acquired would depend on the existence of willing sellers and market appraisals.	$1,560,000	This project entails acquiring more than 15 parcels scattered throughout residential areas to conserve stop-over habitat for neotropical migratory birds. Because these parcels are not contiguous with any existing publicly accessible lands, no public access features (e.g., parking areas to provide human access) currently exist. Further, constructing public access features on the acquired tracts would diminish their ecological value to neotropical migratory birds and would not be technically feasible within the residential areas. Without public access features that would enable broader public access, the recreational use of these sites would be limited to users who could walk or bicycle to these sites. Acquisition of these parcels may be considered by the AL TIG in future, ecologically focused restoration planning.

Projects Not Carried Forward for Alternatives Analysis	Project Description	Project Cost	Reason Not Carried Forward
Cotton Bayou – Perdido Islands Beneficial Use Restoration (Alabama Cooperative Extension System)	This project would address habitat deterioration and associated ecological and recreational impacts in Perdido Bay. The project would have two main objects: (1) restore eroded beach habitat on Robinson and Bird Islands and (2) restore Cotton Bayou's channel and basin for boating access. The United States Army Corps of Engineers (USACE) in cooperation with partners would dredge Cotton Bayou to its historic depth and use the dredged material for beneficial use to create roughly 3.3 acres of beach habitat on Robinson and Bird Islands. This project will benefit the ecosystem by creating essential beach habitat that is used by animal species affected by the DWH oil spill. The project would also benefit Alabama's boating community, attract birders to the Gulf Coast, improve the access of fishermen to Perdido Bay, generally increase the use of Cotton Bayou channel, and in turn, offset impacts of the DWH oil spill on this area.	$1,247,334	Recreational benefits of this project would only be boat accessible in this location. The beach nourishment proposal may be considered by the AL TIG in future, ecologically focused restoration planning.
Magnolia River Preservation Project – Holmes Property (Weeks Bay Foundation)	The Weeks Bay Foundation would acquire property to (1) protect it in perpetuity, and (2) address restoration needs to ensure that it provides the best habitat for native and endemic species. Property would be purchased from a willing seller at the Yellow Book appraised value and held by the Weeks Bay Foundation who, as an accredited land trust, would maintain the conservation value of the property and prohibit any future development. In addition, the Weeks Bay Foundation would work with the Weeks Bay Reserve to create a management plan and prioritize restoration needs, including restoration of longleaf pine savannas, pitcher plant bogs, and marsh and swamp habitat (where appropriate).	$3,233,500	This project was not carried forward because of a lack of geographic nexus. Although this project is in close proximity to the beaches and barrier islands, it is not located along a major thoroughfare leading to sand beaches. Accordingly, it was determined that this project would not provide sufficient benefit to general shoreline recreational use or the users affected by the DWH oil spill. Additionally, the benefits associated with management of this project are primarily ecological with few recreational benefits. Accordingly, this project may be considered by the AL TIG in

Projects Not Carried Forward for Alternatives Analysis	Project Description	Project Cost	Reason Not Carried Forward
			future, ecologically focused restoration planning.
Town of Dauphin Island Beach and Barrier Island Restoration Project Alternative 3 (Town of Dauphin Island)	This project would involve an engineered shoreline restoration project for the approximately 7 miles of Gulf-fronting beach on Dauphin Island. The town contracted with South Coast Engineering, Inc., to develop templates to rehabilitate and strengthen Dauphin Island as a natural barrier and provide a "first line of defense" to protect critical economic and environmental resources in Mobile County.	$28,506,000	The AL TIG's preference is to not move forward with a major structural restoration project on Dauphin Island until the Dauphin Island Barrier Island Restoration Assessment is complete, which has been made clear to the public at many recent public meetings (NFWF, 2016). This proposal may be considered by the AL TIG in future, ecologically focused restoration planning.
Visitors Center at Bon Secour National Wildlife Refuge (Alabama Gulf Coast Convention & Visitors Bureau)	The project would construct a Visitors' Center at Bon Secour National Wildlife Refuge. It would provide an educational experience related to understanding of the importance of the refuge as well as what types of wildlife and habitats it contains.	$3,500,000	USFWS is not currently interested in committing refuge land to a visitor's center.
Town of Perdido Beach Shoreline Restoration Project (Town of Perdido Beach)	The proposed habitat restoration projects would be located within Perdido Bay, which historically has suffered from habitat degradation through the loss of coastal wetlands and associated sea grasses. The proposed project is aimed at the enhancement of coastal aquatic resources through the implementation of a 14-acre living shoreline within waters adjacent to town public access points. This project would provide benefits to residents and create a unique ecosystem that will provide direct benefits to Perdido Bay's aquatic productivity through the restoration of highly productive ecosystems, including oyster reefs, submerged aquatic grass, emergent saltmarsh systems, and tidal channels.	$6,000,000	This living shoreline project was considered through this round of project screening because it is within the area of geographic nexus and because it protects shoreline accessible salt marsh habitats and recreational boating access infrastructure (i.e., boat ramps and associated parking). However, as discussed above related to primarily ecological project types, this project provides limited benefits to general shoreline use (the predominant recreational use injury in Alabama). Instead, it primarily benefits water dependent recreational uses with limited

Projects Not Carried Forward for Alternatives Analysis	Project Description	Project Cost	Reason Not Carried Forward
			benefits to shoreline uses such as shore based fishing opportunity.
Pilot Town Acquisition and Finfish and Shellfish Habitat Restoration (Volkert, Inc.)	Pilot Town is an important part of Alabama history. Pilot Town was destroyed in a 1906 hurricane, but traces of the settlement, including an old graveyard, can still be found there. Erosion of the protective peninsula that was a signature of Navy Cove is almost completely lost to erosion. The shoreline in the project area has eroded approximately 600 feet since 1940 with the loss of approximately 25 acres of high quality wetlands and uplands. Purchase of the Little Point Clear unit would extend the refuge lands further west to include the western shore of St. Andrews Bay and encompass Pilot Town.	$8,100,000	USFWS is not currently interested in acquiring additional lands to include within the Bon Secour National Wildlife Refuge for the purposes of recreation. Acquisition of this land would not provide additional access to shoreline resources and would only provide ecological benefits.
Shoreline Restoration on Ft. Morgan Peninsula (Volkert, Inc.)	Dixie Graves Highway (County Road 180) in Baldwin County is the northern coast road along the Fort Morgan Peninsula in Baldwin County, Alabama. For much of the distance of this road, the northern shoreline is sufficiently wide that there is housing along the shoreline of Bon Secour Bay. In the vicinity of the boat ramp that is labeled Pine Public Access, near the intersection with Plantation Road, the roadway is very close to the waters of the bay. The proposed project would include shoreline supplementation to restore marsh habitat and sand beach. Additionally, as a protection measure against continued shoreline erosion, specifically designed wave attenuation devices would be placed to reduce wave action on the shoreline, which is expected to provide some stabilization to the shoreline in the vicinity of the boat ramp.	$13,500,000	This living shoreline project was considered through this round of project screening because it is within the area of geographic nexus and because it protects shoreline accessible recreational boating access infrastructure (i.e., boat ramps and associated parking) and general access infrastructure (i.e., coastal roadways that are needed for access to shoreline resources). However, this project provides limited benefits to general shoreline use (the predominant recreational use injury in Alabama). Instead, it primarily benefits water-dependent recreational uses.

Projects Not Carried Forward for Alternatives Analysis	Project Description	Project Cost	Reason Not Carried Forward
Cedar Point Restoration and Enhancement Project (Mobile County Commission)	This project would restore shoreline and provide critical public access to Mobile Bay and the Mississippi Sound by enhancing County-owned property in the Cedar Point area. The Commission proposes to enhance the existing facilities, restore natural habitat lost, and provide a high profile venue for public access to local waters. A master plan developed by the Commission for the Cedar Point area includes elements designed to reclaim and restore the shoreline and associated habitats and to construct public access facilities along the Bay and Sound shorelines of the Point.	$10,000,000	Since this project was submitted to the database, some of the proposed work has already been completed. Furthermore, the property has changed ownership, and the willingness of the potential seller is unknown. Accordingly, the likelihood of successful implementation unknown.
Lightning Point Public Access Improvements (ADCNR)	This project would fund recreational improvements to the existing Lightning Point Boat Ramp and Park located in Bayou la Batre in south Mobile County, Alabama. The current site includes a concrete boat ramp, an unimproved gravel boat ramp, and unimproved parking. The proposed project would improve the existing boat ramp and the gravel parking areas at the boat ramp. Additionally, boardwalks, gazebos, and a fishing pier would be added to improve and enhance public recreational use. A breakwater and salt marsh would be constructed to stabilize the eroding shoreline of the site. Finally, a small remnant parcel located along the southern shoreline would be acquired to facilitate the shoreline protection activities. Educational signage concerning fishing regulations, coastal resources and related information would be placed at the site.	$456,500	This project is not carried forward because of lack of geographic nexus. Although this project is in close proximity to the beaches and barrier islands, it is not located along a major thoroughfare leading to sand beaches. Accordingly, it was determined that this project would not provide sufficient benefit to general shoreline recreational use or the users affected by the DWH oil spill. Portions of this project (i.e., land acquisition) may be funded under NFWF GEBF; however, other components of this project may be considered by the AL TIG in future, recreational use restoration planning.

Projects Not Carried Forward for Alternatives Analysis	Project Description	Project Cost	Reason Not Carried Forward
Bureau of Land Management Fort Morgan Our Road Acquisition	This project would acquire 5.89 acres of property on Our Road, Fort Morgan, Alabama, to protect the acquired acreage that provides beach and dune habitat for species such as the Alabama beach mouse, nesting sea turtles, and migratory birds and shorebirds. Additionally, this acquisition would connect 26.32 acres of Bureau of Land Management-administered land and Bon Secour National Wildlife Refuge. There are few available properties for purchase left on Fort Morgan Peninsula that provide connectivity to other protected lands on Fort Morgan.	$7,498,000	This site currently comprises minimally disturbed beach mouse and sea turtle nesting critical habitat. Adding recreational use infrastructure to this site would affect these habitats. Therefore, the AL TIG may consider this proposal in future, ecologically focused restoration planning that would involve acquisition of this site for preservation and management without development of infrastructure.
Bon Secour Wildlife Refuge, Little Point Clear Unit Acquisition (two parcels)	The project proposes permanently protecting lands for long-term management by the Bon Secour National Wildlife Refuge. It would add approximately 250 acres of sensitive coastal lands to the Little Point Clear Unit at this refuge, including frontage along St. Andrews Bay and more than 100 acres of salt and freshwater wetlands, as well as several tidal sloughs, and adjacent upland areas.	$11,000,000	The benefits associated with management of this project are primarily ecological with few recreational benefits. Accordingly, the AL TIG may consider this project in future, ecologically focused restoration planning.
Gulf State Park Master Plan Phase II and III	The Gulf State Park Master Plan lays out a series of improvements that could be implemented in and around the park. The master plan considers operational recommendations to support the physical enhancements, ensuring long-term enhancement sustainability. Key recommendations include upgrading technology systems; improving the visitor experience with service standards and physical guidelines; expanding support for human resources and events; and strengthening reinvestment in the park.	Unknown	Originally considered as an independent project, many of these elements were incorporated into the Gulf State Park Lodge and Associated Public Access Amenities Project; therefore, it was not considered as a stand-alone alternative.

2.1.6 Range of Restoration Alternatives

The screening process identified nine alternatives located in Baldwin and Mobile counties for detailed OPA/NEPA analysis. These are listed in Table 2-5 below. The remainder of this chapter provides in-depth descriptions of each of these alternatives.

Table 2-5: Alternatives Carried Forward for Detailed Analysis

Projects for Alternatives Analysis Consideration	County	Project ID	Organization	Project Cost
Gulf State Park Lodge and Associated Public Access Amenities	Baldwin	DCNR-1	DCNR	$56,300,000
Fort Morgan Pier Rehabilitation	Baldwin	DCNR-3	DCNR	$3,075,000
Fort Morgan Peninsula Public Access Improvements	Baldwin	DCNR-4	DCNR	$2,522,500
Gulf Highlands Land Acquisition and Improvements	Baldwin	AL-132	Gulf Highlands, LLC	$35,000,000
Laguna Cove Little Lagoon Natural Resource Protection	Baldwin	AL-110	Pelican Coast Conservancy	$4,400,000
Bayfront Park Restoration and Improvement – Engineering and Design	Mobile	AL-199	Mobile County Commission	$1,000,000
Dauphin Island Eco-Tourism and Environmental Education Area	Mobile	Fed-879	The Town of Dauphin Island	$4,000,000
Mid-Island Parks and Public Beach Improvements (Parcels A, B, and C)	Mobile	AL-295	Town of Dauphin Island	$4,200,000
Mid-Island Parks and Public Beach Improvements (Parcels B and C)[a]	Mobile	AL-295	Town of Dauphin Island	$1,900,000

Notes [a] This project is a variation of Mid-Island Parks and Public Beach Improvements (Parcels A, B, and C). While shown as two projects in this table, the description of the screening process considered this as one project so as not to double count it.

2.2 ALTERNATIVES CONSIDERED FOR DETAILED ANALYSIS

Alternatives that were carried forward for detailed analysis are described below. For all alternatives except Bayfront Park, this RP/EIS proposes project planning and implementation. In the case of Bayfront Park, only funding of E&D is proposed at this time to provide more information to fully evaluate the alternative at a later date. Bayfront Park is described in detail below and is analyzed for the purpose of OPA (Chapter 3), but is not carried through the affected environment (Chapter 4) or environmental consequences (Chapter 5) sections because only E&D are being considered at this time. The NEPA analysis appropriate for projects considered only for E&D is addressed in the Final PDARP/PEIS (Section 6.4.1.4) and in Chapter 5 of this RP/EIS. A description of the no action alternative is also included in this section.

2.2.1 Baldwin County

Alternative 1: Gulf State Park Lodge and Associated Public Access Amenities Project

Project Summary/Background. The proposed alternative is located in the city of Gulf Shores in Baldwin County, Alabama. The 6,150-acre state park is adjacent to the Gulf of Mexico and includes both white sand beaches and backcountry areas. Orange Beach is located to the east. Access to the park is provided by Alabama State Highways 182 and 135. This alternative would (1) partially rebuild the Gulf State Park Lodge, which was destroyed in 2004 by Hurricane Ivan, and (2) develop a host of public access amenities, which would connect the lodge to other aspects of the park, create and enhance public use and enjoyment of the beach areas at Gulf State Park for visitors not staying at the lodge, and increase access to the non-beach areas within the park to all visitors (see Figure 2-2). The allocation of NRDA funds for partial construction of the Gulf State Park Lodge was previously part of the Gulf State Park Enhancement Project, which was funded with early restoration natural resource damages funds from BP. A court decision in *Gulf Restoration Network v. Jewell*, Case 1:15-cv-00191-CB-C (S.D. Ala.) stayed the use of the $58.5 million budgeted for the lodge and conference center component of that project, pending the completion of additional analysis under OPA and NEPA. A portion of these funds was expended on E&D and permitting of the lodge prior to the Court's stay, leaving approximately $56.3 million for consideration in this plan (see Appendix F). Since its original approval as part of a Phase III Early Restoration project and the subsequent court order staying the use of the funds for the lodge pending further analysis, the design of the lodge, along with the associated conference center, has been further developed by ADCNR (see Gulf State Park Master Plan[15]) (Sasaki, 2016). Also, additional funding for work at Gulf State Park, consistent with the Gulf State Park Master Plan, was secured by Alabama as a result of (1) the settlement of the State's economic damages claims against BP[16] ($50 million allocated to the lodge and conference center at Gulf State Park), and (2) an award of $5 million in BP grant funds to the State, which were allocated toward work at Gulf State Park. Construction of the lodge and conference center has already begun with the use of these non-NRDA funds, but additional funds of $56.3 million are needed to complete the Gulf State Park Lodge and Associated Public Access Amenities Project as described below[17] (see Appendix F). Using NRDA funds for finalizing lodge construction and constructing the public access amenities proposed in this plan would not commence until a Final Plan that meets the requirements of OPA and NEPA is complete, and the Gulf State Park Lodge and Associated Public Access Amenities Project alternative is selected in a ROD. As part of this project the AL TIG is not funding and is not proposing to fund the conference center at Gulf State Park. Additionally, the AL TIG is not proposing to reimburse the State for any non-NRDA funds currently being spent on the planning or construction of the lodge at Gulf State Park (see Appendix F).

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[15] http://mygulfstatepark.com/wp-content/uploads/2016/10/160823_GSP_MasterPlan_Final_lowres.pdf.

[16] Settlement Agreement between the Gulf States and the BP Entities with Respect to Economic and Other Claims Arising from the *Deepwater Horizon* Incident [Doc. 15435-2]: http://www.laed.uscourts.gov/sites/default/files/OilSpill/Orders/10052015Motion(DismissalofStates%2015435).pdf.

[17] The need for additional funding to complete construction of a lodge and conference center at Gulf State Park was acknowledged in the Phase III Early Restoration Plan, which explained that the NRDA funds allocated during Early Restoration would only provide partial funding for that component of the Phase III project.

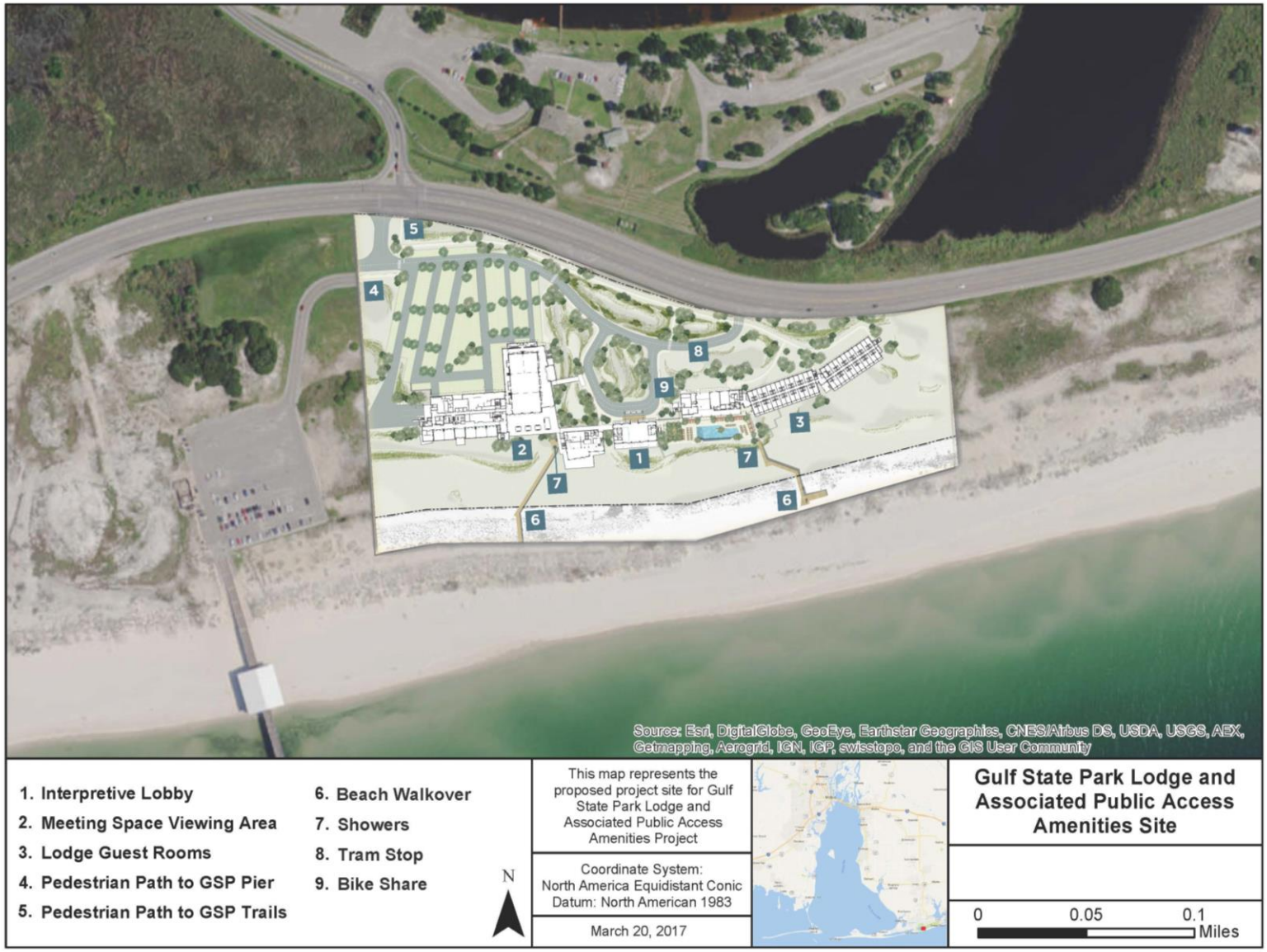

Figure 2-2: Proposed Recreational Enhancements at Gulf State Park

The Gulf State Park Lodge and the majority of the proposed public access amenities are being built on the site of the original lodge complex (Sasaki, 2016). The lodge and public access amenities are designed as “green" facilities to provide accommodations and ecologically based amenities in a natural environment. There would be approximately 350 rooms at the lodge. The rooms would create the opportunity for on-site, overnight access to the beach at Gulf State Park, thus providing visitors a unique way to experience that public resource. The rebuilt lodge would also serve to assist Gulf State Park in providing additional interpretive services addressed by other project elements. A conference center with meeting space capable of accommodating up to approximately 1,500 people would be built adjacent to the lodge with the non-NRDA funding sources described above.

The lodge and conference center were proposed as part of the Gulf State Park Enhancement Project in Phase III Early Restoration, during which the DWH Trustees approved funding a portion of the entire lodge and conference center facility. Because the project underwent further development after Phase III was finalized, the AL TIG is now able to give more specific detail on the public access amenities associated with this alternative. The AL TIG believes that the lodge and the associated public access amenities would provide a more effective vehicle to increase and enhance recreational opportunities at Gulf State Park (and thus to compensate the public for lost recreational use) compared to the conference center component of the early restoration project. As a result, the AL TIG is proposing and evaluating whether to implement the lodge and associated public access amenities with NRDA funds. Under this proposal, the State of Alabama would continue construction of the conference center without using NRDA funding from the AL TIG, as stated above. Furthermore, as part of this project, a portion of the revenue from the lodge would be retained and spent in Gulf State Park to support the public access amenities developed through this project and to enhance the operation and maintenance of the Gulf State Park Enhancement Project components from early restoration (see Appendix F).

The lodge is modeled after lodges found in the National Park System and is designed to be an integral part of the restoration and public utilization of Gulf State Park, furthering the restoration efforts conducted as part of the Gulf State Park Enhancement Project during Phase III Early Restoration. The lodge would provide beach-front lodging and recreational opportunities and support a wide array of other recreational enhancements at Gulf State Park. Thus, the lodge itself and the public access amenities proposed in this RP are projected to result in a major enhancement of the recreational experiences at Gulf State Park.

The public access amenities that would be fully funded through this RP are an important component of the restoration action. First, the lodge would be open to all park visitors, not only those staying there. It would offer public access and amenities similar to those at existing National Park System lodges. The lobby and other public spaces in and around the lodge would serve as focal points for environmental education, with exhibits and programs addressing coastal Alabama ecosystems and sustainable development practices in the coastal zone. In addition, the lobby and other public spaces would provide amenities that would facilitate extended daily access to Gulf State Park beaches for visitors not staying at the lodge. It is further expected that many of the lodge guests would use the amenities, such as the tram and bicycle share program, which would increase access to the non-beach areas within Gulf State Park to visitors who would not come to the park absent the lodge. The goal of the AL TIG would be to make the public spaces and amenities broadly available to all visitors regardless of their income. Accordingly, signage identifying the lodge as open to the public and providing information on its public features, and means to access those features, would be prominently provided at the lodge (both from the street and the beach) and throughout the park.

The following public access amenities that are proposed to be provided through this planning effort would be free and available to all park visitors, and specifically designed to enhance access to and enjoyment of natural resources:

- interpretive lobby,
- public education programs,
- public restrooms and post-beach showers,
- public beach access from the lodge area,
- tram system for access to the remainder of the park,[18]
- pedestrian path from the pier,
- bicycle share stations/program, and
- meeting space viewing area.

The AL TIG is proposing to fund the estimated costs of the public access amenities, which are approximately $8.7 million. The actual costs of these amenities (and other project elements) will depend on bids obtained through Alabama's public bidding process. The actual costs of funding these amenities could vary by as much as 30 percent above or below the $8.7 million cost estimate. In the event that the costs of these elements exceed $8.7 million, additional funds will be taken from the remaining approximately $47.6 million allocated to the lodge component of this project so that all public access amenities are fully funded. Alternatively, in the event that the costs of these elements are less than $8.7 million, the additional funds remaining could be applied toward the lodge, but only after and as long as the public access amenities are fully funded.

With these public access features in place, visitors not staying at the lodge would enjoy the same access to the unique beach area in front of the lodge as those enjoying overnight stays. This would create a special opportunity for the public, because the 2.2 miles of white sand beaches at Gulf State Park represent 7 percent of the total sand beach areas in Baldwin County, Alabama, much of which is privately developed and not publicly accessible. Accordingly, not only would the increased and enhanced beach access at the lodge site provide public access in an area where beach use is largely limited to privately owned and/or operated facilities, but the beach area at Gulf State Park provides an atypical beach experience in Alabama because of the surrounding open space available at the park and associated natural resources.

The proposed alternative also incorporates a number of the Gulf State Park Master Plan recommendations aimed at getting visitors out of their cars and onto the trails and walking paths throughout the park. Parking would be available at a variety of locations in and around the perimeter of the park. From a mobility perspective, parking would be fully integrated with a tram system, bicycles, and walking paths to minimize reliance on private cars in the park itself and reduce the environmental impact of park visitors. The tram system would be free for all visitors to the park. The main road through the center of the park has already been permanently closed in anticipation of full implementation of the

[18] The Park Tram map in the Gulf State Park Master Plan depicts the initial proposed tram routes for the park (http://www.gulfspillrestoration.noaa.gov/restoration/early-restoration/phase-iii and http://www.gulfspillrestoration.noaa.gov/restoration-planning/gulf-plan). These include a primary and secondary park route. The local link possibilities shown in the master plan are not included as part of the public access amenities proposed in this RP. This project would focus on construction of the primary park route, which would be operational when the lodge opens.

transportation infrastructure and services linked to the lodge and public access amenities project (e.g., the tram, rental bicycles). In addition, two pedestrian/bicycle bridges—one near the lodge and the other at the interpretive center—will be constructed to ensure safe access across the main highway to and from the beach, education pier, interpretive center, and lodge. These pedestrian/bicycle bridges are not proposed to be funded with this RP because construction of these bridges is scheduled to occur prior to the final decision of the AL TIG on this RP.

Building design and construction at Gulf State Park have been undertaken with the goal of certification under the LEED Gold and SITES Platinum programs. This project would also incorporate sea turtle-friendly lighting that would be reviewed and approved by the appropriate regulatory agencies. This will minimize the alternative's impact on the environment and establish it as a model for regionally appropriate, ecologically sensitive coastal design. Overall, green design of all facilities would serve as a centerpiece for explaining sustainable siting and construction in the coastal environment.

Construction Methodology (or Implementation Methodology) and Timing. The lodge is being built entirely within the footprint of the original lodge with a smaller footprint than the original lodge allowing for the setback from the coastal construction line.[19] Building design and construction would be undertaken with the goal of certification under the LEED Gold and SITES Platinum programs. The lodge would be built to achieve LEED Gold certification and be a pilot project for the Fortified Commercial program to demonstrate its commitment to resiliency against natural events. The lodge and associated public access amenities proposed under this project would also be one of the first facilities in the world to pursue SITES Platinum certification as a demonstration of the importance of the unique landscape surrounding the facility. This would minimize the project's impact on the environment and establish it as a model for regionally appropriate, ecologically sensitive coastal design.

The Gulf State Park Lodge and Associated Public Access Amenities Project would be scheduled for completion in 2018, if selected for implementation by the AL TIG. Alabama is currently funding the construction of the Gulf State Park Lodge and Conference Center with state-controlled, non-NRDA funds (see Appendix F).

Maintenance Requirements. Upon completion of the lodge, net revenue from the lodge's operations would be used in Gulf State Park to support (1) operation and maintenance of the public access amenities associated with the proposed project, and (2) operation and maintenance of the public access and education components of the Gulf State Park Enhancement Project, funded in Phase III of Early Restoration, including the dune restoration, Interpretive Center, Learning Campus, and trail and visitor enhancements. To accomplish the restoration described for this alternative, annual operation and maintenance of these public features would be supported by lodge revenues for a period anticipated to be 15 years. It is likely that the operation and maintenance of these components would utilize all net revenue from the lodge (not merely the portion of lodge revenue commensurate with the NRDA investment in the total lodge cost) (see Appendix E and Appendix G). However, if there is remaining lodge revenue, then—consistent with the net revenue from the conference center and other amenities currently available at the Gulf State Park site (such as campgrounds and cabins)—those excess funds may flow to ADCNR for general use within the Alabama State Park System. Ongoing funds to support the operation and maintenance of all aspects of the lodge, except for the public access amenities specifically described herein, are not included in the net revenues described above.

[19] Up to date design documents for Gulf State Park can be found at http://mygulfstatepark.com/.

Should the AL TIG not select to fund this alternative, then a separate source of funding would need to be identified to provide for any public access amenities that may be developed associated with the lodge and their operation and maintenance (see Appendix F).

Project Monitoring Summary. The objective of the alternative is to compensate for lost recreational use along the Alabama shoreline, and it is designed to improve the public's accessibility and enjoyment of Alabama's coastal resources. The performance criteria focus on monitoring to ensure the Gulf State Park Lodge and Associated Public Access Amenities Project is constructed according to plans and permitting requirements and to identify future increases in visitation attributable to the new facilities and amenities. To document the increase in recreational usage, the park would make available annual information on total number of visitors to the rebuilt lodge, lodge occupancy rates, average length of stay, and the state of origin for visitors. In addition, information would be assembled each year for at least five years on the number of visitors attending meetings at the facility and, to the extent practical, their use and enjoyment of the park's natural resources.

As a broader measure of the impact on visitation of park enhancements, park managers also plan to assemble annual data on the total number of visitors to the park. This type of information has been collected extending back as far as the early 1990s and would provide a basis for long-term comparisons of park visitation, including comparisons to the time when the previous lodge was operating. For the improvements to the quality of the visitor experience, the park would use existing Gulf State Park protocols for the gathering and evaluating visitor feedback.

Monitoring would also be conducted during construction of the Gulf State Park Lodge and Associated Public Access Amenities Project to ensure that construction activities comply with the full set of environmental permit conditions, including conditions relating to endangered species like the Alabama beach mouse. The specific monitoring requirements have been defined in conjunction with the final permits for work at the site, which were received as part of the Phase III ERP/EIS, and can be found in the administrative record for that process.

Cost. Estimated project cost is $56,300,000 and would include funds for planning, construction, monitoring, and Trustee supervision. No funds are included for operations and maintenance because these would be funded through the revenue generated from the lodge.

Alternative 2: Fort Morgan Pier Rehabilitation

Project Summary/Background. This project would fund the rehabilitation of a fishing pier located on Fort Morgan Peninsula in extreme southwestern Baldwin County, Alabama. The existing pier is approximately 500 feet long and is located at the Fort Morgan State Historic Site. See Figure 2-3. Until recently, the Fort Morgan fishing pier was heavily used by recreational fisherman. However, the pier, which is more than 40 years old, fell into disrepair, and in 2014 the Alabama Historical Commission closed it for safety reasons. The proposed project would rehabilitate the pier on its existing foundations, increasing publicly available opportunities for pier-based fishing in Baldwin County. This rehabilitated pier would meet current building code requirements, comply with Americans with Disabilities Act (ADA) accessible fishing guidelines, and add proper lighting and other features and amenities. Educational signage on fishing regulations, stewardship of coastal resources, and related information would be placed at the site. No parking lot improvements would be needed because adequate parking is already available at the site.

Figure 2-3: Fort Morgan Pier Rehabilitation

The pier would continue to operate under the same conditions as previously. It would be open from 8:00 a.m. to 5:00 p.m. daily. The admission fees already in place for other amenities at the Fort Morgan State Historic Site, which cover the costs of operations, would be applied:

- Adult—$7
- Senior—$5 (ages 65 and over)
- Child—$4 (ages 6–12,(children under 6 are free)
- Family—$18 (Two adults and two children 6–12 years)

Proposed Infrastructure (or Proposed Improvements). The proposed project would include the following:

- Install an anchored vinyl sheet pile as support and protection.
- Back fill the area between the sheet pile and pier for support.
- Remove and dispose of the current wooden decking.
- Replace the current pier decking with new concrete decking.
- Construct a concrete sidewalk connecting the pier and the shore.

No new infrastructure would be required or added at the site. The site includes an existing parking lot with space for 30 to 40 vehicles. Restrooms are available at the site's ferry dock, and portable toilets are available at the pier. These existing amenities would be available for fishing pier visitors. This project would also incorporate sea turtle-friendly lighting that would be reviewed and approved by the appropriate regulatory agencies. Other best management practices (BMPs) would be employed to minimize operational effects on sea turtles. These measures could include such things as improved/enhanced signage, monofilament line and hook disposal bins, unused bait disposal bins, and fish cleaning stations located off the pier.

Additional restoration efforts are underway in the immediate area. Permits are currently being sought by ADCNR Marine Resources Division to restore the boat ramp and jetty that are adjacent to Fort Morgan Pier. This restoration project would be carried out with funds from the USFWS' Sport Fisherman Restoration Fund rather than funds from the DWH NRDA settlement.

Construction Methodology (and Implementation Methodology) and Timing. Planning, E&D, and permitting/consultations with applicable agencies such as the USACE, NOAA, and USFWS would take approximately one year; six months would be needed for construction activities. All construction activities would be designed and implemented in accordance with the existing regulations and permits. Additional permits and consultations would be applied and initiated as required.

Sheet Pile Installation: Currently an aluminum sheet pile exists along the "inside" or boat basin side of the pier. This structure, which has been in place for more than 10 years, would be left intact, and a vinyl sheet pile would be installed on the outside the existing aluminum structure. An additional vinyl sheet pile would also be installed along the outside or waterward side of the pier. Approximately 1,080 linear feet of vinyl sheet pile would be installed around the pier. The sheet pile would be approximately 30 feet long and would be placed to a depth of approximately 20 to 22 feet, thereby creating a pier elevation of approximately 8 feet. A pile cap would be placed along the top of the sheet pile. The sheet pile would likely be installed by crane from a barge and is estimated to take one to two months.

Backfilling: After successful installation of the sheet pile, the area between the sheet pile and the pier would be backfilled with sand to provide additional structural strength and stability. The area to be filled is approximately 24,451 square feet and would require approximately 5,000 to 6,000 cubic yards of fill. The sand used as fill material would be acquired from dredging of the adjacent boat basin and from an onsite spoil area of sand previously dredged from the adjacent boat basin. Fill material would be installed using a long reach track hoe, dump truck, and bulldozer. This construction would occur from the existing pier.

Installation of Tie Rods: 50-foot-long tie rods would be installed connecting one side of the newly installed sheet pile to the other side. These square metal tie rods would measure approximately 1 inch by 1 inch by 50 feet. Wooden walers (1 square foot) would be used to further hold the tie rods in place. These tie rods would be installed along the sheet pile approximately every 3 to 4 feet.

Deck replacement: The support structure underneath the current pier consists of decommissioned barges and wooden pilings. This support structure would be left in place, undisturbed. The current wooden deck area of the existing pier (approximately 17,000 square feet) would be removed. Decking would be removed by track hoe from a barge and would take approximately two weeks. Decking would be replaced with concrete 4 to 6 inches thick installed by pump truck from land. Construction of concrete decking could take up to a month. ADA-compliant wooden railing would be installed. All construction activities would be designed and implemented in accordance with the existing regulations and permits.

Maintenance Requirements. The Alabama Historical Commission would provide short- and long-term maintenance for all project infrastructure. These activities would be funded with site entrance fees. Over time, the entrance fees may be adjusted to reflect changes in the ongoing operating and maintenance costs.

Project Monitoring Summary. The restoration objective of this project is to restore a portion of the lost recreational use caused by the spill. This would be accomplished by repairing and replacing existing infrastructure that is no longer accessible to the public in order to improve the public's enjoyment of Alabama's coastal resources. The project would be deemed successful when the pier has been rehabilitated. As such, performance criteria for this project are the satisfactory construction of the pier. Additional monitoring criteria are described in detail in Appendix C.

Cost. Estimated project costs are $3,075,000. This includes funds for planning, construction, monitoring, and Trustee supervision. No funds are included for operations and maintenance because these activities would be funded through entrance fees for the Fort Morgan State Historic Site.

Alternative 3: Fort Morgan Peninsula Public Access Improvements

Project Summary/Background. This project would fund Gulf beach access improvements on the Fort Morgan Peninsula in southwest Baldwin County, Alabama.

The proposed project would construct parking and dune walkovers at 11 existing Baldwin County- and state-owned sites (Figure 2-4). These publicly accessible sites mainly consist of narrow (50 to 100-foot wide) parcels at the end of county-owned ROWs. Adding the proposed amenities would improve and enhance public access to the beach. Educational signage concerning coastal resources would be placed at the sites. This would establish "pocket parks" similar to the one shown in Figure 2-5. Details of each site and the associated infrastructure are discussed below.

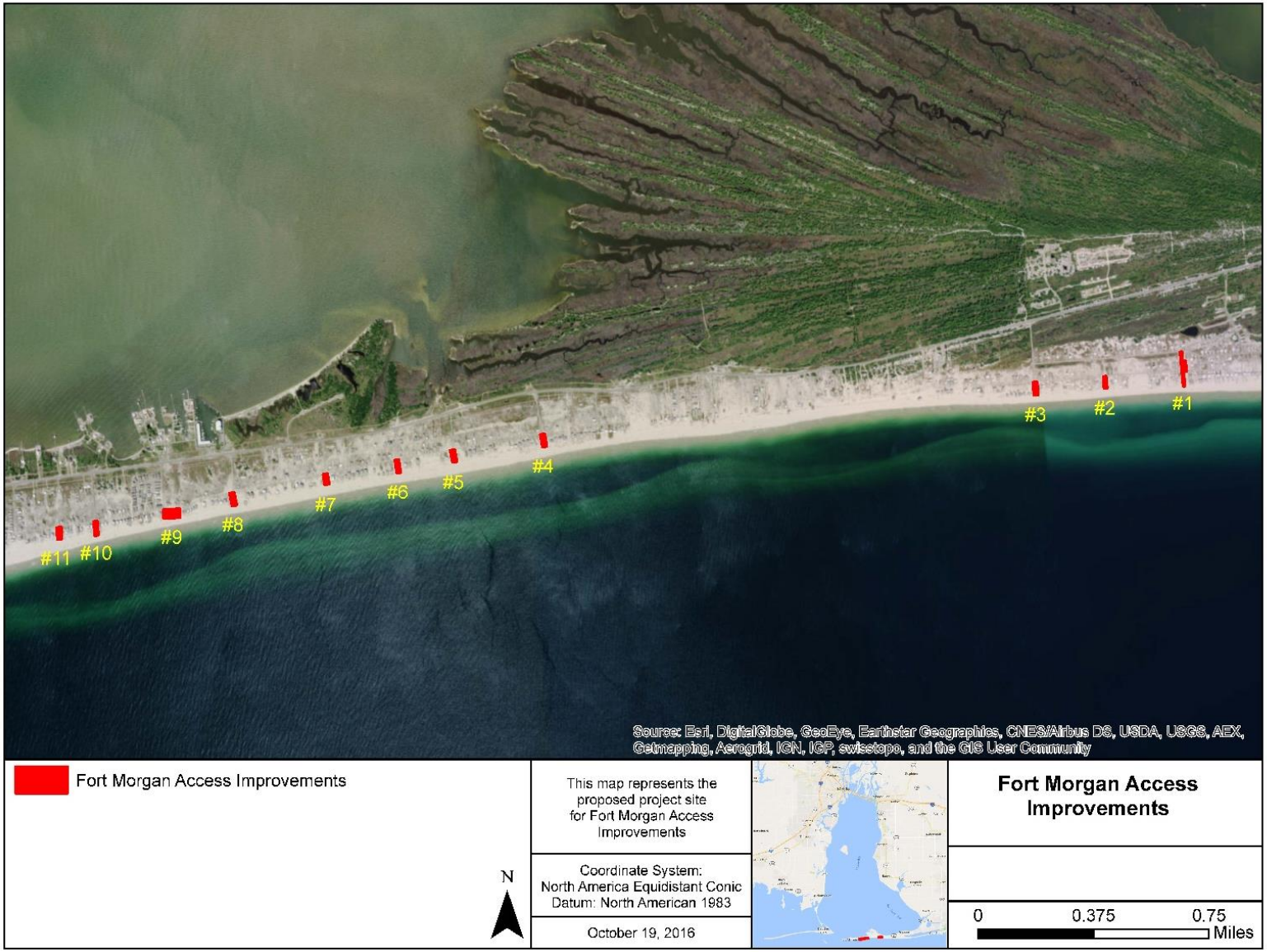

Figure 2-4: Fort Morgan Peninsula Access Site Locations

Figure 2-5: Example of a "Pocket Park" in Walton County, Florida

Proposed Infrastructure (or Proposed Improvements). This project would construct parking and dune walkovers at existing Gulf-fronting public access points. Dune walkovers would vary in length depending on individual site conditions. At Sites 1 and 9, permanent restrooms and showers would be constructed. At these sites, electrical service and water and sewer lines would be installed, and utilities would be placed underground. The utility trench would be excavated, the utility lines would be placed, and then the trenches would be refilled and regraded. Portable toilets and permanent showers would be placed at all other sites except site 2 where the ROW is too small to support parking, bathroom, and shower facilities. Any lighting installed would include certified sea turtle-friendly fixtures placed in accordance with appropriate BMPs.

Table 2-6 details the improvements that would occur at each of the 11 sites. Figure 2-6 provides an example of these sites and their current conditions.

Table 2-6: Site-specific Improvements

Access Point	Property Owner	Number of Parking Spaces	Parking Pave Length (feet)	Parking Pave Width (feet)	Parking Square Yards	Boardwalk Length (feet)	Shower Quantity	Bathroom Quantity	Bathroom Type
1	State of Alabama	15	140	60	933	70	1	1	Stall
2	Baldwin County	3	45	30	150	150	0	0	-
3	Baldwin County	9	90	50	500	110	1	1	Portable
4	Baldwin County	9	90	50	500	100	1	1	Portable
5	Baldwin County	9	90	52	520	95	1	1	Portable
6	Baldwin County	9	90	50	500	110	1	1	Portable
7	Baldwin County	9	90	50	500	60	1	1	Portable
8	Baldwin County	9	90	50	500	110	1	1	Portable
9	Baldwin County	30	20	285	633	385	1	1	Stall
10	Baldwin County	9	90	50	500	130	1	1	Portable
11	Baldwin County	9	90	50	500	85	1	1	Portable

Site #1

Site #3

Site #5

Site #8

Figure 2-6: Example of Proposed Pocket Park Sites

Construction Methodology (and Implementation Methodology) and Timing. Planning and E&D would take approximately six months; permitting and consultations would require approximately four months; and construction activities would require another six months.

At each site, a pile-supported dune walkover would be constructed from the seaward edge of the parking area to the approximate seaward vegetation line. Construction would begin at the edge of the parking area and progress seaward. Pilings would be jetted to appropriate depth, then the supporting framing would be installed, followed by the installation of decking and railings. Dune walkovers would vary in length depending on individual site conditions. Parking areas would be graded, a layer of foundation material placed and topped with permeable materials (e.g., crushed aggregate or parking pavers). At Sites 1 and 9, a pile-supported bathrooms would be constructed. At other sites, portable toilets would be placed and maintained. All construction activities would be designed and implemented in accordance with the existing Alabama Beach Mouse Habitat Conservation Plan (HCP) and ADEM Division 8 Coastal Program rules pertaining to construction on Gulf-fronting beaches and dunes.

Maintenance Requirements. Periodic maintenance of the project components would occur, including trash collection, restroom maintenance, and infrastructure maintenance as needed. Maintenance would be the responsibility of Baldwin County.

Project Monitoring Summary. The restoration objective of this project is to restore a portion of the lost recreational use caused by the DWH oil spill by using land currently owned by the state and county to improve the public's access to and enjoyment of Alabama's coastal resources. The project would be deemed successful when access improvements have been implemented, including parking, boardwalks, and restrooms, where applicable. As such, performance criteria for this project would be the satisfactory construction of the desired parking, boardwalks, restrooms, and showers at each of the 11 sites.

Cost. Estimated project costs are $2,522,500 and would include funds for planning, construction, operation and maintenance, monitoring, and Trustee supervision.

Alternative 4: Gulf Highlands Land Acquisition and Improvements

Project Summary/Background. Gulf Highlands, located in southwest Baldwin County, is part of the Gulf Barrier Island and Coastal Marsh Ecoregion within the larger Southern Coastal Plain Ecoregion. The property consists of approximately 113 acres. Habitat types associated with Gulf Highlands include wet beach (8.2 acres), frontal dunes (37.7 acres), tertiary dunes (18.7 acres), interior scrub (45.5 acres), and wetlands (1.9 acres). These habitats support a wide range of plant and animal life reflecting the diversity of the habitat itself. The proposed project would entail land acquisition, protection, and management by ADCNR State Parks Division.

The Gulf Highlands parcel is the largest remaining privately owned Gulf-fronting parcel on Alabama's coast with approximately 2,700 linear feet of undeveloped beachfront. This beach and dune habitat is typical of coastal Alabama and consists primarily of grasses, forbs, and low shrubs. The grasses found in this habitat include sea oats (*Uniola paniculata*), panic grasses (*Panicum* spp.), coastal bluestem (*Schizachyrium maritimum*), cordgrass (*Spartina patens*), and knotgrass (*Paspalum distichum*). Ground cover plants, such as sea purslane (*Sesuvium portulacastrum*), beach elder (*Iva imbricata*), white morning glories, and railroad vine are also dominant species (USFWS, 2005).

Habitats on the Gulf Highlands site serve as important nesting, foraging, and sheltering environments for hundreds of migratory and non-migratory bird species. As an open tract among developed parcels along the Fort Morgan Peninsula, Gulf Highlands also provides an important corridor for butterflies and birds migrating across the Gulf in the Mississippi Flyway.

In addition to birds and butterflies, sea turtles nest on Alabama beaches. Federally listed as a threatened species in 1978, the loggerhead sea turtle (*Caretta caretta)* is the most prominent species in Alabama (NMFS and USFWS, 1991), but the endangered Kemp's ridley (*Lepidochelys kempii*) and green sea turtles (*Chelonia mydas*) also nest occasionally on the Alabama coast (Share the Beach, 2015). Over the last five years, the Alabama coastline has supported more than 500 sea turtle nests holding up to 13,300 eggs annually and accounting for more than 30,000 hatchlings entering the Gulf of Mexico (Share the Beach, 2015). Threatened and endangered species associated with this project are discussed further in Chapter 4.

This site is facing imminent development pressure. Gulf Highlands is privately owned and has all the permits necessary to move ahead with high density residential development of the parcel. The property is zoned to allow the development of a 612-unit condominium. USACE and the ADEM have issued the necessary permit (SAM-2009-00094-JEB) and Coastal Area Management Program Variance (2010-289-NIP) to allow filling of wetlands on the property. USFWS has also issued a Biological Opinion and Incidental Take Permit for the Alabama beach mouse.

Acquisition of this parcel would help prevent the loss of remaining natural resources and habitats from proposed development of the site. In addition to acquisition of the parcel, ADCNR would design, permit, and construct controlled access point(s) with a raised dune walkover, perimeter fencing, boundary signs, educational/interpretive signage, and managed access. Acquisition of the parcel with controlled access would allow greater protection of ecologically sensitive areas and the ability to strategically manage passive recreational access. The site location and proposed improvements are shown in Figure 2-7.

The acquisition of this property would include an appropriate land protection instrument (i.e., deed restriction or conservation easement) to ensure that the purpose of compensating for lost recreational use as described in this plan is maintained over time. The final land protection instrument would state that this property may not be disposed of in any manner or used for purposes other than conservation and restoration of natural resources and/or for passive public outdoor recreation of the type described for this property in the final RP/EIS.

Proposed Infrastructure (or Proposed Improvements). The Gulf Highlands Land Acquisition and Improvements alternative would include the following components:

- Acquire an estimated 113 acres of Gulf-front habitat on the Fort Morgan Peninsula to help protect beach, dune, wetland, and scrub habitats.
- Design, permit, and construct controlled access point(s) with a raised dune walkover, perimeter fencing, boundary signs, educational/interpretive signage, and managed access.
  - The parking lot would be approximately 15,000 square feet (approximately 40 parking spaces) including 4 to 5 ADA-compliant spaces with a 38,000 square foot driveway.
  - The boardwalk would be approximately 1,280 feet long. This would extend from the northern peripheral parking area to the beach. This design would be modeled after similar systems presently in place on nearby Bon Secour National Wildlife Refuge. This feature would be sited on the periphery of the tract, such that it would not bisect critical habitat within the interior portions of the parcel. Exact placement would consider key habitat features and other related ecological processes. The boardwalk would be ADA-compliant and satisfy ADEM Division 8 Coastal Program rules pertaining to construction on Gulf-fronting beaches and dunes.
  - Interpretive signage would be installed to emphasize the importance of the unique wildlife habitats and signage/enforcement provisions for public use.

Construction Methodology (or Implementation Methodology) and Timing. Planning, including development of a management plan (or strategy) and E&D, would take approximately six months, permitting and consultations would take approximately four months, and construction activities would require six months. Controlled access points would be identified as part of the management plan/strategy in an effort to minimize impacts on habitat and/or wildlife. Potential access points include Gulfway Street and/or an easement just west of Gulfway Street (Figure 2-8).

Parking areas would be graded, and consist of a foundation layer topped with permeable materials, such as crushed aggregate or parking pavers.

All construction activities would be designed and implemented in accordance with the existing Alabama Beach Mouse HCP and the ADEM Division 8 Coastal Program rules pertaining to construction on Gulf-fronting beaches and dunes.

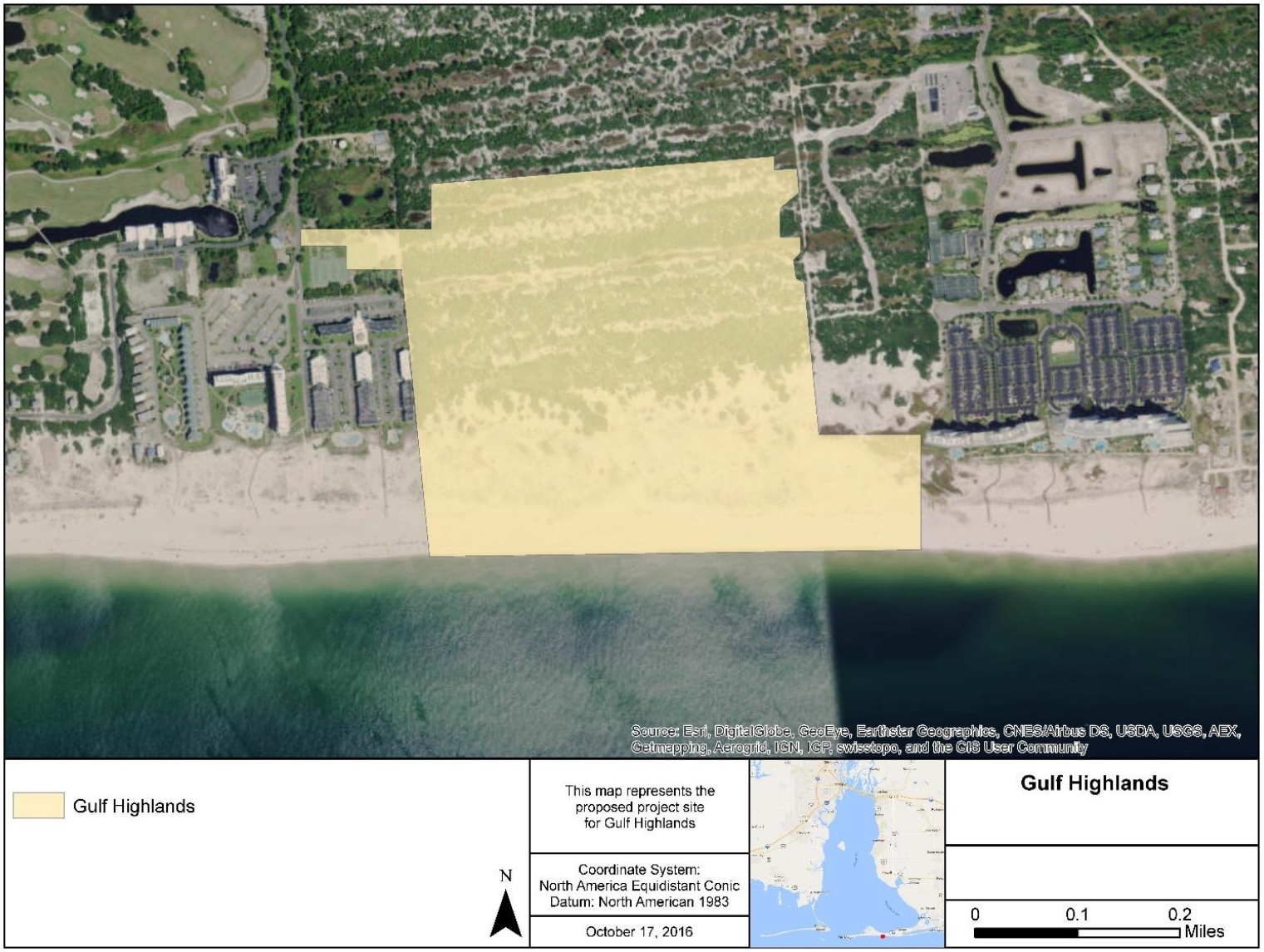

Figure 2-7: Proposed Gulf Highlands Acquisition Site

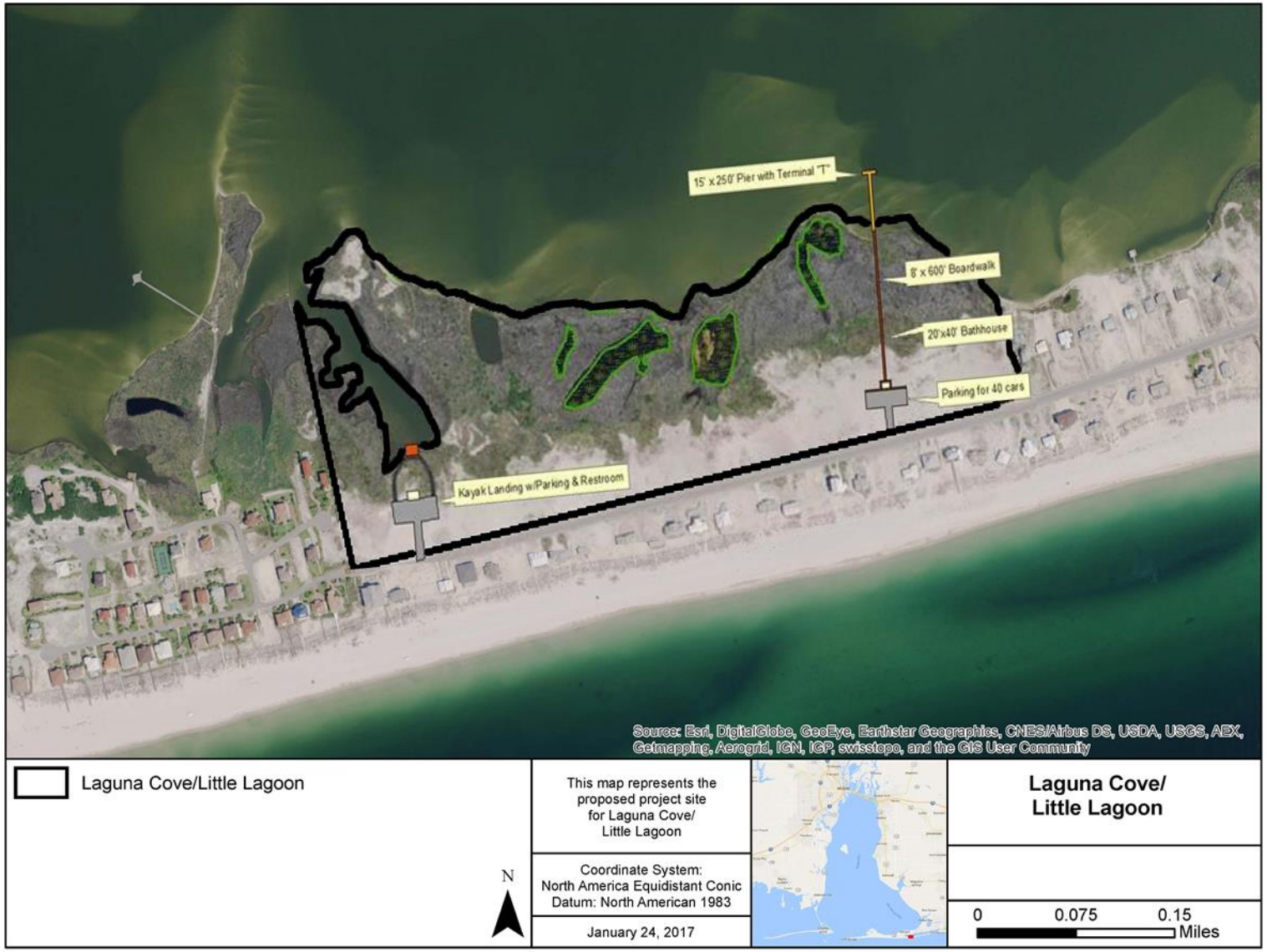

Figure 2-8: Laguna Cove Little Lagoon Natural Resource Protection

Maintenance Requirements. ADCNR State Parks Division would conduct general site maintenance. In addition to maintaining the infrastructure, invasive plant removal and predator management would occur as necessary and as funding allows.

Project Monitoring Summary. The restoration objective of this project is to restore a portion of the lost recreational use on lands affected by the DWH oil spill by acquiring lands currently facing imminent development pressure and developing ecologically sensitive recreational access to the site that would improve the public's access to and enjoyment of Alabama's coastal resources. The project would be deemed successful when land is acquired and access improvements (parking and walkovers) have been established. As such, performance criteria for this project are the satisfactory acquisition of the property and construction of the site access improvements.

Cost. Estimated project costs are $35,000,000 and would include funds for planning, construction, operation and maintenance, monitoring, and Trustee supervision.

Alternative 5: Laguna Cove Little Lagoon Natural Resource Protection

Project Summary/Background. This project would fund the acquisition of and development of recreational amenities on two undeveloped tracts of land, totaling approximately 53 acres near Little Lagoon in Gulf Shores, Southwest Baldwin County, Alabama. ADCNR State Parks Division would purchase the property from the Erie Meyer Foundation and transfer the property to the City of Gulf Shores. The two tracts are bordered by Little Lagoon to the north and West Beach Boulevard (State Highway 182) to the south. The acquisition of these two tracts would provide additional public access to Little Lagoon. The project site is near the boundaries of the Bon Secour National Wildlife Refuge.

The parcels contain low elevation dune habitat, large areas of coastal wetlands, and include approximately 6,100 linear feet of shoreline on Little Lagoon. This site was previously approved for a subdivision and a large-scale marina (69 slips) and is at risk of future development. To support the planned development, USACE Section 404 and Section 10 permits and a biological opinion containing beach mouse restrictions have been issued. An ADCNR Riparian Easement was also obtained in support of the marina and subdivision development. Portions of the property are considered Alabama beach mouse critical habitat, and any infrastructure development would occur in coordination with USFWS to minimize impacts on this habitat.

Prior to transfer of the property to the City of Gulf Shores, ADCNR State Parks Division would record a deed restriction in the deed to ensure that the purpose of compensating for lost recreational use, as described in this plan, is maintained over time. The deed restriction would state that the property may not be disposed of in any manner or used for purposes other than conservation and restoration of natural resources and/or for passive public outdoor recreation of the type described for this property in the final RP/EIS.

Proposed Infrastructure (or Proposed Improvements). Once the land is acquired, multiple proposed access improvements would be implemented (see Figure 2-8).

- A total of 60 parking spaces are proposed on the upland portion of the property. Twenty of these parking spaces would be on the eastern side of the property allowing access to the proposed fishing pier and 40 spaces would be located on the western side of the property near the proposed kayak launch. Each space would be approximately 10 by 25 feet, for a total of approximately 15,000 square feet of parking area.
- Five additional asphalt ADA-accessible parking spaces would be constructed. Each space would be approximately 12 feet by 20 feet for a total of approximately 1,200 square feet of ADA-accessible parking.

- The proposed fishing pier on the eastern side of the property would be approximately 8 feet by 600 feet and include a 15-foot by 250-foot 'T' at the end of the pier. The pier would include a ramp for ADA-compliant accessibility. This ramp would be 10 feet wide with a hand rail on each side. There would be a 20 foot by 30-foot deck base at the end of the ramp. The pile-supported pier would be elevated in compliance with required permits (e.g., the Clean Water Act [CWA] Section 404 and the Coastal Zone Management Act [CZMA]).
- An ADA-compliant accessible 20-foot by 40-foot bathhouse would be located next to the landward end of the fishing pier and would be connected to the City of Gulf Shores Public Utilities.
- A boardwalk would be established on the west side of the property, approximately 8 feet by 600 feet that would provide area for viewing or fishing. This structure would be pile supported and elevated in compliance with required permits (e.g., the CWA Section 404, Rivers and Harbors Act [RHA] Section 10, and the CZMA).
- A 10-foot by 20-foot kayak launch is proposed at the waterward edge of the boardwalk in compliance with required permits (e.g., the CWA Section 404, RHA Section 10, and the CZMA).
- ADA-accessible restrooms (approximately 20 feet by 30 feet) would be located on uplands near the boardwalk/kayak launch area.
- This project would also incorporate sea turtle-friendly lighting that would be reviewed and approved by the appropriate regulatory agencies.

Construction Methodology and Timing. Planning and E&D would take approximately six months, permitting and consultation would take approximately a year, and construction activities would require 6 months. Parking areas would be graded, and a layer of foundation material would be placed and topped with permeable materials, such as crushed aggregate or parking pavers. The fishing pier and boardwalk would include ramps for accessibility. Utilities serving these amenities would require up to 600 feet of utility lines to service the restrooms and lighting. Areas where utilities lines would be placed would be evaluated to minimize resource impacts.

Establishment of infrastructure, including the kayak launch would avoid known areas of shoal grass (*Haloduli wrightii*). All construction activities would be designed and implemented in accordance with the existing Alabama Beach Mouse HCP and other relevant permits and compliance guidelines.

Maintenance Requirements. Periodic maintenance of the project components would occur, which would include trash collection, restroom maintenance, and infrastructure maintenance, as needed. Maintenance would be the responsibility of the City of Gulf Shores and is included in the project budget.

Project Monitoring Summary. The restoration objective of this project is to restore a portion of the lost recreational use caused by the DWH oil spill by acquiring land and preserving Alabama shoreline from future development, while improving the public's access to and enjoyment of Alabama's coastal resources. The project would be deemed successful when the land has been acquired and access improvements (pier, boardwalk, kayak launch, restrooms, and parking spaces) are in place. As such, performance criteria for this project are the satisfactory construction of the desired pier, boardwalk, kayak launch, restrooms, and parking spaces, as well as associated infrastructure and completion of the public use monitoring. Additional monitoring criteria are described in detail in Appendix C.

Cost. Estimated project cost is $4,400,000 and would include funds for planning, construction, operation and maintenance, monitoring, and Trustee supervision.

2.2.2 Mobile County

Alternative 6: Bayfront Park Restoration and Improvements

Project Summary/Background. Mobile County's Bayfront Park is located on Dauphin Island Parkway near the Alabama Port community. The park encompasses approximately 20 acres, about 50 percent of which is classified as estuarine marine wetland, and provides playground, picnic, and restroom facilities along with limited public access to Mobile Bay. The County Commission provides full-time staffing and maintenance of the grounds. Currently, the park receives more than 300 visitors on the weekends and more than 1,200 per week during the peak summer months. Recreational activities include covered picnicking, fishing, kayaking, bird watching, and wildlife observation. This project would provide enhanced public access, salt marsh restoration, and infrastructure protection at Bayfront Park (see Figure 2-9).

Proposed Infrastructure (or Proposed Improvements). At this time, the AL TIG is considering this project for E&D funding only. The proposed E&D work would evaluate constructing a living shoreline and/or sandy beach along the Bayfront Park's currently armored Mobile Bay shoreline and developing additional recreational amenities at the park. These new amenities could include improved restroom and playground facilities, a renovated wetland boardwalk and nature trail, expanded birdwatching opportunities, and a geocaching trail. In addition, the E&D work would include development of a plan for the addition of signage and interpretive materials promoting environmental education and stewardship.

Construction Methodology (or Implementation Methodology) and Timing. Project planning, associated compliance, and construction would take up to two years. A phased approach would begin with planning and design tasks that focus on defining specific goals and objectives, quantifiable performance criteria, specific habitat conditions in the park, the scope of wetland restoration and enhancement, and the feasibility and preliminary design for creating a living shoreline or sandy beach area along the armored section of the Mobile Bay shoreline. This design phase would include planning to obtain any required permits and conducting any necessary field work (e.g., wetland delineations, cultural resource surveys, sediment core collection). The second phase would include construction and monitoring. It would also focus on assessing project performance and implementing a long-term monitoring program. This future phase would be fully evaluated in a future restoration plan.

Maintenance Requirements. Periodic maintenance of the project components would occur, including trash collection, restroom maintenance, and infrastructure maintenance as needed. The City of Mobile (property owner) would be responsible for maintenance.

Project Monitoring Summary. The E&D phase proposed in this RP/EIS will be successful once the planning and development of the project is complete.

While only E&D is being considered at this time, the restoration objective of the overall project would be to restore a portion of the lost recreational use caused by the DWH oil spill by establishing infrastructure to improve the public's access to and enjoyment of Alabama's coastal resources. The project would be deemed successful when the proposed improvements at Bayfront Park (i.e., construction of a living shoreline and/or a sandy beach area along the armored section of the Mobile Bay shoreline) have been established. As such, performance criteria for the overall project are the satisfactory construction of the proposed improvements and public use monitoring.

Cost. Estimated project costs for E&D activities are $1,000,000.

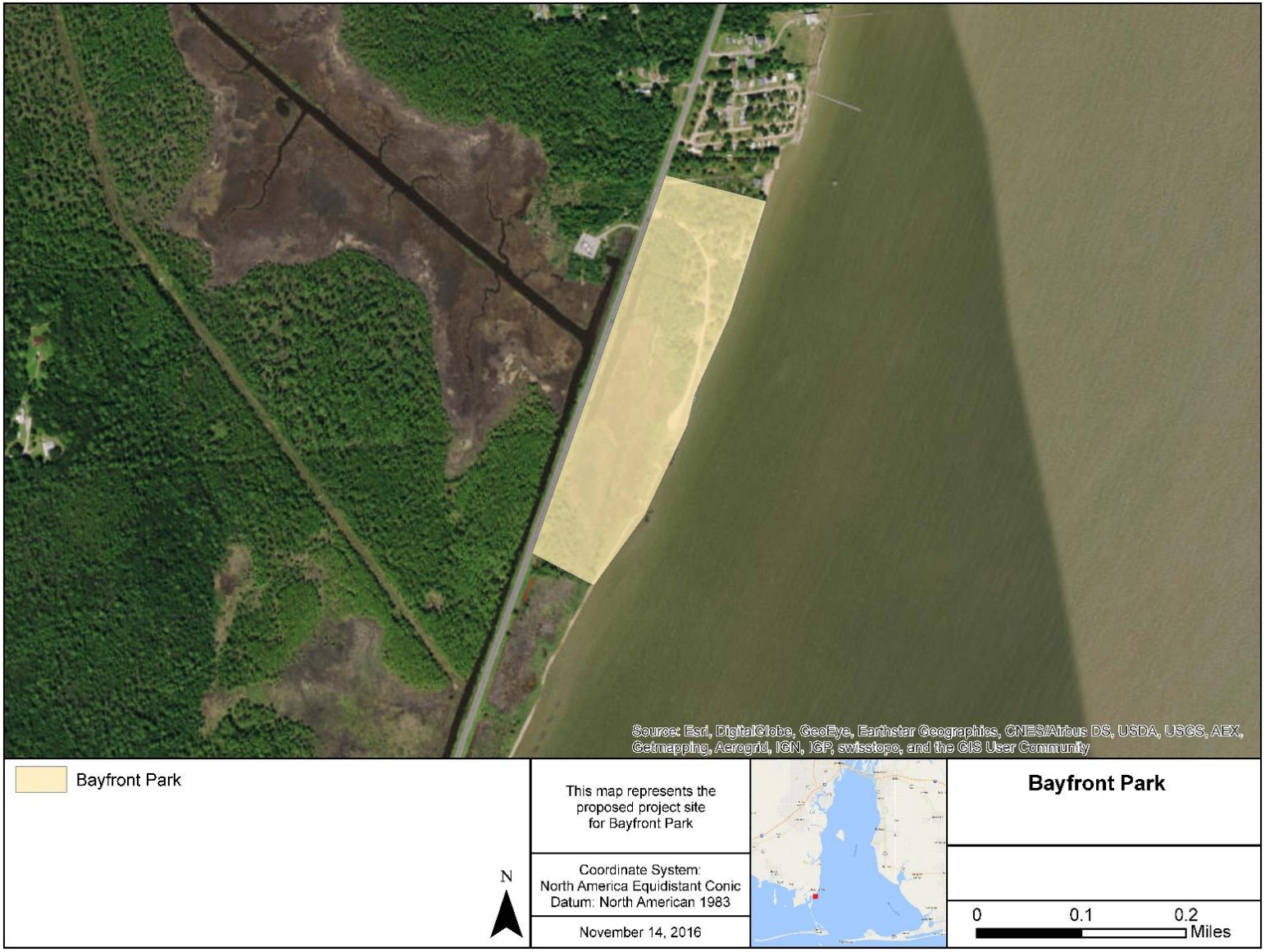

Figure 2-9: Bayfront Park Site Location

Alternative 7: Dauphin Island Eco-Tourism and Environmental Education Area

Project Summary/Background. The proposed Dauphin Island Eco-Tourism and Environmental Education Area would be located on Dauphin Island in south Mobile County, Alabama. Dauphin Island is a barrier island that sits at the mouth of Mobile Bay where it joins the Gulf of Mexico. With its east-west orientation, the approximately 14-mile long island has Gulf-fronting beaches on its southern side. Mississippi Sound borders Dauphin Island to the north. The proposed project is in the geographic middle of the island. Under the proposed project, the Town of Dauphin Island would acquire approximately 100 acres of privately held land and water bottom that are currently for sale. The State of Alabama does not currently own the water bottom in this area. If sold to another private landowner, the property could be permitted and developed. Approximately 90 acres of the property are coastal salt marsh and water bottom and 10 acres are upland. The dominant macrophyte in the marsh is black needlerush (*Juncus roemerianus)* with a waterward fringe of smooth cordgrass (*Spartina alterniflora)*. In addition to protecting the land from development, the project would enhance recreational use of the coastal habitat by providing amenities that offer recreational opportunities to the public. These proposed visitor amenities include a fishing pier, bicycle path, parking area, boardwalks, gazebos, and public restrooms. The fishing pier and boardwalks would allow visitors access to the marsh and water. Educational signage would be placed at strategic locations to improve public awareness of environmental resources associated with the site. Figure 2-10 shows the proposed project site.

By constructing a parking area and boardwalks, this project would provide public access to wetland habitats adjacent to Aloe Bay, where no public access currently exists. Visitor experiences would be enhanced by the addition of gazebos and restroom facilities.

The acquisition of this property would include the recording of a deed restriction in the deed to ensure that the purpose of compensating for lost recreational use, as described in this plan, is maintained over time. The deed restriction would state that the property may not be disposed of in any manner or used for purposes other than conservation and restoration of natural resources and/or for passive public outdoor recreation of the type described for this property in the final RP/EIS.

Proposed Infrastructure (or Proposed Improvements). Once the land is acquired, multiple proposed access improvements would be implemented:

- Up to 100 parking spaces are proposed for the upland on the northern side of the property. Each space would be approximately 10 by 20 feet, for a total of approximately 20,000 square feet of parking area, and the parking area would be a pervious surface (e.g., crushed aggregate).
- Seven additional asphalt ADA-accessible parking spaces would be constructed. Each space would be approximately 12 feet by 20 feet for a total of approximately 1,680 square feet of ADA-accessible parking.
- The fishing pier would be 10 feet by 530 feet and include four finger piers off of the main pier. Each finger pier would be 10 feet by 100 feet and would include handrails. The pier would include a ramp for accessibility. This ramp would be 10 feet wide with a hand rail on each side. There would be a 20 foot by 30-foot deck base at the end of the ramp. The pile-supported pier would be elevated in compliance with required permits (e.g., CWA Section 404, the CZMA, the Endangered Species Act [ESA], and the Marine Mammal Protection Act of 1972 [MMPA]). Water depth in the location of the proposed pier is approximately 2 to 3 feet. USACE bathymetry data would be reviewed, and the location adjusted if a more appropriate location is determined.

Note: This map is for illustrative purposes only and additional design is necessary to finalize siting of the amenities

Figure 2-10: Proposed Dauphin Island Eco-Tourism and Environmental Education Area

- Accessible restrooms totaling approximately 500 square feet would be located at the end of the fishing pier and would be connected to Town of Dauphin Island Public Utilities.
- An elevated boardwalk above the wetlands would connect with the parking area and fishing pier. The walk would be approximately 1,520 linear feet and 8 feet wide. This pile-supported structure would be elevated in compliance with required permits (e.g., CWA Section 404, RHA Section 10, the CZMA, Essential Fish Habitat [EFH], the MMPA, and the ESA).
- A 450-square-foot gazebo would be constructed of pressure-treated wood framing and exposed beaded plywood roof decking.
- An asphalt bicycle path of approximately 2,355 linear feet and 8 feet wide would extend along the eastern edge of the parcel, avoiding wetland areas.
- Educational displays would be provided at the site to inform visitors about the cultural and natural resources of the area and of coastal Alabama.
- This project would also incorporate sea turtle-friendly lighting that would be reviewed and approved by the appropriate regulatory agencies.

Construction Methodology (or Implementation Methodology) and Timing. Project planning, associated compliance, and construction would take up to two years. Construction of the parking areas and bicycle path would occur on the north and east sides of the property, respectively. Permeable aggregate material (such as crushed shell) would be used in the parking area. The bicycle path and accessible parking places would be constructed with asphalt.

The proposed fishing pier and boardwalk would be elevated and supported on piles driven into the ground; however, a minimum of approximately 5 feet would be left between the base of the boardwalk and the wetland surfaces so that emergent plants are not stunted. A minimum of 0.75 inch would be left between boardwalk slats to allow sufficient sunlight to reach wetland plants beneath the boardwalk.

Accessible restrooms would be constructed of pressure-treated wood framing with exposed beaded plywood roof decking.

The acquisition of this property would include the recording of a deed restriction in the deed to ensure that the purpose of compensating for lost recreational use, as described in this plan, is maintained over time.

Maintenance Requirements. Periodic maintenance of the project components would occur, including trash collection, restroom maintenance, and infrastructure maintenance as needed. The Town of Dauphin Island (as the property owner) would be responsible for maintenance. A nominal fee ($2 to $5) would be charged for use of the fishing pier. The fees would be used to fund maintenance of the project. Over time, the fees may be adjusted to reflect changes in ongoing operating and maintenance costs.

Project Monitoring Summary. The restoration objective of this project would be to restore a portion of the lost recreational use caused by the DWH oil spill by acquiring land and establishing infrastructure to improve the public's access to and enjoyment of Alabama's coastal resources. The project would be deemed successful when the land has been acquired, and access improvements (i.e., pier, boardwalk, parking, bicycle path, gazebos, and ramp) are complete. As such, performance criteria for this project are the satisfactory construction of the desired pier, boardwalk, parking, bicycle path, gazebos, and ramp, as well as associated infrastructure. Additional monitoring criteria are described in detail in Appendix C.

Cost. Estimated project costs are $4,000,000 and would include funds for planning, construction, operation and maintenance, monitoring, and Trustee supervision.

Alternative 8: Mid-Island Parks and Public Beach Improvements (Parcels A, B, and C)

Project Summary/Background. This project would involve the acquisition and development of infrastructure to support shoreline recreational activities on three adjacent parcels of land, totaling approximately 10 acres, (A, B, and C) on Dauphin Island (Figure 2-11), a barrier island in southwest Mobile County, Alabama. Dauphin Island's Gulf-fronting beaches were repeatedly oiled during the DWH oil spill and were the site of response activity. This alternative would offer visitors to Dauphin Island dune walkover access across Parcel A to the public beach area on the Gulf of Mexico, additional shoreline access parking, adjacent restroom facilities, and other passive public outdoor recreation opportunities, thereby increasing the public's access to Alabama's shoreline resources and enhancing the quality of visitor experience. Table 2-7 provides information about the three parcels.

Table 2-7: Dauphin Island Parcels

Parcel	Size (Acres)	Estimated Cost of Acquisition	Improvements
A	~8	$2,300,000	Dune walkover
B	~0.94	$281,000	Parking, restrooms
C	~1.15	$431,000	Parking

Parcel A is one of the largest parcels (approximately 8 acres) of undeveloped land on Dauphin Island. The primary barrier island provides critical nesting, loafing, stopover, and foraging habitats for a variety of coastal birds, shorebirds, neotropical migrants, and other species. The nearly 1,200 linear feet of beachfront is close to the center of the approximately 14-mile-long barrier island, which also provides nesting habitat for two species of endangered sea turtles (threatened and endangered species considerations will be discussed in Chapters 3 and 4). Parcel A is currently zoned resort-commercial, which allows for construction of buildings up to and including condominiums. This project builds on previous conservation work by the Town of Dauphin Island, The Nature Conservancy, and other partners to protect critically important coastal bird, shorebird, and migratory stopover habitat along the Gulf of Mexico, including specifically Dauphin Island. A dune walkover would be constructed on Parcel A to provide controlled access to this shoreline and protect habitat.

Parcels B and C are approximately 0.94 and 1.15 acres, respectively. These two parcels are located to the north of Parcel A. Parcels B and C are zoned as resort-commercial, multi-family, and commercial general and could be developed as such. Parking is proposed for Parcels B and C; restrooms are proposed for Parcel B; and certain passive public outdoor recreation opportunities, such as a primitive kayak launch, are proposed for Parcel C.

The acquisition of this property would include the recording of a deed restriction in the deed to ensure that the purpose of compensating for lost recreational use, as described in this plan, is maintained over time. The deed restriction would state that this property may not be disposed of in any manner or used for purposes other than conservation and restoration of natural resources and/or for passive public outdoor recreation of the type described for this property in the final RP/EIS.

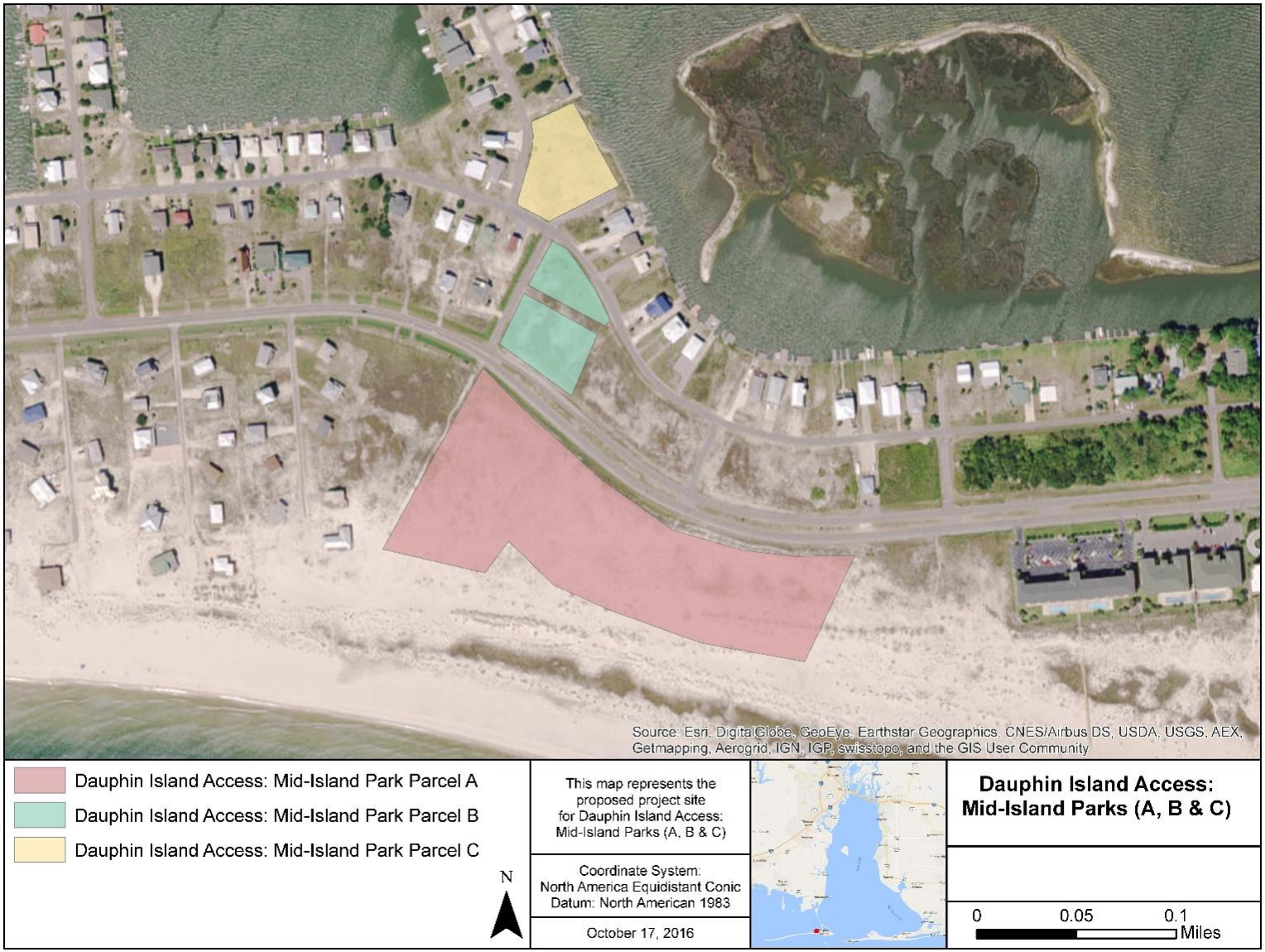

Figure 2-11: Parcels A, B, and C on Dauphin Island

Proposed Infrastructure (or Proposed Improvements).

Parcel A: A dune walkover would be constructed on Parcel A. This walkover would be approximately 975 linear feet and approximately 6 feet wide. The walkover would extend along the western edge of the parcel along an old street ROW from the northern edge of the parcel and extend seaward to the approximate seaward vegetation line.

Parcel B: A public parking area and restrooms are proposed for Parcel B. Accessible restrooms totaling approximately 500 square feet would be constructed in Parcel B and connected to Town of Dauphin Island Public Utilities. Approximately 80 to 100 parking spaces are proposed for Parcel B. The number of parking spaces may decrease further once factors such as optimal traffic flow, incorporation of stormwater BMPs, and other design considerations are factored into the design of the project. The parking area would be constructed of a permeable surface, and native vegetation plantings would be used throughout. Appropriate stormwater management measures would be included in the parking area. Parking on this site would provide parking needed to access Parcel A. Pedestrian connectivity between Parcels A and B would be established through appropriate measures, such as pavement markings, pedestrian crossing signs, and/or traffic calming devices in the area. Design of the parking area would also consider local transportation patterns and optimize the locations on ingress/egress to work with the existing traffic flow.

Parcel C:

Construction of approximately 80 to 100 parking spaces is proposed for Parcel C. The parking area would be constructed of a permeable surface, and native vegetation plantings would be used throughout. The number of parking spaces may decrease further once factors such as optimal traffic flow, incorporation of stormwater BMPs, and other design considerations are factored into the design of the project. Appropriate stormwater management measures would be included in the parking area. This parking would be used to support the beach access provided by Parcel A. In addition, in the future, the Town of Dauphin Island may develop additional amenities to support passive public outdoor recreation at the site, such as a land-based boardwalk, gazebo, benches, shade structures, and/or a primitive kayak launch on the site's existing sandy beach area.

Construction Methodology (or Implementation Methodology) and Timing. Planning and E&D would take approximately six months, permitting and consultation would take approximately four months, and construction activities would take six months.

At Parcel A, a pile-supported dune walkover would be constructed. The walkover would extend along the western edge of the parcel along an old street ROW. From the northern edge of the parcel, the walkover would extend seaward to the approximate seaward vegetation line. Pilings would be jetted to an appropriate depth, the supporting framing would be installed followed by the installation of decking and railings.

Parking areas at Parcels B and C would be graded, and a layer of foundation material would be placed and topped with permeable materials, such as crushed aggregate or parking pavers.

At Parcel B, a pile-supported bathroom would be constructed. Water and sewer lines would be installed, and utilities would be placed underground. The utility trench would be excavated, the utility lines would be placed, and then the trenches would be refilled and regraded.

All construction activities would be designed and implemented in accordance with the ADEM Division 8 Coastal Program rules pertaining to construction on Gulf-fronting beaches and dunes and any other applicable regulatory requirements.

Any lighting installed would include certified sea turtle-friendly fixtures placed in accordance with appropriate BMPs.

Maintenance Requirements. Periodic maintenance of the project components would occur, including trash collection, restroom maintenance, and infrastructure maintenance as needed. The property owner (Town of Dauphin Island) would be responsible for maintenance, which would be funded by a parking fee of approximately $5 per vehicle. Over time, this fee may be adjusted to reflect changes in ongoing operating and maintenance costs.

Project Monitoring Summary. The restoration objective of this project is to restore a portion of the lost recreational use on lands caused by the DWH oil spill. This would be accomplished by acquiring land and establishing infrastructure to improve the public's access to and enjoyment of Alabama's coastal resources. The project would be deemed successful when the land has been acquired and access improvements (parking, restrooms, and dune walkover) have been established. As such, performance criteria for this project are the satisfactory construction of the parking, restrooms, and dune walkover. Additional monitoring criteria are described in detail in Appendix C.

Cost. Estimated project costs are $4,200,000 and would include funds for planning, construction, monitoring, and Trustee supervision. The Town of Dauphin Island would fund operations and maintenance through fees collected for parking. These revenues and maintenance fees are not reflected in the project budget. The AL TIG would delay allocating funds to this project until the zoning has undergone and completed the required review for the "Public Parks and Recreational Areas" use (see Table 5-33).

Alternative 9: Mid-Island Parks and Public Beach Improvements (Parcels B and C)

Project Summary/Background. This project would involve the acquisition and management of two separate parcels of property on Dauphin Island. During the DWH oil spill and associated response, Dauphin Island was oiled and was the site of extensive response activity. Acquisition of these parcels would protect them from future development and would offer public parking, restrooms, access to the Gulf of Mexico, and other passive public outdoor recreation opportunities, thereby increasing the public's access to Alabama's shoreline resources and enhancing the quality of visitor experience. Table 2-8 provides information about Parcels B and C and Figure 2-12 details the location of Parcels B and C.

The acquisition of this property would include the recording of a deed restriction in the deed to ensure that the purpose of compensating for lost recreational use, as described in this plan, is maintained over time. The deed restriction would state that this property may not be disposed of in any manner or used for purposes other than conservation and restoration of natural resources and/or for passive public outdoor recreation of the type described for this property in the final RP/EIS.

Table 2-8: Parcels B and C

Parcel	Size (Acres)	Estimated Cost of Acquisition	Improvements
B	~0.94	$281,000	Parking, restrooms, pedestrian access infrastructure
C	~1.15	$431,000	Parking

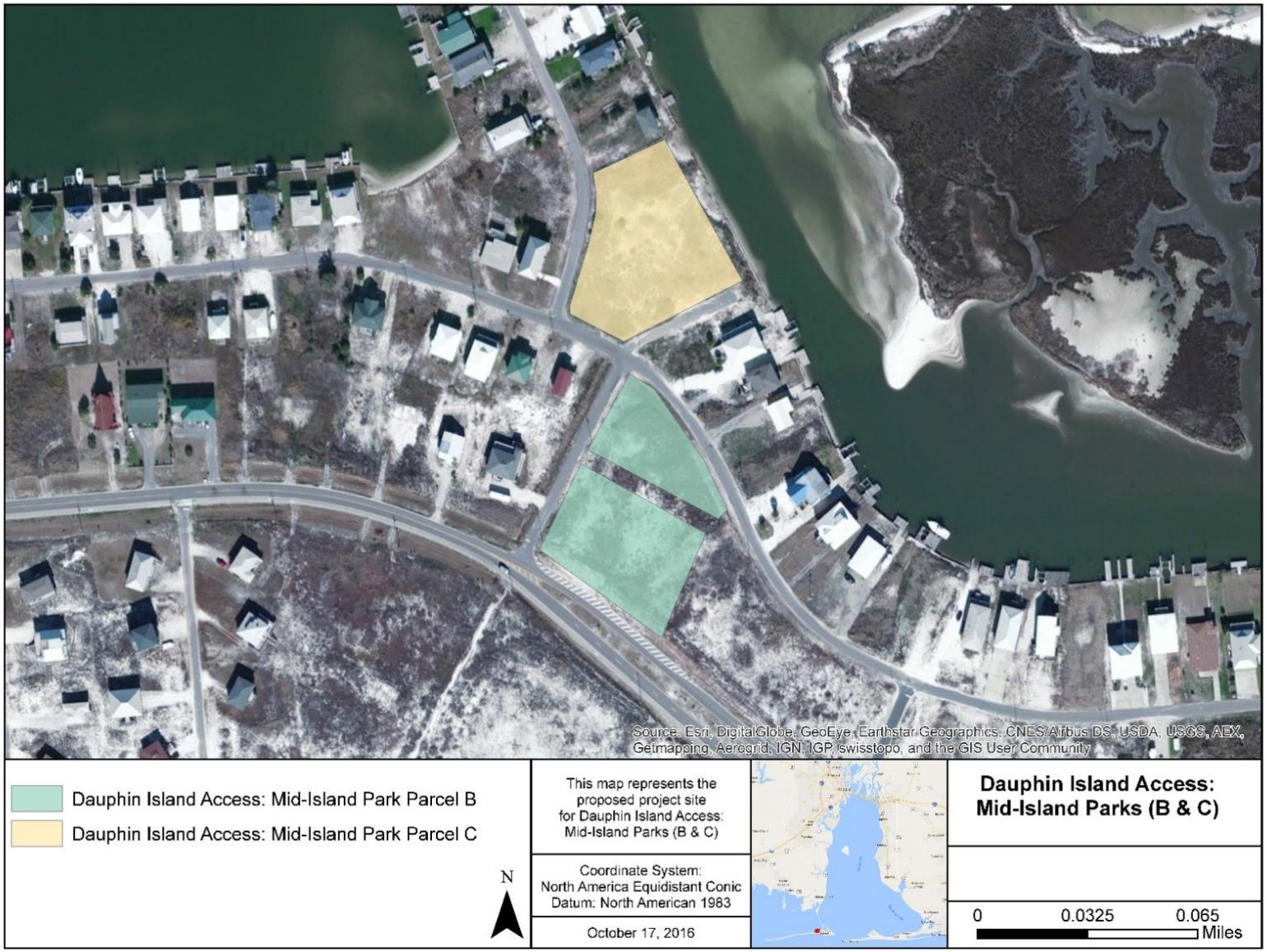

Figure 2-12: Parcels B and C on Dauphin Island

Proposed Infrastructure (or Proposed Improvements).

Parcel B: A public parking area and restrooms are proposed for Parcel B. Approximately 500 square feet of accessible restrooms would be constructed within Parcel B that would be connected to Town of Dauphin Island Public Utilities. Approximately 80 to 100 parking spaces are proposed for Parcel B. The number of parking spaces may decrease further once factors such as optimal traffic flow, incorporation of stormwater BMPs, and other design considerations are factored into the design of the project. The parking area would be constructed of a permeable surface, and native vegetation plantings would be used throughout. Appropriate stormwater management measures would be included in the parking area. Parking on this site would provide parking needed to access Parcel A. Pedestrian connectivity between Parcels A and B would be established through appropriate measures, such as pavement markings, pedestrian crossing signs, and/or traffic calming devices in the area. Design of the parking area would also consider local transportation patterns and optimize the locations on ingress/egress to work with the existing traffic flow.

Parcel C: Construction of approximately 80 to 100 parking spaces is proposed for Parcel C. The parking area would be constructed of a permeable surface, and native vegetation plantings would be used throughout. The number of parking spaces may decrease further once factors such as optimal traffic flow, incorporation of stormwater BMPs, and other design considerations are factored into the design of the project. Appropriate stormwater management measures would be included in the parking area. This parking would be used to support the beach access provided by Parcel A. In addition, in the future, the Town of Dauphin Island may develop additional amenities to support passive public outdoor recreation at the site, such as a land-based boardwalk, gazebo, benches, shade structures, and/or a primitive kayak launch on the site's existing sandy beach area.

Construction Methodology (or Implementation Methodology) and Timing. Planning and E&D would take approximately six months, permitting and consultation would take approximately four months, and construction activities would require six months.

Parking areas at Parcels B and C would be graded, and a layer of foundation material would be placed and topped with permeable materials, such as crushed aggregate or parking pavers.

At Parcel B a pile-supported bathroom would be constructed. Water and sewer lines would be installed, and utilities would be placed underground. The utility trench would be excavated, the utility lines would be placed, and then the trenches would be refilled and regraded.

All construction activities would be designed and implemented in accordance with the ADEM Division 8 Coastal Program rules pertaining to construction on Gulf-fronting beaches and dunes and any other relevant regulatory requirements.

Any lighting installed would include certified sea turtle-friendly fixtures placed in accordance with appropriate BMPs.

Maintenance Requirements. Periodic maintenance of the project components would occur, including trash collection, restroom maintenance, and infrastructure maintenance as needed. The property owner (Town of Dauphin Island) would be responsible for maintenance, which would be funded by a parking fee of approximately $5 per vehicle. Over time, this fee may be adjusted to reflect changes in the ongoing operating and maintenance costs.

Project Monitoring Summary. The restoration objective of this project is to restore a portion of the lost recreational use on lands caused by the DWH oil spill by acquiring land and establishing infrastructure to improve the public's access to and enjoyment of Alabama's coastal resources. The project would be deemed successful when the land has been acquired and access improvements (parking and restrooms)

have been established. As such, performance criteria for this project are the satisfactory construction of the parking and restrooms. Additional monitoring criteria are described in detail in Appendix C.

Cost. Estimated project cost would be $1,900,000 and would include funds for planning, construction, monitoring, and Trustee supervision. Operations and maintenance would be funded by the Town of Dauphin Island through fees collected for parking. These revenues and maintenance fees are not reflected in the project budget. The AL TIG would delay allocating funds to this project until the zoning has undergone and completed the required review for the "Public Parks and Recreational Areas" use (see Table 5-33).

2.2.3 No Action Alternative

The alternatives under consideration must include the "no-action" alternative as prescribed by 40 CFR 1502.14. Under the no action alternative, the AL TIG would not, at this time, select and implement the restoration projects in this RP to compensate for lost recreational shoreline use services resulting from the DWH oil spill. Under the no action alternative, only recreational use projects selected and/or implemented during early restoration (see the Final Phase III ERP/PEIS and Final Phase IV ERP/EA) (DWH Trustees 2015; 2014) would compensate the public for lost recreational use in the Alabama. Providing additional compensation to the public would be delayed pending the completion of a future RP. Accordingly, the no action alternative would not meet the purpose and need for implementing projects that address lost recreational use as described in Section 5.3.2 of the Final PDARP/PEIS and in Section 1.2 of this document, because it would not help meet the restoration goals of the "Provide and Enhance Recreational Opportunities" Restoration Type.

The no action alternative represents no change from current management and is considered with respect to the individual project-specific action alternatives. If this plan was not implemented, none of the projects proposed as preferred alternatives would be selected for implementation. If the no action alternative was selected, what represents "the continuation of current management" would be different for each of the projects under consideration.

The no action alternative for each of the proposed action alternatives, considered by general project type, is briefly described below for three different project types.

Access Improvement Projects on Currently Publicly Owned Lands (Fort Morgan Peninsula Public Access Improvements, Fort Morgan Pier Replacement, and Bayfront Park E&D). Under the no action alternative, no improvements to recreational infrastructure on these project sites would occur at this time.

- The Fort Morgan Peninsula Public Access Improvement sites would continue to be unrestricted. Because no parking currently exists at these sites, access is limited to users who can walk or bicycle to these access points from nearby properties. As a result of the lack of parking improvements under the no action alternative, public access to these sites would continue to be limited mostly to users who live in close proximity to the sites.
- The Fort Morgan Pier Replacement would not move forward, and the pier would continue to be closed to the public. Infrastructure would continue to deteriorate at this site, and the public would be restricted from accessing the pier indefinitely.
- The conceptual Bayfront Park project would not move forward with NRDA-funded E&D, which would delay future enhancements of recreational uses at the project site.

Land Acquisition and Access Improvement Projects (Laguna Cove Little Lagoon Natural Resource Protection, Gulf Highlands Land Acquisition and Improvements, Dauphin Island Eco-Tourism and Environmental Education Area, and Mid-Island Parks and Public Beach Improvements). Under the no action alternative, without NRDA funding for acquisition and access improvements, these project sites would be at risk of future development. While, the Gulf Highlands site and Mid-Island Parks Parcel A site have been approved for acquisition with other DWH-related, Gulf restoration funding mechanisms (NFWF and RESTORE), full funding is still pending. Under the no action alternative, if these properties are not acquired with either NRDA funds or other DWH-related, Gulf Restoration funds, it is likely that these properties would be developed. The Gulf Highlands and Laguna Cove properties have development plans for the sites and permits for those development plans have been obtained. The Mid-Island Parks and Public Beach Improvements and Dauphin Island Eco-Tourism and Environmental Education Area sites are adjacent to residential and commercial developments. Development of these properties would significantly affect the natural resources on these properties, diminishing their public benefit to lost recreational use and restricting public access to the beach, lagoon, and other waterbodies.

- The Gulf Highlands site may be purchased with NFWF funds and, if that occurs, this alternative would no longer be considered in this RP/EIS. Further, under the no action alternative, no recreational use infrastructure would be constructed on this project site. If the Gulf Highlands site is not purchased with NFWF funds, under the no action alternative, the site would remain at risk of development.
- The Laguna Cove Little Lagoon site would not be acquired with NRDA funds and would remain at risk of development, in accordance with permits obtained from USACE, ADEM, and ADCNR. Additionally, no recreational amenities would be constructed on this property with NRDA funds.
- Parcel A of the Mid-Island Parks and Public Beach Improvements sites may be acquired for preservation with funds from the NFWF GEBF and, if that occurs, the acquisition of this parcel would no longer be considered in this RP/EIS. Parcels B and C and the proposed public access amenities (parking lots, restrooms, and showers) may still be considered for acquisition with NRDA funds. If Parcel A is not purchased with NFWF funds, then under the no action alternative, Parcels A, B, and C would remain at risk of development, and no recreational use infrastructure would be constructed on the parcels.
- The Dauphin Island Eco-Tourism and Environmental Education Area site would not be acquired with NRDA funds and would remain at risk of development. Further, no recreational amenities would be constructed on this property with NRDA funds.

Projects Currently Under Construction (Gulf State Park Lodge and Associated Public Access Amenities Project). Relevant to the Gulf State Park Lodge and Associated Public Access Amenities Project, construction has already begun on the lodge and associated conference center at Gulf State Park utilizing other existing non-NRDA funding (Section 2.2.1). Under the no action alternative, construction would continue using these non-NRDA funds. However, there is not enough existing funding to complete full construction of the lodge, and Alabama would need to obtain additional funding from non-NRDA sources. It is expected that a portion of the lodge facility would be constructed on the site with the funding currently available, but that the remainder of the lodge facilities, and where possible, additional access amenities such as those proposed in this RP/ would require additional funds in order to be completed as proposed in this RP/EIS. Thus, under the no action alternative, the state would need to secure funds from another source(s) to complete the project (see Appendix F). Unlike other project alternatives that are being considered for funding by the NFWF GEBF, this project is not currently being evaluated for funding under any other restoration funding source. Accordingly, the state would likely

need to obtain private funding. It is unknown exactly how other alternative funding options may influence the design and schedule of the project. More specifically, it is not known if the project could be built with the same public access amenities, or deliver the same recreational use benefits, as proposed in this RP/EIS if the project is funded through other sources (see Appendix F).

Summary. The no action alternative is used as the baseline for comparison of the impacts expected from the action alternatives proposed in this RP/EIS. The scenarios considered under this no action alternative, along with their associated connected actions, will be analyzed under NEPA and OPA NRDA regulations, with the preferred alternatives grouped into categories based on similarity (i.e., Access Improvement Projects on Currently Publicly Owned Lands, Land Acquisition and Access Improvement Projects, and Projects Currently Under Construction) for each of the resource types. This analysis will provide information on any environmental impacts that would likely be caused by the no action alternative and inform the AL TIG's decision on whether to provide NRDA funds for each project.

2.2.4 The Preferred Alternative

The AL TIG's preferred alternative(s) is the alternative(s) that it believes best meets both the OPA Evaluation Criteria (15 CFR § 990.54) and the DWH Trustees' goals and objectives for the "Provide and Enhance Recreational Opportunities" Restoration Type (Final PDARP/EIS, Section 5.5), and that would fulfill its mission and responsibilities, giving consideration to economic, environmental, technical, and other factors. Section 1502.14(e) of the United States Council on Environmental Quality (CEQ) NEPA regulations requires the section of the EIS on alternatives to "identify the agency's preferred alternative if one or more exists, in the draft statement, and identify such alternative in the final statement." This means that if the agency has a preferred alternative at the draft EIS stage, the alternative must be labeled or identified as such in the draft EIS. Additionally, the OPA NRDA regulations call for draft restoration plans to identify the DWH Trustees' tentative preferred alternative(s) (15 CFR § 990.55).

The AL TIG identified the same following alternatives as its preferred alternatives for the draft RP/EIS and this final RP/EIS:

- Gulf State Park Lodge and Associated Public Access Amenities Project
- Fort Morgan Pier Rehabilitation
- Laguna Cove Little Lagoon Natural Resource Protection
- Bayfront Park Restoration and Improvement (E&D Only)
- Dauphin Island Eco-Tourism and Environmental Education Area
- Mid-Island Parks and Public Beach Improvements (Parcels B and C)

These alternatives are proposed for selection by the AL TIG at this time because they provide the most effective vehicle to meet the RP/EIS purpose of restoring lost shoreline use in the State of Alabama. Projects that have been approved for funding from other restoration funding sources, such as NFWF GEBF, (i.e., the Gulf Highlands site and Mid-Islands Parks Parcel A site) are not identified as preferred in this RP/EIS because funding through those sources would accomplish all the restoration described in this plan and provide similar restoration benefits. Thus, the use of NRDA funds for other efforts not yet identified for funding would best maximize overall restoration in the Alabama Restoration Area. If the approved funding through other restoration funding sources is not finalized, these projects could be reconsidered in a future restoration planning process. Although a portion of the Gulf State Park Lodge and Associated Public Access Amenities Project is being funded with Alabama's oil spill economic damages settlement and BP grant funding, that funding alone is not sufficient to complete the entire project. Therefore, the project is still considered as a preferred alternative because, absent funding from

DWH NRDA, the project would likely need to be funded privately and it is not known if the proposed public access amenities would be completed or would be as broadly accessible to the public as is proposed in this RP/EIS (see Appendix F). For these reasons, funding of the Gulf State Park Lodge and Associated Public Access Amenities Project is considered a preferred alternative because, unlike the Gulf Highlands Land Acquisition and Improvements and Mid-Islands Parks and Public Beach Improvements (Parcel A) alternatives, it is not known if the restoration benefits of this project could be fully implemented without NRDA funds. The Fort Morgan Peninsula Public Access Improvements alternative is not proposed for selection at this time because of concerns, including those raised by Baldwin County, that the project would result in beach overcrowding and a reduction in Baldwin County's ability to access the beaches to address storm damage caused by hurricanes. Overcrowding and the inability to address hurricane impacts on the beaches have the potential to reduce the long-term benefits of the alternative.

Projects not proposed for selection as preferred alternatives (Gulf Highlands Land Acquisition and Improvements, Fort Morgan Peninsula Public Access Improvements, and Mid-Island Parks and Public Beach Improvements [Parcels A, B, and C]) do not best meet the AL TIG's objectives at this time, but per the OPA and NEPA analysis in this RP/EIS (Chapters 3 and 5, respectively), could be viable projects in the future and could be revisited in a future restoration planning effort, as described above.

3.0 OPA EVALUATION OF RESTORATION RECREATIONAL USE ALTERNATIVES

According to the NRDA regulations under OPA, trustees are responsible for identifying a reasonable range of restoration alternatives (15 CFR § 990.53(a)(2)) that can be evaluated according to the OPA evaluation standards (15 CFR § 990.54). Chapter 2 describes the screening and identification of a reasonable range of alternatives for evaluation under OPA. The following section describes the considerations the AL TIG included when performing the OPA evaluation of these alternatives. This evaluation process is informed by the OPA criteria found in 15 CFR 990.54(a), as well as the Final PDARP/PEIS and public comments, including those received on the NOI for this RP/EIS and those received on the draft RP/EIS.

For each alternative, the OPA criteria are evaluated independently, and a determination is made on how well the alternative meets that element. The AL TIG applied each of the OPA criteria to the reasonable range of alternatives in this section to provide (1) a summary explanation of the types of questions and analysis raised under each of the OPA criteria, and (2) a narrative summary of each alternative's evaluation with respect to those criteria.

i. **The cost to carry out the alternative**. The analysis of the AL TIG addresses the following questions. Is there a description of the anticipated costs of the alternative? Are the costs of the alternative (including land acquisition, design, construction, management, monitoring, and maintenance) reasonable, appropriate, and comparable to other equivalent restoration alternatives?

ii. **The extent to which each alternative is expected to meet the AL TIG's goals and objectives in returning the injured natural resources and services to baseline and/or compensating for interim losses.** The AL TIG's analysis addresses the restoration alternative's nexus to the lost recreational shoreline use injury as described in the Final PDARP/PEIS while also evaluating the nature, magnitude, and distribution of the recreational benefits expected to be provided to the public by each alternative. Measures of the magnitude of the recreational benefit (where available and appropriate) can include number of acres, miles of shoreline, number of expected user days, and a measure of the value conveyed to users. The distribution of benefits considers the extent to which the alternative provides benefits to various subgroups within the injury population. Each of the following components of this element are evaluated independently and qualitatively, where appropriate:

Nexus to Injury: Alternatives are evaluated on their ability to benefit individuals who visit Alabama coastal areas for the primary purpose of engaging in coastal shoreline recreation. An additional focus is placed on users of natural resources accessed via sandy beach areas or in close proximity to sandy beach areas (because this was the predominant use category described in the Final PDARP/PEIS [see Section 4.10]).

Benefit to Injured Resources: Each of the following points capture elements necessary to evaluate the relative benefits of the restoration alternatives:

- **Component Benefits—**What are the anticipated recreational benefits of the alternative? What are the alternative attributes that are expected to increase or improve the shoreline recreational experience? Are any of these attributes supported by peer-reviewed economics literature? Examples of attributes that are expected to increase or improve recreational use experiences include:
  - beach width,

  - reductions in marine debris,
  - new or improved access points (e.g., dune walkovers, parking),
  - improved water quality,
  - amenities (e.g., bathrooms, bike paths, showers),
  - fishing piers,
  - parks and open space (e.g., land preservation with access component),
  - reduced crowding, and
  - environmental education and stewardship opportunities.
- **Scale of Benefits—**What is the scale of the anticipated recreational benefits? What information is available on the level of current use at the alternative site and the beneficial impacts expected after implementation of the alternative (e.g., increases in visits to a site, number of individuals experiencing enhanced recreational values, changes in acreage of available recreational areas, number of new access points)? What is the timing of the anticipated benefits?
- **Public Access—**How will members of the public be able to access the benefits from the proposed alternative?
  - Can users be excluded from enjoying the benefits of an alternative? Do any potential exclusions disproportionately affect any demographic subset of the population?
  - If there is a user-access fee, how is it set?
    - Profit-maximizing (i.e., prices are set to capture user willingness-to-pay),
    - Cost-neutral (i.e., a nominal price is set to cover on-site maintenance costs), and
    - Capacity-controlling pricing schedule (i.e., prices set to encourage turnover and limit on-site congestion).
  - What are the implications on user value from this pricing schedule?
  - Are there any anticipated accounting profits, and if so, are they spent on OPA-applicable alternatives or maintenance?
- **Location—**Where is the alternative located? Considerations for siting restoration include:
  - Availability of substitutes (e.g., if there are fewer nearby available sites that provide similar recreational benefits, the alternative may convey a higher value)
  - Uniqueness of restoration (e.g., if the recreational amenities proposed are unique it may lead to more long-distance trips to the site and possibly result in a higher per-trip value)
- **Additional Benefit Considerations—**What is the magnitude of additional benefits from the alternative in comparison to the existing state of the resource? For example:
  - Will additional access lead to increased crowding?
  - Is it clear that alternatives are not redundant?
  - Will marginal environmental quality improvements convey benefits? (e.g., for water quality alternatives, is there sufficiently impaired water quality in the area?).

iii. **The likelihood of success of each alternative.** Does the alternative propose restoration approaches or techniques that the AL TIG have previously executed successfully? Is the restoration approach or technique routinely used? How did these past experiences inform the development of the alternative so as to increase its likelihood of success? For novel or new techniques, have the AL TIG incorporated any measures to minimize risk? Have AL TIG considered the uncertainties influencing success and any adaptive management approaches that would address those uncertainties?

Considerations likely leading to success are dependent on alternative types. For example, for land acquisition alternatives, key predictors of success include whether there is a willing seller, whether there is continuity to other conservation areas, and whether the property will be managed to increase or improve access to resources. For infrastructure alternative types, key predictors include whether the infrastructure provides increased access to resources, whether there is a mechanism for long-term maintenance and management of the alternative, and whether there are mechanisms in place to ensure that the alternative will remain publicly accessible over the long term.

iv. **The extent to which each alternative will prevent future injury as a result of the incident and avoid collateral injury as a result of implementing the alternative.** Does the restoration alternative have direct or indirect collateral environmental impacts (positive or negative)? Many of these considerations are covered in the "Affected Environment" and "Environmental Consequences" sections of this document (Chapters 4 and 5).

v. **The extent to which each alternative benefits more than one natural resource and/or service.** Although each alternative is funded exclusively from one Restoration Type allocation, the AL TIG considered the importance of multiple resource benefits by evaluating whether alternatives convey multiple ecosystem service benefits (in addition to recreational use) that make them more valuable to the public (e.g., non-use (ecological) values, storm-protection benefits, and habitat/resource improvements that may benefit ecological resources injured by the DWH oil spill).

vi. **The effect of each alternative on public health and safety.** The AL TIG considered whether there are any aspects of the alternative that could negatively affect public health and safety that cannot be mitigated.

3.1 EVALUATION OF GULF STATE PARK LODGE AND ASSOCIATED PUBLIC ACCESS AMENITIES PROJECT

3.1.1 Project Description

This alternative would provide funding (1) for partial construction of the Gulf State Park Lodge in Baldwin County, Alabama, and (2) to develop a host of public access amenities associated with the lodge. The public access amenities associated with the lodge would include the interpretive lobby of the lodge, public education programs to increase awareness and appreciation of Alabama's coastal resources, including the natural resources at Gulf State Park, expansive viewing porches, public beach access points, public restrooms and beach shower facilities, a bicycle share program, and a public tram system. The associated public access amenities would connect the lodge to other aspects of the park, and thus both create and enhance public use and enjoyment of the beach areas at Gulf State Park for visitors not staying at the lodge and increase access to the non-beach areas within Gulf State Park to all visitors. The core, foundation, and shell packages are already under construction for the lodge and associated conference center with other non-NRDA funds (see Section 2.2.1 and Appendix F).

Building design and construction at Gulf State Park have been undertaken with the goal of certification under the LEED Gold and SITES Platinum programs. Further, the lodge would offer access to public lands and amenities similar to those at existing National Park System lodges. The lobby and other public spaces in and around the lodge would serve as focal points for environmental education, with exhibits and programs addressing coastal Alabama ecosystems and sustainable development practices in the coastal zone. In addition, the lobby and other public spaces would provide amenities that would facilitate extended daily access to the Gulf State Park beaches. The lodge rooms would further provide the opportunity for on-site, overnight access at the beach at Gulf State Park, thus giving visitors a unique way to experience that public resource. The park tram would connect visitors from the lodge to other areas of Gulf State Park. Overall, the project is designed to be an integral part of the restoration and public utilization of Gulf State Park by (1) furthering the restoration efforts conducted as part of the Gulf State Park Enhancement Project during Phase III Early Restoration, and (2) building on the state-funded effort to revitalize Gulf State Park pursuant to the Gulf State Park Master Plan (see Appendix F for further details).

3.1.2 OPA Evaluation

The cost to carry out the alternative. The costs to carry out the Gulf State Park Lodge and Associated Public Access Amenities Project are reasonable, appropriate, and comparable to other equivalent restoration alternatives. The proposed cost of the NRDA-funded portion of the Gulf State Park Lodge and Associated Public Access Amenities Project is $56.3 million. The project has gone through an extensive E&D process. No land acquisition costs are associated with the alternative because the state already owns the property. The estimated construction costs represent the best estimates of the designers and are comparable with the costs of similar LEED-certified “green building” projects, as described in the Proposed Gulf State Park Lodge Market Feasibility Study prepared by Pinkowski & Company for ACDNR in December 2014 (see Appendix G).

Construction costs for the public access components of this alternative (e.g., the interpretive lobby, public education programs, public restrooms, post-beach shower facilities, beach access walkovers, bicycle share stations/programs, tram system, and other public spaces) are estimated to be $8.7 million. The anticipated costs of these components are appropriate and are within the range of other similar projects (see Table 3-1).[20]

Table 3-1: DWH Early Restoration Project Cost Examples

Project	Cost
Galveston Island State Park Beach Redevelopment	$10.7 million (2013)
Infinity Science Center	$10.4 million (2013)
Navarre Beach Park Gulf Side Walkover	$1.22 million (2013)

The AL TIG’s contribution to the cost to construct the lodge is approximately $47.6 million. All work will be awarded in compliance with Alabama’s public bid laws and regulations, ensuring that the project is constructed at current market rates. Operation and maintenance costs for the public access amenities associated with the lodge will be funded using revenues from the lodge. Projections of operating costs,

[20] The three DWH early restoration project cost examples depicted in Table 3-1 are described in in the Final Phase III ERP/PEIS.

utilization, and revenue were based on market research presented in the Proposed Gulf State Park Lodge Market Feasibility Study and are explained in more detail in Appendix E and Appendix G.

The extent to which each alternative is expected to meet the AL TIG's goals and objectives in returning the injured natural resources and services to baseline and/or compensating for interim losses.

- **Nexus to Injury.** The Gulf State Park Lodge and Associated Public Access Amenities Project has a strong nexus to the DWH recreational injury. The recreational assessment, discussed in the Final PDARP/PEIS, focused on reduced shoreline uses comparable to those occurring at Gulf State Park (e.g., lost user-days of shoreline recreation—swimming, sunbathing, surfing, walking, kayaking, and fishing from the shore or shoreline structures such as piers). During the spill, the beaches in the park were extensively oiled. The park was a staging area for response activities, and beaches in the park were subjected to frequent mechanical cleaning over the course of the spill. The alternative is designed to enhance public shoreline recreational experiences, both by increasing visitation and enhancing the quality of all future recreational visits to the park. As such, the alternative's goal of creating and enhancing visitor access to natural resources at Gulf State Park, including its beach areas, has a strong nexus to the public's lost shoreline recreational use of Alabama coastal areas. Further, the alternative is consistent with the NRDA preference for "in-place, in-kind" restoration.
- **Benefit to Injured Resources.**
  - *Component Benefits:* The alternative's location and amenities are within the geographical footprint of the DWH injury. The Gulf State Park Lodge and each of the public access amenities are designed to be used by recreational beachgoers and aid/enhance their ability to access and interact with natural resources along the Alabama shoreline. As described in the Proposed Gulf State Park Lodge Market Feasibility Study, the Gulf State Park Lodge would satisfy and stimulate demand for lodging along Alabama's shoreline.[21] The lodge itself, including the overnight rooms, would restore for lost recreational use of the Alabama shoreline by allowing visitors to stay right at the beach and conveniently use the beach and new amenities described below. In addition, some people would come to visit the park, but not stay overnight, enticed by the availability of the free public access amenities, including the lodge's common areas. The Gulf State Park Lodge and Associated Public Access Amenities Project would, therefore, restore the lost recreational use of Alabama's shoreline by providing and enhancing access to Alabama's shoreline for all members of the public, including those not staying overnight at the lodge.

    Some elements of the public access amenities (e.g., beach access points, restrooms, and showers) directly enhance the beach visit for all members of the public; others (e.g., the lodge, the tram system, bicycle share program, and the path from the pier) enable easier access to the beach for all members of the public; and the remainder (e.g., the lodge's interpretive lobby and public education programs) provide opportunities to enhance a visit to the park for all members of the public while also achieving Trustee education and stewardship goals. Should the AL TIG elect not to fund the Gulf State Park Lodge and Associated Public Access Amenities Project, it is not clear that these amenities would be developed or that the non-paying public would have the same degree of access to these amenities, if they were developed with state or private funds (see Appendix F). Additionally, although users would be paying competitive market rates to stay in the lodge, the revenue

[21] See Pinkowski & Company, 2014, pages 20-21, 50-52.

stream that is generated would provide funding (1) for ongoing operations and maintenance of the public access amenities, and (2) to support operations and maintenance for the Gulf State Park Enhancement components from early restoration. Thus, this revenue stream would help compensate for lost recreational use in Alabama as a result of the DWH oil spill.

– *Scale of Benefits:* The scale of the recreational benefits is dependent on the alternative's anticipated utilization. For the lodge, project designers anticipate an average 66 percent overnight occupancy rate over the first five years, yielding an anticipated 84,315[22] user-nights per year, which would be expected to be higher when considering multiple occupants in one room. For example, with double occupancy for each room the user-night number would increase to 168,630 user-nights per year. The majority of these lodge guests, including people who would not come to the park absent the lodge, would be anticipated to come to the lodge to visit the park beaches, use the associated public access amenities, and otherwise interact with trust resources. Thus, these user-nights may be included in any estimate of user days. For example, lodge guests may visit other areas in the park, which would be connected to the lodge via the public access amenities such as the tram system and the bike sharing stations/program.

  In addition to lodge guests, the Gulf State Park Lodge and Associated Public Access Amenities Project is expected to produce user-day benefits in the form of day-use visitors to the lodge and the park's Gulf-facing beaches. These day-users would visit the lodge to use the common areas and new amenities, but not stay in the lodge rooms. Some of these day-users would access the lodge and associated amenities via the Gulf State Park tram and the parking lot at the adjacent Gulf State Park pier.

  The Gulf State Park Lodge is modeled after existing National Park System lodges. The lobby and other public spaces in and around the lodge would serve as focal points for environmental education, with exhibits and programs addressing coastal Alabama ecosystems and sustainable development practices in the coastal zone. In addition, the lobby and other public spaces would provide amenities (such as restrooms, showers, and shaded/air-conditioned common spaces) that would facilitate extended daily access to the park beaches. As a result, the project is expected both to provide access to (and thus bring people to) the park and it beaches, and to enhance these visitors' experience of the natural resources and services of the park and its beaches, by providing a more comfortable and improved experience. The AL TIG did not quantify the numbers of expected day-users, or their enhanced experience, but expects (1) that most of the 84,315[23] user-nights created by the Gulf State Park Lodge would translate to day-users who would undertake recreational use of Alabama's shoreline, (2) that members of the public would visit the lodge to use the common areas and new amenities, but not stay in the lodge rooms, (3) that some of these day-users would access the lodge and associated amenities via the Gulf State Park tram system, the bike sharing stations/program, and the parking lot at the adjacent Gulf State Park pier, and (4) that some of these day-users would not come to the park beaches absent the free public access amenities described, and which would be provided, as part of this alternative.

[22] This assumes a 66 percent occupancy rate for the lodge's 350 rooms (see Pinkowski & Company, 2014, page 54).

[23] Again, this assumes a 66 percent occupancy rate for the lodge's 350 rooms (see Pinkowski & Company, 2014, page 54).

- *Public Access:* The Gulf State Park Lodge, including the overnight rooms, would restore for lost recreational use of Alabama's shoreline by allowing visitors to stay right at the beach and conveniently use the beach and the proposed associated public access amenities. Additionally, the recreational benefits of the public access components of this alternative, including the lodge's common areas, would be broadly available to the public. There would be no charge for using the public amenities at the lodge site, for parking at non-beach parking lots in Gulf State Park, or for using the tram or bicycle share program to access the lodge and associated public amenities. Parking at the adjacent Gulf State Park Pier lot would be priced at a nominal fee. Because of the lack of public transportation in the local area, it is likely benefits would primarily accrue to individuals who own vehicles and have sufficient disposable income to drive to the Gulf State Park. During the peak, summer season, parking capacity and crowding on the beach would limit the total benefits available.

  The lodge rooms would provide unique, overnight access to the beach at Gulf State Park and convenient access to the proposed amenities. In addition, the market rate rooms could generate revenue that would be used to maintain the public access amenities included in this alternative, as well as the public access and education components of the Gulf State Park Enhancement Project funded in Phase III of Early Restoration (i.e., the dune restoration, Interpretive Center, Learning Campus, and trail enhancements). Although a portion of the population affected by the DWH spill may not be willing or able to pay for the market rate rooms, the potential revenue generated by the commercial elements of this project would provide increased and enhanced public access to Gulf State Park and its beaches through the operation and maintenance of the other free recreational use amenities at the lodge and within the park.

- *Location:* None of the public access amenities proposed currently exist at the site. Within the surrounding 5 miles, there are only four existing public beach access points (Gulf Shores Public Beach, Gulf State Park Pier, Gulf State Park Beach Pavilion, and the Romar Beach Access area) in an area dominated by private development. Given this limited set of alternative public access points, it is anticipated that this alternative would provide new and enhanced opportunities to many recreational users, especially during the crowded summer season. While other overnight lodging is available in this area, the market feasibility study prepared for ADCNR concluded that enough demand exists to support a 350-room lodge facility in this location (see Appendix G). Moreover, the lodge will provide a unique overnight stay option, like that of a lodge in a National Park, because the beach at Gulf State Park is unique in that it is characterized by open space that supports natural resources, and in which guests can more readily interact with these natural resources.

- *Additional Benefit Considerations:* Existing beach access at the proposed lodge site is limited, and it is expected that sufficient demand exists for beach recreation in the area, and that all sites would experience use at full capacity during at least part of the year. Design features (sea turtle-friendly lighting, permeable pavers, protected dune walkovers, and educational kiosks) would mitigate the environmental impacts of increased utilization. Limiting pedestrian access to the beach walkovers would minimize effects of foot traffic and potentially allow the dunes to regenerate. The presence of dunes and a more "natural" beach setting would enhance the visitor experience for both existing and new users of the access points.

The likelihood of success of each alternative. Given the AL TIG's experience in developing beach access points and the estimated high usage of the lodge and surrounding shoreline areas, there is a strong

likelihood of success. No land acquisition is required. Similar public access restoration efforts have been completed successfully throughout the region (see the project example included in Chapter 2 located in Walton County, Florida). Further, the market feasibility study conducted for ADCNR concluded that sufficient demand exists to support this project. Operation of the lodge would be conducted by a commercial hotel operator with experience running similar facilities. A revenue-sharing agreement with the operator ensures that appropriate incentives are in place for success of the lodge. The funds needed to complete the non-NRDA funded portions of this project have already been secured through the state's economic damages settlement with BP ($50 million) and an award of BP grant money ($5 million), as described in Section 2.2.1 and in Appendix F.

The extent to which each alternative will prevent future injury as a result of the incident and avoid collateral injury as a result of implementing the alternative. The Gulf State Park Lodge and Associated Public Access Amenities Project is not expected to play a role in preventing future injury from the spill. The Final PDARP/PEIS indicates that recreational uses have recovered (DWH Trustees, 2016a). The purpose of the alternative is only to provide compensatory restoration for losses that occurred between April 2010 and November 2011, after which the Final PDARP/PEIS studies conclude that recreational use returned to baseline levels.

The designers of the lodge and public access amenities have made minimized environmental impact and long-term sustainability a central theme of the project. The project is anticipated to achieve a LEED Gold rating and would serve as an excellent example of sustainable construction techniques. The dune walkovers and path from the pier minimize impact on the dunes, beach area, and related habitat. Furthermore, the bicycle sharing program and tram limit the ultimate footprint of the entire project by reducing necessary parking, traffic in the area, and related air quality emissions.

This project would be located within an area currently covered under a HCP for the Alabama beach mouse and adjacent to critical habitat for the loggerhead sea turtle, and would require consultations under the ESA. Further, this area is currently used by the public to some extent. To address these potential impacts, the project would minimize and potentially reduce impacts on Alabama beach mouse and loggerhead sea turtle habitat with the inclusion of dune walkovers, additional educational displays on the area's sensitive resources, and educational programming. Additionally, BMPs, as described in Chapter 5, would be used to minimize impacts on species and critical habitat.

The extent to which each alternative benefits more than one natural resource and/or service. The primary NRDA benefit of the Gulf State Park Lodge and Associated Public Access Amenities Project is to provide and enhance public access to and recreational uses of Alabama's coastal shoreline resources. In addition, the interpretive lobby and educational programs are expected to promote public support for and stewardship of Alabama coastal resources. Furthermore, the dune walkovers would provide ecological benefits by helping to protect dune habitats and the species dependent on them, including beach mice, birds, and nesting sea turtles.

The effect of each alternative on public health and safety. Adverse impacts on public health and safety are not expected from these elements. Project design elements include paved surface areas to provide suitable cover for disabled access, and all elements are designed for consistency with ADA standards. Specific design details have been refined to increase the individual mobility of users of the lodge and public access amenities and the number of ADA-compliant guest rooms exceeds the minimum requirement by nearly 20 percent. It is anticipated that project operation would include appropriate placement/maintenance of trash receptacles, maintenance of bathroom facilities, and enforcement of existing public safety regulations.

Summary Project Evaluation. The cost of the alternative is well documented, reasonable, and appropriate. The alternative would create and enhance public use and enjoyment of the beach areas at Gulf State Park and increase access to the non-beach areas within the park. Moreover, by combining a set of public access components with a revenue stream from the alternative's commercial elements, which would support those components as well as the early restoration project within Gulf State Park, the alternative has a strong nexus to the recreational injury caused by the DWH spill, and can reasonably be expected to provide benefits to the broad public over an extended time. While some collateral impacts on critical habitat for the Alabama beach mouse and loggerhead sea turtles are possible, these impacts are expected to be minor and mitigated by the use of dune walkovers, turtle-friendly lighting, and educational information provided to the public. Finally, public safety issues are not expected to be a concern.

3.2 EVALUATION OF FORT MORGAN PIER REHABILITATION

3.2.1 Alternative Description

This alternative would fund the rehabilitation of a fishing pier located on the Fort Morgan Peninsula in southwestern Baldwin County, Alabama. The existing pier is approximately 500 feet long and is located at the Fort Morgan State Historic Site. Until recently, the Fort Morgan fishing pier was heavily used by recreational anglers. However, the pier, which is more than 40 years old, fell into disrepair, and in 2014 the Alabama Historical Commission closed it for safety reasons. The proposed alternative would rehabilitate the pier on its existing foundations, which would increase publicly available opportunities for pier-based fishing in Baldwin County. The rehabilitated pier would meet current building code requirements, comply with ADA-accessible fishing guidelines, and add proper lighting and other features and amenities. Educational signage regarding fishing regulations, stewardship of coastal resources, and other related information would be placed at the site. No parking lot improvements would be needed because adequate parking is already available at the site. Existing entry fees to the Fort Morgan State Historic Site would apply to visitors using the fishing pier. The Alabama Historical Commission would provide maintenance for the fishing pier, which would be funded using site entrance fees.

3.2.2 OPA Evaluation

The cost to carry out the alternative. The proposed cost to plan and construct the Fort Morgan Pier Rehabilitation alternative is $3,075,000. These funds would be directed solely to the planning and construction of infrastructure that improves access to coastal natural resources. ADCNR developed the estimated infrastructure costs based on similar past projects, which indicate that the alternative can be implemented at a reasonable cost. If the AL TIG selects the alternative, it would go through the State of Alabama's competitive bidding process to further ensure the reasonableness of the costs. No land acquisition would be required for this alternative; the Alabama Historical Commission already owns the site. Fees collected for entry to the site would be used for operation and maintenance of the pier over the life of the alternative. This fee may be adjusted over time to reflect changes in the ongoing operating and maintenance costs of the facility. These maintenance expenses, funded through entry fees, are not included in the budgeted cost of this alternative.

The extent to which each alternative is expected to meet the AL TIG's goals and objectives in returning the injured natural resources and services to baseline and/or compensating for interim losses.

- **Nexus to Injury.** The shoreline of the Fort Morgan Peninsula, including the area around the fishing pier, was extensively oiled during the DWH oil spill. The alternative is designed to enhance the public's recreational access and experience in this area by creating new pier-fishing opportunities at a location that was formerly available for fishing but that fell into disrepair and

was closed in 2014 for public safety reasons. The recreational opportunities that would be created by this alternative are the same shoreline uses that were lost as a result of the DWH oil spill (i.e., lost user-days of pier-fishing, wildlife viewing). Visitors to the coastal pier, the same user population that the DWH oil spill affected, would benefit from this alternative. The alternative represents "in-place, in-kind" restoration and is fully consistent with OPA objectives for compensatory restoration.

- **Benefit to Injured Resources.**
  - *Component Benefits:* This alternative would create new, enhanced pier-fishing and pier-based wildlife viewing opportunities in the Fort Morgan area. Pier-fishing locations are limited in Baldwin County, with the nearest existing publicly accessible alternative located at Gulf State Park, more than 20 miles east. Before its closure, the Fort Morgan pier was a popular destination for shoreline recreation, clearly demonstrating the value of the alternative to visitors in the area. Rehabilitation of the Fort Morgan pier could be expected to increase recreational shorefishing on the peninsula. Improvements such as ADA-accessibility and lighting would further enhance the experiences of visitors to the pier. Adding educational signage is expected to increase environmental awareness and promote environmental stewardship. The proposed infrastructure is expected to serve the public for at least several decades.
  - *Scale of Benefits:* The scale of benefits for the Fort Morgan Pier Rehabilitation alternative would be a direct function of capacity utilization at the pier. Based on ADCNR estimates of use levels at the pier prior to its 2014 closure, approximately 40 persons would be expected at the pier during times of peak demand, and users would be expected to turn over roughly three times each day. Average utilization across the year of approximately 50 percent of the peak values yields an average of 60 daily trips, or approximately 22,000 user-days per year for the pier.[24]
  - *Public Access:* The recreational benefits of this alternative would be broadly available to the public. There would be a nominal charge ($7 per adult, with reduced fees for seniors and families) for entry to the Alabama Historical Commission site. This fee is not expected to be a significant impediment to recreational visitors because a similar fee was charged prior to 2014 when the pier was heavily used. However, because of a lack of public transportation in the area, benefits would likely accrue primarily to individuals who own vehicles and have sufficient disposable income to drive to the site and pay the entry fee. No users would be actively excluded by the alternative. During the peak summer season, parking capacity and crowding would limit the total benefits available.
  - *Location:* The Fort Morgan Peninsula has limited public pier-fishing opportunities in an area where recreational fishing is a popular activity. This implies a high marginal value for this alternative. The alternative is within 1.5-hour drive of Mobile, Alabama, and would be available to a large potential visitor population.

[24] Assuming 50 percent annual utilization relative to peak capacity and three turnovers per day suggests annual visitation on the order of 22,000 user-days.

– *Additional Benefit Considerations:* Given experience at the pier prior to 2014, it is expected that there would be sufficient demand for pier-fishing and pier-based wildlife viewing at the site, and that it would operate at full capacity during at least part of the year. The additional pier-fishing opportunities created by the alternative also would have the potential to reduce fishing pressure at other sites in Baldwin County. Reduced crowding could have the effect of increasing the benefits for users who continue to fish at these other locations. The AL TIG is considering one other Baldwin County pier-fishing alternative at Laguna Cove Little Lagoon, although that alternative, discussed below, is much smaller in scale and approximately 15 miles east of Fort Morgan. Therefore, it is not expected to be redundant with the Fort Morgan Pier Rehabilitation alternative. The AL TIG is also considering a pier on Dauphin Island but, if constructed, the pier would not be easily accessible by the visitors staying in the Fort Morgan area because it would be on the other side of the Mobile Bay ship channel. However, it would be roughly equidistant for visitors traveling from Mobile itself.

The likelihood of success of each alternative. The alternative's goal of enhancing public recreational access to and enjoyment of coastal areas on the Fort Morgan Peninsula has a high likelihood of success. No land acquisition is required, and ADNCR has successfully implemented similar recreational pier projects as part of its day-to-day natural resource management responsibilities at public parks and other state-owned properties along the Alabama coast.

The extent to which each alternative will prevent future injury as a result of the incident and avoid collateral injury as a result of implementing the alternative. The Fort Morgan Pier Rehabilitation alternative is not expected to play a role in preventing future injury from the spill. The Final PDARP/PEIS indicates that recreational uses have recovered (DWH Trustees, 2016a). The purpose of the alternative is only to provide compensatory restoration for losses that occurred between April 2010 and November 2011, after which the Final PDARP/PEIS studies conclude that recreational use returned to baseline levels.

Implementation of the alternative is not expected to cause any net collateral damage to the environment. The pier would be reconstructed on its existing foundations, which would minimize in-water disturbance and potential impacts on cultural resources.[25] Moreover, implementation of the alternative would include educational displays concerning coastal resources that are expected to help minimize and potentially reduce impacts on these resources.

The extent to which each alternative benefits more than one natural resource and/or service. The primary NRDA benefit of this alternative would be to provide and enhance recreational uses. However, the educational signage, which would be designed to promote public support and stewardship, is expected to lead to greater understanding and sensitivity about the environmental threats in coastal Alabama. The goal of the educational signage would be to shape public understanding in ways that enhance public support for overall improvements in the management and provision of ecosystem services in coastal Alabama. Education related to fishing practices has a direct potential to broadly benefit stewardship of the Gulf's marine resources.

The effect of each alternative on public health and safety. Adverse impacts on public health and safety are not expected from the alternative. To minimize public health impacts, the Alabama Historical Commission would provide and maintain trash receptacles on the pier. No changes to historic parking and traffic patterns are anticipated. The alternative would result in ADA-accessibility improvements to

[25] See Chapter 5 of this RP/EIS.

the pier that did not exist previously. Lighting improvements and upgrades to comply with current building codes would also ensure public safety.

Summary Alternative Evaluation. The OPA evaluation indicates that the infrastructure costs of the alternative are well documented, reasonable, and appropriate. The alternative has a strong nexus to the recreational injury caused by the DWH oil spill and can reasonably be expected to provide benefits to the public over an extended timeframe. The alternative would provide new and improved public access to trust resources that were injured by the DWH oil spill and has a high probability of success. The alternative also would provide environmental education and stewardship benefits. Finally, public safety issues are not expected to be a concern.

3.3 EVALUATION OF FORT MORGAN PENINSULA PUBLIC ACCESS IMPROVEMENTS

3.3.1 Alternative Description

This alternative would fund Gulf-side beach access improvements on the Fort Morgan Peninsula in southwestern Baldwin County, Alabama. The proposed alternative would construct a mix of parking lots, restrooms, showers, and dune walkovers at 11 existing county- and state-owned parcels. These sites mainly consist of narrow (50 to 100 foot wide) parcels at the end of county-owned ROWs. The sites are currently accessible to the public but lack amenities that would enhance existing public use and/or promote additional use of the sites. Educational signage focused on coastal natural resources would also be placed at the sites to promote environmental awareness and stewardship.

3.3.2 OPA Evaluation

The cost to carry out the alternative. The proposed cost to plan and construct the Fort Morgan Peninsula Public Access Improvements alternative is $2,522,500. These funds would be directed solely to construction of infrastructure that improves access to the coastal resources. ADCNR developed the estimated infrastructure costs based on similar past projects, which indicate that the alternative could be implemented at a reasonable cost. If the AL TIG selects the alternative, it would go through the State of Alabama's competitive bidding process to further ensure the reasonableness of the costs. No land acquisition is required for this alternative; the state or Baldwin County already own the sites. Baldwin County would provide future project maintenance, which is included in the budget for this alternative.

The extent to which each alternative is expected to meet the AL TIG's goals and objectives in returning the injured natural resources and services to baseline and/or compensating for interim losses.

- **Nexus to Injury.** The beaches on the Fort Morgan Peninsula were extensively oiled during the DWH oil spill, and response operations were undertaken in the areas where the beach access points are proposed (DWH Trustees, 2016a). The alternative is designed to enhance the public's recreational access and experience in these areas by creating parking lots and dune walkovers in areas where access is currently limited and adding public amenities (i.e., restrooms and showers) at these access sites. The recreational opportunities that would be created by this alternative are the same shoreline uses that were lost as a result of the DWH oil spill (e.g., lost user-days of shoreline recreation—swimming, sunbathing, and walking). Shoreline recreational users, the same group that was injured by the DWH oil spill, would benefit from this alternative. The alternative represents "in-place, in-kind" restoration and is fully consistent with OPA objectives for compensatory restoration.

- **Benefit to Injured Resources.**
  - *Component Benefits:* This alternative would create additional and improved access points to Alabama beaches in the Fort Morgan area for individuals who do not live within walking distance of the beach. Users of these sites are expected to drive to one of the parking areas. While the Fort Morgan State Historic Site currently provides some public access to natural areas along the Fort Morgan Peninsula, the majority of water-front property along the peninsula is either privately held or lacks sufficient infrastructure to encourage public use (i.e., parking areas, dune walkovers, or associated amenities). By constructing the proposed infrastructure at the 11 sites, new shoreline recreational opportunities would be created and existing recreational opportunities would be enhanced for the public. The inclusion of parking areas, bathrooms, showers, and dune walkovers that protect the natural environment would improve the recreational experience for new visitors. Even local residents who do not need parking could be expected to benefit from the restrooms, showers, and the walkovers (which some beachgoers find greatly facilitate walking through the dunes). The proposed infrastructure is expected to serve the public for at least several decades.
  - *Scale of Benefits:* Existing beach access along the Fort Morgan Peninsula is largely limited to visitors of the Fort Morgan State Historic Site and individuals staying at privately owned residences or hotels in the area. It is anticipated that the benefits of this alternative would accrue primarily to new visitors to the area, with additional limited benefits accruing to existing users. The scale of the recreational benefits for the Fort Morgan Peninsula Public Access Improvements alternative would be primarily a function of the available parking spaces created by the alternative. A total of 120 parking spaces would be available at the 11 sites on a year-round basis. Assuming a utilization rate of around 35 percent, the alternative yields more than 60,000 beach user-days each year.[26]
  - *Public Access:* The recreational benefits of this alternative would be broadly available to the public. There would be no charge for parking or use of the other recreational amenities. However, because of a lack of public transportation in the area, benefits would likely accrue primarily to individuals who own vehicles and have sufficient disposable income to drive to the site. No users would be actively excluded by the alternative. There would be no user-fees at any of the sites for the duration of the project. During the peak summer season, parking capacity and crowding on the beach would limit the total benefits available.
  - *Location:* There are few public beach-access substitutes available along the Alabama coast for individuals not staying within walking distance of the beach. This implies a high marginal value from this alternative. The alternative is within a 1.5-hour drive of Mobile, Alabama, and would be available to a large potential visitor population. However, discussions with Baldwin County officials indicate that the levels of use anticipated at these sites would substantially increase crowding at the beach sites during peak seasons, which would be anticipated to substantially reduce the benefits of this alternative when new visitation is added to existing use.
  - *Additional Benefit Considerations:* Design features (permeable pavers, protected dune walkovers, and educational kiosks) would mitigate the environmental impacts of increased

[26] This reflects the 35 percent utilization rate with cars in the lot turning over twice daily and an average of two occupants per car.

utilization. Limiting pedestrian access to the beach walkovers would minimize effects of foot traffic and potentially allow the dunes to regenerate. The presence of dunes and a more "natural" beach setting would enhance the visitor experience for both existing and new users of the access points. However, Baldwin County has raised concerns that construction of dune walkovers, while providing ecological benefits, would reduce the county's ability to access the beach to address storm damage after hurricanes, which potentially would limit the availability of the recreational benefits of this alternative in the long run.

The likelihood of success of each alternative. The alternative's goal of increasing and enhancing public access to beaches along the Fort Morgan Peninsula has a high likelihood of success. No land acquisition is required, and the AL TIG has successfully implemented similar recreational design and improvement projects as part of its day-to-day natural resource management responsibilities at public parks and other state-owned properties along the Alabama coast.

The extent to which each alternative will prevent future injury as a result of the incident and avoid collateral injury as a result of implementing the alternative. The Fort Morgan Peninsula Public Access Improvements alternative is not expected to play a role in preventing future injury from the DWH oil spill. The Final PDARP/PEIS indicates that recreational uses have recovered (DWH Trustees, 2016a). The purpose of the alternative is only to provide compensatory restoration for losses that occurred between April 2010 and November 2011, after which the Final PDARP/PEIS studies conclude that recreational use returned to baseline levels.

This alternative would be located in an area currently covered under an HCP for the Alabama beach mouse and adjacent to critical habitat for the loggerhead sea turtle and would require consultations under the ESA. However, given that the public is already using these areas to some extent, including dune walkovers in the alternative design and additional educational displays regarding the area's sensitive resources are expected to help minimize and potentially reduce impacts on these habitats. Further, other BMPs, as described in Chapter 5, would be used to minimize impacts on species and critical habitat.

The extent to which each alternative benefits more than one natural resource and/or service. The primary NRDA benefit of this alternative is to provide and enhance recreational uses. The alternative, however, would also create educational signage to promote public support for and stewardship of Alabama coastal resources. Furthermore, the dune walkovers would direct public foot traffic away from sensitive habitats into a single area, which would help protect dune habitats and the species that depend on them, including beach mice, birds, and nesting sea turtles.

The effect of each alternative on public health and safety. Adverse impacts on public health and safety are not expected to result from this proposed alternative. To minimize public health impacts, Baldwin County would provide and maintain trash receptacles at each access point. Further, restroom facilities would be connected to existing sanitary sewer or, when portable facilities are used, maintained regularly. This includes, as appropriate, during peak season. The parking lots associated with each access point are small and, consequently, only minor traffic impacts are anticipated. Porous pavement would be used and provide suitable cover for ADA-compliant access. Each beach walkover would also be designed to ADA standards. The parking areas would be lighted (using turtle-friendly lighting) to improve safety after sundown.

Summary Alternative Evaluation. The OPA evaluation indicates that the cost of the alternative is well documented, reasonable, and appropriate. The alternative has a strong nexus to the recreational injury caused by the DWH oil spill. The alternative provides new and improved public access to trust resources that were injured by the DWH oil spill and could be successfully constructed. While some collateral impacts on critical habitat for the Alabama beach mouse and loggerhead sea turtles are possible, these impacts are expected to be minor and mitigated by the use of dune walkovers, turtle-friendly lighting, and educational information provided to the public. Public safety issues are not expected to be a concern. However, there are concerns that the alternative could lead to overcrowding during peak summer months on the beaches where improved access is proposed and that creation of dune walkovers would reduce the ability of Baldwin County to access the beaches to address storm damage caused by hurricanes. Overcrowding and the inability to address hurricane impacts on the beaches have the potential to reduce the long-term benefits of the alternative.

3.4 EVALUATION OF GULF HIGHLANDS LAND ACQUISITION AND IMPROVEMENTS

3.4.1 Alternative Description

The Gulf Highlands parcel is the largest remaining Gulf-fronting parcel on Alabama's coast, with 2,700 feet of undeveloped beach. Gulf Highlands is privately owned and has all the permits necessary to allow high density residential development in the form of a proposed 612-unit condominium project.

The Gulf Highlands Land Acquisition and Improvements alternative entails acquiring the parcel and designing, permitting, and constructing public recreational access amenities, including a driveway and parking lot for 40 cars and a 1,280 foot ADA-compliant boardwalk through the dune habitat connecting the parking area to the beach. Interpretive signage would be installed to emphasize the importance of the unique wildlife habitats and the guidelines for public use. ADCNR State Parks Division would acquire and manage the land.

3.4.2 OPA Evaluation

The cost to carry out the alternative. The proposed cost for the Gulf Highlands Land Acquisition and Improvements alternative is $35,000,000. These funds are solely directed to acquiring the land and constructing the infrastructure that would allow access to the beach, dune, and other habitat at Gulf Highlands. The budget for the alternative includes funds for land acquisition, planning and trustee oversight, infrastructure construction, maintenance, and monitoring. The land acquisition costs included in the budget are based on an independent appraisal and are consistent with previous conservation purchases in the area.[27] ADCNR developed the estimated infrastructure estimates based on similar past projects, which indicate that the alternative can be implemented at a reasonable cost. If the AL TIG selects the alternative, the recreational infrastructure associated with this alternative would go through the State of Alabama's competitive bidding process to further ensure the reasonableness of the costs. ADCNR State Parks Division would conduct future maintenance of the project infrastructure, which would also include invasive plant removal and predator management as funding allows. These maintenance costs are included in the budget for this alternative.

[27] All land acquisitions entered into by the DWH Trustees must occur at or below USPAP or UASFLA Yellow Book appraisal values. These values are based on recent market transactions of comparable properties and thus provide reasonable estimates that represent fair market values.

The extent to which each alternative is expected to meet the AL TIG's goals and objectives in returning the injured natural resources and services to baseline and/or compensating for interim losses.

- **Nexus to Injury.** The beaches on the Fort Morgan Peninsula were extensively oiled during the DWH oil spill, and response operations were conducted in the areas where the alternative would be implemented (DWH Trustees, 2016a). The alternative is designed to enhance the public's recreational access and experience in these areas by creating a parking lot and dune walkover in an area where public beach access is currently limited. The recreational opportunities that would be created by this alternative are the same shoreline uses that were lost as a result of the DWH oil spill (i.e., lost user-days of shoreline recreation, including swimming, sunbathing, and walking). Shoreline recreational users, the same group that was affected by the DWH oil spill, would benefit from this alternative. The alternative represents "in-place, in-kind" restoration and is fully consistent with OPA objectives for compensatory restoration.
- **Benefit to Injured Resources.**
  - *Component Benefits:* This alternative would create new access through the dunes to Gulf-facing beach in the Fort Morgan area. Most users of this site are expected to drive to the parking area, although the site would also be accessible to local residents on foot or by bicycle. The majority of waterfront property on the Fort Morgan Peninsula is either privately held or lacks sufficient infrastructure to encourage public use (e.g., parking areas and dune walkovers). Establishing public access infrastructure at Gulf Highlands would create new shoreline recreational opportunities for the public. Because of the high ecological value of the habitat at the site, the footprint of proposed recreational amenities would be kept to a minimum and designed to maximize protection for resident species and habitat. The benefits provided would be most valuable to individuals and families that place greater value on undeveloped shoreline recreational experiences. The infrastructure proposed for the alternative is expected to serve the public for at least several decades, and would be maintained over the life of the project by ADCNR State Parks Division. The acquisition of this property would include an appropriate land protection instrument (i.e., deed restriction, conservation easement) to ensure that the dual purpose of compensating for lost recreational use and conserving the largest remaining, beach-fronting tract in coastal Alabama is maintained for the life of the project.
  - *Scale of Benefits:* Existing beach access along the Fort Morgan Peninsula is largely limited to visitors of the Fort Morgan State Historic Site and individuals staying at privately owned residences in the area. It is anticipated that the benefits of this alternative would accrue mainly to new visitors to the area. The scale of the recreational benefits for the Gulf Highlands Land Acquisition and Improvements alternative would be primarily a function of the available parking spaces created by the alternative. A total of 40 parking spaces would be available at the project site on a year-round basis. Assuming a utilization rate of around 35 percent, the alternative yields more than 20,000 shoreline recreational user-days each year.[28] Additional visits would be expected by visitors arriving on foot or by bicycle.
  - *Public Access:* The recreational benefits of this alternative would be broadly available to the public. There would be no charge for parking or use of the beach. However, because of the

[28] This reflects the 35 percent utilization rate with cars in the lot turning over twice daily and an average of two occupants per car.

lack of public transportation in the area, benefits would likely accrue primarily to individuals who own vehicles and have sufficient disposable income to drive to the site. No users would be actively excluded by the alternative. No user-fees would be charged at the site for the duration of the project. During the peak summer season, parking capacity would limit the total benefits available. Overcrowding on the beach is not expected to be a major issue because access would be limited by the relatively small number of parking spaces, which would serve more than 0.5 mile of beach that lacks other major access points.

– *Location:* There are a limited number of public beach access substitutes available along the Alabama coast for individuals not staying within walking distance of the beach. This implies a high marginal value for the benefits of this alternative. The alternative location is within a 1.5-hour drive of Mobile, Alabama, and would be available to a large potential visitor population. In addition, because of the relatively high degree of development along the Alabama coast, the 0.5 mile of undeveloped and low density use beach at Gulf Highlands would provide a relatively unique recreational experience, also implying a high marginal value.

– *Other Benefit Considerations:* Because of its unique characteristics, at least during peak seasons the proposed public shoreline access at Gulf Highlands is expected to be used to capacity. However, the additional access created by this alternative is not expected to create overcrowding—the site is privately owned and not currently open to the public for shoreline recreation, so new use would not add to any substantial existing use. Moreover, the infrastructure is being designed for level of use that would protect the valuable ecological resources at the site. No other restoration projects in the area are planned that will open a comparable large undeveloped expanse of beach in Alabama to the public. More generally, however, decisions about how to best manage the Gulf Highlands property for the public's benefit require a careful balancing of ecological and recreational uses. Because of the property's large size, location, and habitat characteristics, its ecological attributes are uniquely valuable, and the tradeoffs associated with recreational use merit special consideration.

The likelihood of success of each alternative. The alternative's goal of enhancing public recreational access to and enjoyment of coastal areas at Gulf Highlands has a high likelihood of success. The land proposed for acquisition is already under agreement for purchase. ADCNR has successfully implemented similar recreational design and improvement projects as part of its day-to-day natural resource management responsibilities at public parks and other state-owned properties along the Alabama coast.

The extent to which each alternative will prevent future injury as a result of the incident and avoid collateral injury as a result of implementing the alternative. The Gulf Highlands Land Acquisition and Improvements alternative is not expected to play a role in preventing future injury from the DWH oil spill. The Final PDARP/PEIS indicates that recreational uses have recovered (DWH Trustees, 2016a). The purpose of the alternative is only to provide compensatory restoration for losses that occurred between April 2010 and November 2011, after which the Final PDARP/PEIS studies conclude that recreational use levels returned to baseline.

When compared to an acquisition that would restrict human use at the site, implementation of the alternative does have the potential to create some collateral damage as a result of increased recreational use. Not implementing the alternative, however, would likely lead to private development of the parcel and increased impacts on the natural resources. Acquisition of the land as proposed would prevent future development, and the acquired land would be strategically managed for passive recreational access to minimize impacts on natural resources. Nonetheless, an alternative conservation

strategy that managed the site for habitat rather than recreation could result in reduced impacts on critical habitat.

The extent to which each alternative benefits more than one natural resource and/or service. The primary NRDA benefit of this alternative is to provide and enhance recreational uses. The alternative, however, would include the creation of educational signage designed to promote public support for stewardship of Alabama coastal resources. Furthermore, the implementation of the alternative would prevent development of the site and minimize injury to the valuable ecological resources. In addition, the dune walkover would direct public foot traffic away from sensitive habitats into a single area, which would help protect dune habitats and the species that depend on them, including beach mice, birds, and nesting sea turtles.

The effect of each alternative on public health and safety. Adverse impacts on public health and safety are not expected from this proposed alternative. To minimize public health impacts, ADCNR would provide and regularly maintain trash receptacles at the parking area. The parking lot at the site would be small and provide four to five ADA-compliant spaces; consequently, only minor traffic impacts are anticipated. The boardwalk would be ADA-compliant.

Summary Alternative Evaluation. The OPA evaluation indicates that the land acquisition and infrastructure costs of the alternative are well documented, reasonable, and appropriate. The alternative has a strong nexus to the recreational injury caused by the DWH oil spill and can reasonably be expected to provide benefits to the public over an extended timeframe. The alternative would provide new and improved public access to trust resources that were injured by the DWH oil spill and has a high probability of success. The alternative would also protect valuable beach and dune habitat from future development and provide for the effective management of ongoing recreational use. Finally, public safety issues are not expected to be a concern.

3.5 EVALUATION OF LAGUNA COVE LITTLE LAGOON NATURAL RESOURCE PROTECTION

3.5.1 Alternative Description

Under the alternative, the City of Gulf Shores would acquire in fee simple two undeveloped tracts of land, totaling approximately 53 acres, near Little Lagoon in Gulf Shores, Alabama, and develop and manage recreational amenities on the property. The two tracts are located near the Bon Secour National Wildlife Refuge and include large areas of coastal wetlands, with a total of approximately 6,100 feet of shoreline on Little Lagoon. Portions of the properties proposed for acquisition are considered critical habitat for Alabama beach mouse. The site has previously been approved for a subdivision and large marina and is therefore at risk for development. Acquisition would permanently protect habitat at the two tracts.

Currently the property is privately owned and public access is limited. The planned acquisition includes development of recreational amenities (e.g., parking and walkways) that would facilitate public access to Little Lagoon and the surrounding lands. Sixty parking spaces, divided between two locations at the site, would be built, and lighting would be provided at the parking lot and walkways as needed. In addition, the alternative would construct a variety of additional recreational amenities to enhance visitor experiences. These amenities would include a pier, a kayak landing, a boardwalk, and restrooms. Educational signage focused on coastal resources would be placed around the site to promote environmental awareness and stewardship.

3.5.2 OPA Evaluation

The cost to carry out the alternative. The proposed cost for the Laguna Cove Little Lagoon Natural Resource Protection alternative is $4,400,000. These funds are directed solely to the acquisition of land and the construction of infrastructure that would improve access to shoreline resources around Little Lagoon. The budget for the alternative includes funds for land acquisition, planning and trustee oversight, infrastructure construction, maintenance, and monitoring. The land acquisition costs included in the budget are based on an independent appraisal and are consistent with previous conservation purchases in the area.[29] ADCNR developed the estimated infrastructure costs based on similar past projects, which indicate that the project can be implemented at a reasonable cost. If the AL TIG selects the alternative, it would go through the State of Alabama's competitive bidding process to further ensure the reasonableness of the infrastructure costs. The City of Gulf Shores would be responsible for future maintenance of the project infrastructure. Maintenance costs are included in the proposed alternative budget.

The extent to which each alternative is expected to meet the AL TIG's goals and objectives in returning the injured natural resources and services to baseline and/or compensating for interim losses.

- **Nexus to Injury:** The beaches in Gulf Shores just to the south of Little Lagoon were extensively oiled during the DWH oil spill (DWH Trustees, 2016a). The two tracts proposed for acquisition are directly across the road from the oiled beaches and did not experience direct oiling or response activities. The alternative is designed to enhance the public's recreational access and experience through the acquisition of valuable shoreline habitat and construction of recreational amenities on these two tracts where public access is currently limited. The recreational opportunities that would be created by this alternative are the same shoreline uses that were lost as a result of the DWH oil spill (i.e., lost user-days of shoreline recreation, including swimming, walking, shorefishing, kayaking, and birding). Recreational shoreline visitors, the user population that was affected by the spill, would benefit from this alternative. Because the site is directly adjacent to oiled beaches, the alternative represents "in-place, in-kind" restoration and is fully consistent with OPA objectives for compensatory restoration.
- **Benefit to Injured Resources.**
  - *Component Benefits:* This alternative would create needed public shoreline recreational access to Little Lagoon. Little Lagoon is approximately 10 miles long and the western end is accessible by only two public access trails (http://www.info.littlelagoon.net/). The proposed alternative would primarily serve visitors who arrive at the site's parking area by car or access the site on foot or by bicycle. Specifically, the kayak landing would create valuable nearshore boating recreation on Little Lagoon, and the pier would add new fishing and wildlife viewing opportunities at the site. The proposed recreational infrastructure is expected to serve the public for at least several decades. The land acquisition component of the alternative would provide habitat protection benefits by preventing future development of the site. The provision of educational signage is expected to increase environmental awareness and promote environmental stewardship. The acquisition of this property would include the recording of a deed restriction in the deed to ensure that the purpose of compensating for lost recreational use is maintained for the life of the project. The deed

[29] All land acquisitions entered into by the DWH Trustees must occur at or below USPAP or UASFLA Yellow Book appraisal values. These values are based on recent market transactions of comparable properties and thus provide reasonable estimates that represent fair market values.

restriction would state that this property may not be disposed of in any manner or used for purposes other than conservation and restoration of natural resources and/or for passive public outdoor recreation of the type described for this property in the final RP/EIS.

- *Scale of Benefits:* Access to the western end of Little Lagoon is limited to two existing trails—there are no public piers and only one publicly available location for launching a kayak. In the future, it is anticipated that the benefits of this alternative would accrue almost entirely new visitors to the Little Lagoon parcels. The scale of these benefits would be determined primarily by the availability of parking at the site. The alternative would create approximately 60 parking spots and an average annual capacity utilization of around 35 percent is expected. Under these assumptions, the alternative yields more than 30,000 user-days each year.[30] Additional visits would be expected by visitors arriving on foot or by bicycle.
- *Public Access:* The recreational benefits of this alternative would be broadly available to the public. No parking or user fees would be charged at Little Lagoon. However, because of the lack of public transportation in the area, benefits would likely accrue primarily to individuals who own vehicles and have sufficient disposable income to drive to the site. No users would be actively excluded by the alternative. There would be no user-fees for the duration of the project. During the peak summer season, parking capacity would limit the total benefits available. Crowding is not expected to be a major issue and future use would be limited by the relatively small number of parking spaces available to visitors at the site.
- *Location:* The site is located at the western end of Little Lagoon, an area with limited public access opportunities. Little Lagoon is a 10-mile-long brackish body of water located just behind the beach in Gulf Shores. It provides a unique recreational opportunity for protected shoreline recreation. In addition, the western end of Little Lagoon has only two other public access points. These characteristics imply a high marginal value for the benefits of this alternative. The alternative is within 1.5 hour's drive of Mobile, Alabama, and would be available to a large potential visitor population.
- *Other Benefit Considerations:* Because of the lack of public access at the western end of Little Lagoon, the proposed project infrastructure is expected to be used to capacity during at least part of the year. However, the additional public shoreline access created by this alternative is not expected to create overcrowding. The site is not currently a destination for shoreline recreation, and the infrastructure is being designed for a level of use that would protect the valuable ecological resources at the site. No other restoration projects are planned that will create major new access to Little Lagoon, although as part of the DWH Early Restoration program, the Bon Secour National Wildlife Refuge rebuilt one of the existing access trails to the western end of the lagoon (see the Final Phase IV Early Restoration Plan and Environmental Assessments) (DWH Trustees, 2015).

The likelihood of success of each alternative. The alternative's goal of enhancing public recreational access to and enjoyment of the shoreline and habitat around Little Lagoon has a high likelihood of success. The land proposed for acquisition is already under agreement for purchase, and ADCNR has successfully implemented similar recreational design and improvement projects as part of its day-to-day

[30] This reflects the 35 percent utilization rate with cars in the lot turning over twice daily and an average of two occupants per car.

natural resource management responsibilities at public parks and other state-owned properties along the Alabama coast.

The extent to which each alternative will prevent future injury as a result of the incident and avoid collateral injury as a result of implementing the alternative. The Laguna Cove Little Lagoon Natural Resource Protection Alternative is not expected to play a role in preventing future injury from the DWH oil spill. The Final PDARP/PEIS indicates that recreational uses have recovered (DWH Trustees, 2016a). The purpose of the alternative is only to provide compensatory restoration for losses that occurred between April 2010 and November 2011, after which the Final PDARP/PEIS studies conclude that recreational use returned to baseline levels.

Portions of the properties proposed for acquisition are considered Alabama beach mouse critical habitat; therefore, the project will require consultations under the ESA. In addition, ADCNR staff have observed that certain areas of the site are already being used informally by the public, and as a result, the inclusion of boardwalks, designated paths, and additional educational displays highlighting the site's sensitive resources are expected to help minimize and potentially reduce impacts on these habitats.

The extent to which each alternative benefits more than one natural resource and/or service. The primary NRDA benefit of this alternative is to provide and enhance recreational uses. The alternative, however, would also create educational signage designed to promote public support for and stewardship of Alabama coastal resources. Furthermore, the alternative would prevent development of the site and minimize injury to valuable ecological resources, including habitat for state and federally listed threatened or endangered species.

The effect of each alternative on public health and safety. Adverse impacts on public health and safety are not expected from this proposed alternative. To minimize public health impacts, the City of Gulf Shores would provide and maintain trash receptacles at each access point and as part of its operations. Restroom facilities would be connected to existing sanitary sewer and maintained regularly by City of Gulf Shores' staff. The parking lots and boardwalks at the project site would be ADA accessible. Only minor traffic impacts are anticipated for parking lots of the proposed size. Porous pavement would be used to minimize any water quality impacts. The parking areas would be lighted (using turtle-friendly lighting) to improve safety after sundown.

Summary Alternative Evaluation. The OPA evaluation indicates that the land acquisition and infrastructure costs of the alternative are well documented, reasonable, and appropriate. The alternative has a strong nexus to the recreational injury caused by the DWH oil spill and can reasonably be expected to provide benefits to the public over an extended timeframe. The alternative would provide new and improved public access to trust resources that were injured by the DWH oil spill and has a high probability of success. The alternative would also protect valuable shoreline habitat from future development and provide for the effective management of ongoing recreational use. Finally, public safety issues are not expected to be a concern.

3.6 EVALUATION OF BAYFRONT PARK RESTORATION AND IMPROVEMENT

3.6.1 Alternative Description

This initiative proposes to fund project E&D for shoreline recreational improvements at Mobile County's Bayfront Park, which is located on Dauphin Island Parkway near the Alabama Port community. The 20-acre park, operated by the Mobile County Commission, currently receives more than 300 visitors on weekends and more than 1,200 visitors per week during the peak summer months. Recreational activities currently supported at this site include covered picnicking, fishing, kayaking, bird watching, and

wildlife observation. This alternative would provide enhanced public access to Mobile Bay and improved recreational amenities at Bayfront Park.

The proposed E&D work would evaluate the construction of a living shoreline and/or a sandy beach along Bayfront Park's currently armored shoreline along Mobile Bay and the development of additional recreational amenities at the park. The new amenities could include improved restroom and playground facilities, a renovated wetland boardwalk and nature trail, expanded birdwatching opportunities, and a geocaching nature trail. In addition, the E&D work would include developing a plan for the addition of signage and interpretive materials promoting environmental education and stewardship.

This OPA evaluation focuses on the project concept described above and is intended only to inform a decision about whether additional funding for the E&D work is warranted. The OPA evaluation is based on the AL TIG's current best understanding of the proposed activities outlined in the project description. However, further planning and NEPA analysis would be required prior to any final decision by the AL TIG to recommend the alternative for full implementation.

3.6.2 OPA Evaluation

The cost to carry out the alternative. While the Bayfront Park Restoration and Improvement concept has the potential to provide important shoreline recreational benefits, the details of its design and the full project cost are not adequately specified at this time. The cost of the proposed E&D work needed to finalize the project concept is $1,000,000. Completion of this E&D work is expected to bring the alternative to the point where the AL TIG will be able to make final decisions about implementation, including the most suitable design and layout of proposed amenities and improvements. These funds would be solely directed to the planning and E&D for a Bayfront Park alternative that would improve access to the coastal natural resources on Mobile Bay. The Mobile County Commission developed the cost estimate based on similar past planning initiatives, and ADCNR staff have reviewed them and confirmed that this work can be implemented at a reasonable cost. If the AL TIG ultimately selects the E&D alternative, it would go through the State of Alabama's competitive bidding process to further ensure the reasonableness of the costs.

The extent to which each alternative is expected to meet the AL TIG's goals and objectives in returning the injured natural resources and services to baseline and/or compensating for interim losses.

- **Nexus to Injury.** Bayfront Park is on the southwestern shore of Mobile Bay in an area that, although it did not experience direct oiling or response activities, is still relatively near to the shorelines on Dauphin Island and Mississippi Sound that were oiled. The park is on the main highway leading to Dauphin Island, approximately 3.5 miles north of the causeway. According to the Mobile County Commission, it generally draws from a more local group of residents than those who visit the beaches on Dauphin Island itself. As such, the alternative, while not fully consistent with the NRDA "in-place, in-kind" preference, still has a reasonable nexus to the spill given its proximity to oiled areas and its targeted ability to compensate local residents injured by the DWH oil spill through the provision of similar types of recreational opportunities.
- **Benefit to Injured Resources.**
  - *Component Benefits:* The Bayfront Park Restoration and Improvement alternative would create new and improved access to the waters of Mobile Bay and would be expected to be used primarily by local residents of southern Mobile County. This part of Mobile County has limited local public access opportunities for shoreline recreation, particularly beaches that are close enough to allow for quick, short duration visits to the shore. The majority of waterfront property on the western shore of Mobile Bay is privately held or lacks sufficient

infrastructure to encourage public use. New shoreline recreational opportunities would be created by constructing a living shoreline and beach at Bayfront Park. Including playground improvements, renovated restrooms, and a boardwalk would further enhance the existing visitor experience. The project infrastructure would be expected to serve the public for at least several decades. Other possible enhancements to be considered as part of the planning process include creating new birdwatching opportunities at the site and the possibility of adding a geocaching nature trail that would add new possibilities for exploring and learning about the site's natural resources. Educational signage would be put in place to further promote an understanding of coastal Alabama's ecosystems.

- *Scale of Benefits:* Existing public beach access to the southwestern shore of Mobile Bay is limited. It is anticipated that the benefits of this alternative would accrue primarily to local residents in the area, with additional limited benefits accruing to visitors passing Bayfront Park on their way to Dauphin Island. The scale of the recreational benefits for the alternative would primarily be a function of park visitation. Because the alternative would not incorporate significant increases in parking at the park, the benefits would likely to take two forms—enhancements to the recreational experiences of current visitors and any increases in overall visitation at the park within the existing parking constraints.
- *Public Access:* The recreational benefits of this alternative would be broadly available to the public. No parking fee would be charged at the park. However, because of the lack of public transportation in the area, benefits would likely accrue primarily to individuals who own vehicles and have sufficient disposable income to drive to the site. No users would be actively excluded by the alternative. There would be no user-fees at the park for the duration of the project. During the peak summer season, parking capacity would limit the total benefits available.
- *Location:* The southwestern shore of Mobile Bay has limited public beach and shoreline recreational access. This implies a high marginal value from this alternative. The alternative is within a short drive of Mobile, Alabama, and would be available to a large potential visitor population and an underserved, more local population.
- *Additional Benefit Considerations:* Because public beach and shoreline access along southwestern Mobile Bay is lacking, adequate demand for an expanded beach and improved recreational amenities at Bayfront Park is expected. But these improvements are not expected to lead to overcrowding because the park would not be able to accommodate any substantial increase in parking because of site constraints. The AL TIG is not currently planning any other projects along the western shore of Mobile Bay, so the alternative would not duplicate other restoration initiatives.

The likelihood of success of each alternative. The alternative's goal of enhancing public recreational access to and enjoyment of coastal areas along southwestern Mobile Bay has a high likelihood of success. No land acquisition is required, and ADCNR has successfully implemented similar recreational planning, design, and improvement projects as part of its day-to-day natural resource management responsibilities at public parks and other state-owned properties along the Alabama coast.

The extent to which each alternative will prevent future injury as a result of the incident and avoid collateral injury as a result of implementing the alternative. The Bayfront Park Restoration and Improvement alternative is not expected to play a role in preventing future injury from the spill. The Final PDARP/PEIS indicates that recreational uses have recovered (DWH Trustees, 2016a). The purpose of the project is only to provide compensatory restoration for losses that occurred between April 2010

and November 2011, after which the Final PDARP/PEIS studies conclude that recreational use returned to baseline levels.

Implementation of the alternative is not currently expected to cause any net collateral damages to the environment. However, this conclusion must be informed by the future NEPA analysis proposed to be conducted as part of the AL TIG's more extensive planning process before it makes any final decision on whether to recommend this alternative for implementation.

The extent to which each alternative benefits more than one natural resource and/or service. The primary NRDA benefit of this alternative is compensatory restoration of recreational services. The alternative, however, also may include a living shoreline that would be a potential source of ecological benefits. In addition, educational signage and interpretive materials designed to promote public support for environmental stewardship would lead to greater understanding and sensitivity to the environmental threats in coastal Alabama.

The effect of each alternative on public health and safety. Adverse impacts on public health and safety currently are not expected from this proposed alternative. The proposal envisions that all proposed enhancements at the park would meet current building and public health code requirements and be ADA-compliant. However, completion of more detailed E&D work is needed to confirm this.

Summary Alternative Evaluation. The OPA evaluation indicates that conceptual design of the alternative demonstrates a nexus to the recreational injury caused by the DWH oil spill, and that this design can reasonably be expected to provide shoreline recreational benefits to the public over an extended time. The alternative would provide new and improved public access to trust resources that were injured by the DWH oil spill and, subject to completion of the additional E&D and compliance analyses, has a high probability of success. It would also target local residents injured by the DWH oil spill.

3.7 EVALUATION OF DAUPHIN ISLAND ECO-TOURISM AND ENVIRONMENTAL EDUCATION AREA

3.7.1 Alternative Description

As part of this proposed initiative, the Town of Dauphin Island would acquire 100 acres of privately held land near the middle of Dauphin Island—90 acres of salt marsh and water bottom plus 10 acres of upland habitat. If not acquired and protected, the upland acres could be developed; consequently, acquisition and protection would provide habitat protection benefits. In addition, the alternative would create recreational infrastructure to promote public access to and use of the natural resources at the site. Proposed visitor amenities include a bicycle path, boardwalks, a fishing pier, public restrooms, gazebos, and parking. Boardwalks would be placed above wetland habitat to allow visitors to access the site's salt water marshes while minimizing environmental impacts. The pier would create opportunities for fishing in the waters of Aloe Bay. Educational signage would be placed at strategic locations to improve public awareness of environmental resources and enhance learning opportunities.

3.7.2 OPA Evaluation

The cost to carry out the alternative. The proposed cost of the Dauphin Island Eco-tourism and Environmental Education Area alternative is $4,000,000. These funds would be directed solely to acquiring the land and constructing infrastructure that improves access to the coastal natural resources. The budget for the alternative includes funds for land acquisition, planning and trustee oversight, infrastructure construction, and monitoring. The land acquisition costs included in the budget represent

the seller's asking price and are consistent with previous conservation purchases in the area.[31] The Town of Dauphin Island developed the estimated infrastructure costs based on similar past projects, and ADCNR staff have reviewed them and confirmed that the alternative can be implemented at a reasonable cost. If the AL TIG selects the alternative, it would go through the State of Alabama's competitive bidding process to further ensure the reasonableness of the costs. Future project maintenance is included in the project budget and would be supplemented through a nominal $2 to $5 fee for use of the fishing pier. The Town of Dauphin Island would hold title to the property and would be responsible for all maintenance at the site for the life of the project. Over time, the fishing pier fee may be adjusted to reflect changes in the ongoing operating and maintenance costs of the facility.

The extent to which each alternative is expected to meet the AL TIG's goals and objectives in returning the injured natural resources and services to baseline and/or compensating for interim losses.

- **Nexus to Injury.** The beaches on Dauphin Island were extensively oiled during the DWH oil spill (DWH Trustees, 2016a). The project site, while not in an area of Dauphin Island that was directly oiled (the site faces Mississippi Sound rather than the Gulf of Mexico), is located on the island's main access road approximately 1 mile from beaches that were oiled and underwent response activities. The project is designed to enhance the public's recreational access and experience through the acquisition of valuable shoreline habitat and the construction of recreational amenities in an area where access is currently limited. The recreational opportunities that would be created by this alternative are similar shoreline uses to those that were lost as a result of the DWH oil spill (i.e., lost user-days of shoreline recreation, including walking, shorefishing, biking, and birding). Recreational shoreline visitors, the same user population that was affected by the DWH oil spill, would benefit from this alternative. Because the site is located close to the oiled beaches and in habitat similar to that affected by the spill, the alternative effectively represents "in-place, in-kind" restoration and is fully consistent with OPA objectives for compensatory restoration.
- **Benefit to Injured Resources.**
  - *Component Benefits*: This alternative would create additional and enhanced public recreational access to shoreline natural resources on Dauphin Island. The alternative would primarily serve visitors who arrive at the site by car or access the site via the bicycle path created by the alternative. The alternative would create needed public access to the bayside of Dauphin Island, where access is more limited than at Gulf-facing beaches. The proposed fishing pier at the site would replace opportunities lost at a pier at the nearby public beach which, due to changes in beach morphology, is now landlocked and no longer provides fishing opportunities. The boardwalk, gazebos, and restrooms would further enhance the recreational value of the site. The proposed infrastructure is expected to serve the public for at least several decades. The land acquisition component of the alternative would provide wetland habitat protection benefits by preventing future development of the site. The provision of educational signage is expected to increase environmental awareness and promote environmental stewardship. The acquisition of this property would include the recording of a deed restriction in the deed to ensure that the purpose of compensating for lost recreational use is maintained for the life of the project. The deed restriction would

[31] All land acquisitions entered into by the DWH Trustees must occur at or below USPAP or UASFLA Yellow Book appraisal values. These values are based on recent market transactions of comparable properties and thus provide reasonable estimates that represent fair market values. Prior to acquisition, the fair market value of the property would be determined.

state that this property may not be disposed of in any manner or used for purposes other than conservation and restoration of natural resources and/or for passive public outdoor recreation of the type described for this property in the final RP/EIS.

- *Scale of Benefits:* Access to the current site is limited because it is private property that is not open to the public. Benefits from this alternative are anticipated to accrue to new visitors to the site. The scale of these benefits would primarily be determined by the availability of parking at the site. Approximately 100 parking spots would be created by the alternative with an anticipated average annual capacity utilization of around 35 percent. Under these assumptions, the alternative yields approximately 50,000 user-days each year.[32] Additional visits would be expected by those arriving on foot or by bicycle.
- *Public Access:* The recreational benefits of this alternative would be broadly available to the public. There would be a nominal charge ($2 to $5 per car) for use of the fishing pier, and these revenues would be used to support the operation and maintenance of the infrastructure. However, the fee is not expected to be a significant impediment to use because the nearby pier that is no longer available charged a similar nominal fee and was a popular fishing destination. Parking for and use of the other site amenities would be free for the duration of the project. Bicycle access would make the site available for visitors without cars. However, because of a lack of public transportation in the area, benefits would likely accrue primarily to individuals who own vehicles and have sufficient disposable income to drive to the site or to those who can access the site on foot or by bicycle. No users would be actively excluded by the alternative. During the peak summer season, parking capacity would limit the total benefits available.
- *Location:* The northern bayside of Dauphin Island has limited public shoreline access with recreational amenities. This alternative would create new opportunities to access the bayside natural resources. The site is within an hour's drive of Mobile, Alabama, and would be available to a large potential visitor population.
- *Additional Benefit Considerations:* The additional public shoreline access created by this project is not expected to cause overcrowding. The site is not currently used for shoreline recreation, and the infrastructure is being designed to meet expected site utilization. The AL TIG is not currently planning other recreational restoration projects in salt marsh habitat on Dauphin Island, so the alternative would provide a unique suite of expanded recreational opportunities in the area. As a result, it is expected that sufficient demand for bayside recreation exists on Dauphin Island and that the site would operate at full capacity during at least some times of the year.

The likelihood of success of each alternative. The alternative's goal of enhancing public recreational access to and enjoyment of coastal areas on Dauphin Island has a high likelihood of success. The land proposed for acquisition has a willing seller, and ADCNR has successfully implemented similar recreational design and improvement projects as part of its day-to-day natural resource management responsibilities at public parks and other state-owned properties along the Alabama coast.

The extent to which each alternative will prevent future injury as a result of the incident and avoid collateral injury as a result of implementing the alternative. The Dauphin Island Eco-Tourism and Environmental Education Area alternative is not expected to play a role in preventing future injury from

[32] This reflects the 35 percent utilization rate with cars in the lot turning over twice daily and an average of two occupants per car.

the spill. The Final PDARP/PEIS indicates that recreational uses have recovered (DWH Trustees, 2016a). The purpose of the alternative is only to provide compensatory restoration for losses that occurred between April 2010 and November 2011, after which the Final PDARP/PEIS studies conclude that recreational use returned to baseline levels.

Implementation of the alternative is also not expected to cause any net collateral damage to the environment (see Final PDARP/PEIS, Chapter 5). The construction of boardwalks over wetlands would likely require USACE authorization. Adverse impacts would be avoided or minimized (e.g., by designing the height of the boardwalk to avoid marsh shading). While historical experience in Alabama suggests that mitigation measures would allow collateral injury to be avoided, any remaining unavoidable impacts could be offset by appropriate compensatory mitigation.

The extent to which each alternative benefits more than one natural resource and/or service. The primary NRDA benefit of this alternative would be to provide and enhance recreational uses. However, the educational signage, which would be designed to promote public support and stewardship, is expected to lead to greater understanding and sensitivity to the environmental threats in coastal Alabama. The goal of this is to shape public understanding in ways that enhance public support for overall improvements in the management and provision of ecosystem services in coastal Alabama. There would also be a benefit to salt marsh and upland habitat at the site to the extent that future development is prevented.

The effect of each alternative on public health and safety. Adverse impacts on public health and safety are not expected from the alternative. To minimize public health impacts, the Town of Dauphin Island would provide and regularly maintain trash receptacles throughout the site. Restroom facilities would be connected to the local sewer system, and the town would be responsible for regular cleaning and maintenance. The parking lot and access road would be designed to ensure only minor impacts on existing traffic flows. Porous pavement (e.g., crushed oyster shell) would be used throughout and provide suitable cover for seven ADA-accessible spaces. The fishing pier would be ADA-compliant with a ramp for accessibility.

Summary Alternative Evaluation. The OPA evaluation indicates that the land acquisition and infrastructure costs of the alternative are well documented, reasonable, and appropriate. The alternative has a strong nexus to the recreational injury caused by the DWH oil spill and can reasonably be expected to provide benefits to the public over an extended timeframe. The alternative would provide new and improved public access to trust resources that were injured by the DWH oil spill and has a high probability of success. The alternative would also protect valuable wetland and upland habitat from future development and provide environmental education and stewardship benefits. Finally, public safety issues are not expected to be a concern.

3.8 EVALUATION OF MID-ISLAND PARKS AND PUBLIC BEACH IMPROVEMENTS (PARCELS A, B, AND C)

3.8.1 Alternative Description

This alternative involves the acquisition and development of infrastructure to support shoreline recreational activities on three adjacent parcels of land, totaling approximately 10 acres. This alternative would offer visitors to Dauphin Island dune walkover access across Parcel A to the public beach area on the Gulf of Mexico, additional shoreline access parking, adjacent restroom facilities, and other passive public outdoor recreation opportunities. The parcels to be acquired under this alternative are currently zoned as resort commercial, multi-family, and commercial. Their acquisition by the Town of Dauphin Island would prevent potential development and ensure permanent future public access to valuable

coastal resources. The recreational enhancements would provide valuable opportunities for beach-going activities such as swimming, walking, sunbathing, and shorefishing. The land acquisition and measures to manage recreational access through construction and careful siting of the dune walkover would also protect valuable habitat for resident species such as nesting sea turtles and migratory bird species that rely on Dauphin Island as an important stop-over and foraging location. Educational signage focused on coastal resources would also be placed at the sites to promote environmental awareness and stewardship.

3.8.2 OPA Evaluation

The cost to carry out the alternative. The proposed cost for the Mid-Island Parks and Public Beach Improvements alternative is $4,200,000. These funds would be directed solely to the acquisition of land and construction of infrastructure that improves access to and enjoyment of the coastal natural resources on Dauphin Island. The budget for the alternative includes funds for land acquisition, planning and trustee oversight, infrastructure construction, and monitoring. The land acquisition cost included in the budget represents the seller's asking price and is consistent with previous conservation purchases in the area.[33] The Town of Dauphin Island developed the estimated infrastructure costs based on similar past projects. ADCNR has reviewed these costs and has confirmed that the alternative can be implemented at a reasonable cost. If the AL TIG selects the alternative, it would go through the State of Alabama's competitive bidding process to further ensure the reasonableness of the costs. The Town of Dauphin Island would provide future project maintenance, which would be funded through an approximate fee of approximately $5 for use of the proposed parking and is not included in the alternative budget. This fee may be adjusted over time to reflect changes in the ongoing operating and maintenance costs of the facility.

The extent to which each alternative is expected to meet the AL TIG's goals and objectives in returning the injured natural resources and services to baseline and/or compensating for interim losses.

- **Nexus to Injury.** The beaches on Dauphin Island were extensively oiled during the DWH oil spill, and response operations were undertaken along the beach where this alternative would create public access (DWH Trustees, 2016a). The alternative is designed to facilitate the public's recreational access to the shoreline and enhance recreational experiences by creating parking lots and dune walkovers in areas where public access is not available and by adding restrooms. The recreational opportunities that would be created by this alternative are the same shoreline uses that were lost as a result of the DWH oil spill (i.e., lost user-days of shoreline recreation, including swimming, sunbathing, and walking,). Recreational beachgoers, the same user population that was affected by the DWH oil spill, would benefit from this alternative. The alternative represents "in-place, in-kind" restoration and is fully consistent with OPA objectives for compensatory restoration.
- **Benefit to Injured Resources**.
  - *Component Benefits:* This alternative would create additional and improved access to Gulf of Mexico public beach and shoreline areas on Dauphin Island. The new access point and project infrastructure would be available to residents, visitors staying on the island, and day trippers from off-island. The alternative would acquire three parcels of land that would

[33] All land acquisitions entered into by the DWH Trustees must occur at or below USPAP or UASFLA Yellow Book appraisal values. The costs are based on recent market transactions of comparable properties and thus provide reasonable estimates that represent fair market values. Prior to acquisition, the fair market value of the property would be determined.

allow creation of up to 200 public parking spaces, a dune walkover to access 1,200 linear feet of beach habitat, and restrooms serving visitors to the shoreline. Beach users would derive significant benefits from the new dune walkover—recent changes in beach morphology in this area of Dauphin Island now require beachgoers to walk 300 yards across an area of unconsolidated sand to reach adjacent public beaches. Creation of the dune walkover would also protect dune habitat. The proposed infrastructure is expected to serve the public for at least several decades. Educational signage installed as part of the alternative would also provide environmental stewardship benefits to the public. The acquisition of this property would include an appropriate land protection instrument (i.e., deed restriction, conservation easement) to ensure that the purpose of compensating for lost recreational use is maintained for the life of the project. The final land protection instrument would state that this property may not be disposed of in any manner or used for purposes other than conservation and restoration of natural resources and/or for passive public outdoor recreation of the type described for this property in the final RP/EIS.

- *Scale of Benefits:* Existing public beach access on Dauphin Island is limited by the availability of parking during peak periods during the summer. The existing public beach lots on Dauphin Island regularly fill up on summer days before noon (Town of Dauphin Island, 2016a). Expansion of public beach parking is expected to draw new visitors to the island and serve residents and visitors staying on the island. The scale of the recreational benefits for the alternative would primarily be a function of the available parking spaces created by the alternative. A total of up to 200 parking spaces would be constructed as part of the alternative. Assuming a utilization rate of around 35 percent, the alternative is expected to yield between 80,000 and 100,000 shoreline user-days each year.[34]
- *Public Access:* The recreational benefits of this alternative would be broadly available to the public. There would be a nominal charge (approximately $5 per vehicle) for parking. However, this fee is not expected to significantly deter use; the existing public beach lot charges a similar fee and is heavily used. Because of the limited public transportation options in the area, benefits would likely accrue primarily to individuals who own vehicles and have sufficient disposable income to drive to the site and pay the parking fee or to those who would access the site on foot or by bicycle. No users would be actively excluded by the alternative. During the peak summer season, parking capacity and crowding on the beach would limit the total benefits available.
- *Location:* This alternative would expand capacity and enhance amenities adjacent to Dauphin Island's existing public beach. The public beach reaches its maximum capacity on summer days due to parking constraints. Public parking to access Dauphin Island's other main public beach (West End Beach) is also limited during peak periods and substitute beach opportunities are not readily available on the island at these times. Similar constraints exist along other segments of the Alabama coast as a result of the limited number of public access opportunities (see other alternative descriptions in Baldwin County). This implies a high marginal value from this alternative. Dauphin Island is within an hour's drive of Mobile, Alabama, and the alternative's amenities would be available to a large potential visitor population.

[34] This reflects the 35 percent utilization rate with cars in the lot turning over twice daily and an average of two occupants per car.

– *Additional Benefit Considerations:* Because current demand for parking at public beaches on Dauphin Island exceeds supply on summer days, it is expected that sufficient demand for the new infrastructure created by this alternative exists. Increased crowding at the beach sites has the potential to diminish the value of the beach experience for beach visitors on Dauphin Island. However, the stretch of beach that will be directly served by the new parking lot is relatively distant from existing access points to the public beach and currently experiences light use according to Dauphin Island officials. Overcrowding is not expected to result in substantial reductions in benefits to existing beachgoers.[35] Because no other beach access projects are planned on Dauphin Island at this time, the alternative is not redundant with other nearby initiatives. More generally, although the AL TIG is considering other beach access projects, the combined impact of these projects would be small relative to the millions of annual beach user-days along the Alabama coast (see Final PDARP/PEIS, Section 4.10), and is therefore not expected to lead to excess supply of recreational beach amenities.

The likelihood of success of each alternative. The alternative's goal of enhancing public recreational access to and enjoyment of the shoreline and beach on Dauphin Island has a high likelihood of success. The land proposed for acquisition has a willing seller, and the AL TIG has successfully implemented similar recreational design and improvement projects as part of its day-to-day natural resource management responsibilities at public parks and other state-owned properties along the Alabama coast.

The extent to which each alternative will prevent future injury as a result of the incident and avoid collateral injury as a result of implementing the alternative. The Dauphin Island Mid-Island Parks and Public Beach alternative is not expected to play a role in preventing future injury from the DWH oil spill. The Final PDARP/PEIS indicates that recreational uses have recovered (DWH Trustees, 2016a). The purpose of the alternative is only to provide compensatory restoration for losses that occurred between April 2010 and November 2011, after which the Final PDARP/PEIS studies conclude that recreational use returned to baseline levels.

Implementation of the alternative is also not expected to cause any net collateral damage to the environment. Acquisition of these parcels would prevent future development and construction of the dune walkover would provide additional protection for potentially affected natural resources.

The extent to which each alternative benefits more than one natural resource and/or service. The primary NRDA benefit of this alternative is to provide and enhance recreational uses. The alternative would also include educational signage designed to promote public support for and stewardship of Alabama coastal resources. Furthermore, the dune walkover would direct public foot traffic away from sensitive habitats into a single area, which would help protect dune habitat and the species that depend on them, including birds and nesting sea turtles.

The effect of each alternative on public health and safety. Adverse impacts on public health and safety are not expected from this proposed alternative. To minimize public health impacts, the Town of Dauphin Island would provide and regularly maintain trash receptacles at the parking lots. Restrooms would be connected to existing sanitary sewer and maintained regularly by the Town. The parking lot would be engineered to minimize the changes to traffic flows and, consequently, only minor traffic

[35] After completion of the proposed alternative, an additional 400 persons might be expected on the beach at peak capacity (i.e., up to 200 cars averaging 2 persons per vehicle), added to the 0.25 mile of beach that is opened up by the dune walkover. At high tide, if the beach is 50 feet wide; therefore, each user would have about 150 square feet of area (10 feet by 15 feet).

impacts are anticipated. Porous pavement would be used to protect water quality. The parking lot would provide ADA-accessible spaces, and the beach walkover would also be designed for consistency with ADA standards. The parking areas would be lighted (using turtle-friendly lighting) to improve safety after sundown.

Summary Alternative Evaluation. The land acquisition and infrastructure costs of the alternative are well documented, reasonable, and appropriate. The alternative has a strong nexus to the recreational injury caused by the DWH oil spill and can reasonably be expected to provide benefits to the public over an extended timeframe. The alternative would provide new and improved public access to trust resources that were injured by the DWH oil spill and has a high probability of success. It would also protect valuable shoreline habitat from future development and provide for the effective management of ongoing recreational use. Finally, public safety issues are not expected to be a concern.

3.9 EVALUATION OF MID-ISLAND PARKS AND PUBLIC BEACH IMPROVEMENTS (PARCELS B AND C)

3.9.1 Alternative Description

This alternative differs slightly from the alternative discussed in Section 3. 8, Evaluation of Mid-Island Parks and Public Beach Improvements (Parcels A, B, and C), because it is assumes that Parcel A is no longer included, most likely because it has been acquired using another funding source. On November 15, 2016, it was announced that Parcel A was approved for funding by the NFWF program (State of Alabama, 2016).

3.9.2 OPA Evaluation

The OPA evaluation for this alternative differs in only minor respects from the evaluation for the full alternative that includes all three parcels. Specifically, this alternative does not include the costs of acquiring Parcel A or constructing the dune walkover to the beach. These benefits would be attributable to the project that acquires Parcel A and constructs the dune walkover. However, it is important to note that the scale of these benefits would depend on whether or not this proposed alternative (Parcels B and C only) is implemented. Without the parking provided by acquisition of Parcels B and C, acquisition of Parcel A and development of the dune walkover would create a much more limited set of recreational benefits because access would be available only to those visitors who do not need the Parcel B and C parking to use the site. The only other significant difference is that the ecological benefits of the walkover would be attributable to the project that includes the acquisition of Parcel A rather than with this alternative. The project cost for Parcels B and C is $1,900,000. In other respects, the OPA evaluation of the more limited alternative is essentially the same as the full alternative discussed above in Section 3.8.

Consequently, it is reasonable to conclude that even in the event that Parcel A is acquired and a dune walkover is developed using an alternative source of funds, a Mid-Island Parks and Public Beach Improvements alternative that acquires Parcels B and C and installs public restrooms and provides other passive public outdoor recreation opportunities would provide substantial recreational benefits to the public over an extended timeframe. The land acquisition and infrastructure costs of the alternative are well documented, reasonable, and appropriate. The alternative has a strong nexus to the recreational injury caused by the DWH oil spill. It would provide new and improved public access to trust resources that were injured by the DWH oil spill and has a high probability of success. The alternative would also protect valuable shoreline habitat from future development and provide for the effective management of ongoing recreational use. Finally, public safety issues are not expected to be a concern.

3.10 EVALUATION OF NATURAL RECOVERY

OPA regulations require that "[t]rustees must consider a natural recovery alternative in which no human intervention would be taken to directly restore injured natural resources and services to baseline" (40 CFR § 990.53[b][2]).[36] Under this alternative, the AL TIG would undertake no additional restoration to accelerate recovery of injured natural resources or to compensate for lost services.

According to Section 4.10.3.3.4 of the Final PDARP/PEIS recreational injury assessment (page 4-657), the shoreline use injury began in May 2010 and lasted through November 2011. The entire shoreline recreational use injury quantified in the Final PDARP/PEIS represents interim loss that occurred during this period. Because shoreline visitation returned to pre-spill levels by the end of November 2011, future natural recovery is not available to provide compensation for remaining interim losses. The Final PDARP/PEIS (Section 5.8.2, page 5-92) also notes that interim losses of natural resources would not be compensated under a natural recovery alternative. For these reasons, the AL TIG rejects the natural recovery alternative as a viable means of compensating the public for the lost shoreline recreational use injury caused by the DWH oil spill.

3.11 OPA EVALUATION CONCLUSION

The AL TIG has completed its OPA evaluation of the set of reasonable alternatives and concludes that the following six alternatives best meet the objectives of the AL TIG, at this time:

- Gulf State Park Lodge and Associated Public Access Amenities Project
- Fort Morgan Pier Rehabilitation
- Laguna Cove Little Lagoon Natural Resource Protection
- Bayfront Park Restoration and Improvement (E&D Only)
- Dauphin Island Eco-Tourism and Environmental Education Area
- Mid-Island Parks and Public Beach Improvements (Parcels B and C)

The OPA analysis indicates that each of these six alternatives would provide recreational benefits with a strong nexus to the shoreline injuries caused by the DWH spill. The alternatives all occur in areas that were either directly oiled by the spill, were the location of response activities, or are in close proximity to these areas. Recreational benefits accrue from land acquisitions that protect valuable habitat and create public access to coastal natural resources and through the development of infrastructure and environmental stewardship resources that enhance shoreline recreation and the appreciation of Alabama's coastal natural resources. These benefits would be broadly available to the public over an extended timeframe.

Although the focus of the alternatives included in this RP/EIS is shoreline recreation, these alternatives would also benefit other natural resources and services. Specifically, land protection prevents the negative environmental impacts of development (e.g., habitat loss, impaired water quality). Similarly, infrastructure would be designed and implemented to manage public access in ways that would minimize impacts on valuable habitats and species. These approaches would also ensure that any collateral damage to the environment is minor and mitigated. Furthermore, no adverse impacts on public health are anticipated from any of the alternatives.

[36] NEPA requires evaluation of a "no action" alternative. This differs from the natural recovery alternative under OPA. The environmental consequences of the NEPA no action alternative are considered separately in Chapter 5.

Based on Trustee experience in Alabama, each of the six alternatives could be implemented at a reasonable cost and would have a high probability of success. The alternatives include provision of funding for both maintenance and monitoring to ensure these benefits would be available over the planned life of the projects. In the case of alternatives that include land acquisition, an appropriate land protection instrument (i.e., deed restriction, conservation easement) would be included to ensure that the purpose of compensating for lost recreational use as described in this plan is maintained for the life of the project.

The AL TIG also evaluated three additional projects as part of the set of reasonable alternatives:

- Fort Morgan Peninsula Public Access Improvements
- Gulf Highlands Land Acquisition and Improvements
- Mid-Island Parks and Public Beach Improvements (Parcels A, B, and C)

The OPA evaluation indicates that these three alternatives have good potential for providing public natural resource benefits but do not meet the AL TIG's objectives at this time. The Gulf Highlands Land Acquisitions and Improvements and Mid-Island Parks and Public Beach Improvements alternatives are under consideration for funding from other restoration funding sources (e.g., NFWF GEBF). Based on the OPA evaluation, including concerns raised by Baldwin County, it was determined that a third alternative, the Fort Morgan Peninsula Public Access Improvements, is not expected to provide adequate public benefits because it would create overcrowding at the beach access sites and limit the ability of the county to conduct operations in response to hurricanes.

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4.0 NEPA AFFECTED ENVIRONMENT

4.1 INTRODUCTION

This section describes the affected environment for the suite of alternatives evaluated in this RP/EIS and provides the context for the impacts described in Chapter 5, Environmental Consequences.

The northern Gulf of Mexico comprises a vast regional ecosystem—an interactive, interdependent network of organisms (from microbes to plants to animals) and their chemical, biological, and physical environment. Ranging from the coastline itself, to its bays and estuaries, expansive continental shelf, and vast open ocean and deep sea, the northern Gulf of Mexico ecosystem contains some of the nation's most diverse and productive natural resources, as described in detail in Chapter 3 of the Final PDARP/PEIS, which is incorporated by reference here.

Focusing in on the State of Alabama, which also has a diverse set of ecosystems, the following section describes the existing conditions for each of the resources potentially affected by the restoration actions proposed in this plan in Baldwin and Mobile counties. Where applicable, site-specific information is provided for each alternative. However, if the conditions are the same for all alternative sites (e.g., air quality), then the resource is discussed at the county level. Because it is only being proposed for E&D at this time, the NEPA compliance to address the Bayfront Park alternative is provided in the Final PDARP/PEIS in Section 6.4.1.4, which is incorporated by reference, and discussion of the affected environment for this project is not included in this plan. If Bayfront Park is implemented in the future, the affected environment would be detailed in the associated NEPA compliance documents associated with that decision.

4.2 PHYSICAL ENVIRONMENT

4.2.1 Geology and Substrates

Baldwin County

Baldwin County is located within the East Gulf Coastal Plain physiographic section of Alabama. The East Gulf Coastal Plain comprises Mesozoic and Cenozoic sediments (Tew and Ebersol, 2013), whose deposition depressed the Gulf to its current elevation and created deep oil reserves in the Gulf and southwestern Alabama (Hine et al., 2013).

All of the proposed alternatives in Baldwin County are located in the Coastal Lowlands physiographic district. This district is underlain by Holocene-aged alluvial low terrace deposits of predominately sand, gravel, silt, and clay that have been modified over the last 10,000 years by coastal processes such as tides, wave activity, wind, and currents (Schmid and Otvos, 2010). The sand is predominately quartz grain, resulting in beautiful white sand beaches along the Alabama Gulf Coast (Douglass, 2012). These shores are constantly being formed by coastal processes such as sea level change, waves, tides, deposition, and littoral drift (Douglass, 2012).

Humans have also had an important impact on the geologic development of the Alabama Gulf Coast by conducting activities such as wetland filling, bulkhead and dune construction, channel dredging, and degrading dunes with foot traffic (Douglass, 2012). Removal of sediments from the Gulf Coast through dredging has accelerated beach erosion because less sediment is then available for natural deposition. Additionally, along the bayside of the Gulf Coast, the construction of bulkheads is thought to have resulted in increased erosion—more than 6 miles of intertidal beaches have been lost since 1900 (Douglass, 2012). In response to increased beach erosion, long-term beach replenishment projects have

been used as a mechanism for beach management along the Gulf Coast (Douglass, 2012). Beach nourishment typically results in beaches that have different sediments and slopes than naturally occurring beaches (Watkins, 2011).

The digitized Baldwin County Soil Survey[37] (NRCS, 2015) identifies 18 different soil map units along the Gulf Coast in the area where the alternatives are located. Of these 18, only 4 are specifically located within the proposed alternative sites. These soils create beaches and primary, secondary, and scrub dunes. Primary dunes are closest to the Gulf and are highly susceptible to erosion from human activity (e.g., from people walking on them and destroying the vegetation that holds them in place) and from storms. For example, Hurricane Frederic leveled Gulf State Park's dunes and inundated the entire park in 1979, when a storm surge made landfall on the Alabama coast (USDOI, 2014). Although the dunes have been rebuilding, this process has been slowed by the impacts from storms throughout the years.

More complete descriptions of the soils intersected by the proposed project elements are provided below.

- **Tidal marsh—**Tidal marshes are coastal marshes where hydrologic fluctuations are predominately determined by the tidal movements of the adjacent ocean, bay, or estuary (USEPA, 2016a). These marshes are of a distinctive tidal flat landform and occur within elevations of 0–10 feet. They are typically vegetated with salt-tolerant, herbaceous vegetation. These marshes exist within the water table and are therefore frequently flooded or ponded, have a high water storage capacity, and are classified as hydric.
- **Coastal beaches—**Coastal beaches are primarily composed of Eolian sands that have been weathered from sedimentary rock that ranges from sand to coarse sand. These sands have a 2–20 percent slope range and create beach landforms (NRCS, 2015). Unlike tidal marshes, coastal beaches are infrequently flooded or ponded, have limited water storage capacity, and are not classified as hydric (NRCS, 2015).
- **St. Lucie sand—**St. Lucie sand comprises marine sandy deposits from sedimentary rock (NRCS, 2015). These sands are excessively drained and are not prone to flooding or ponding. They typically begin occurring slightly above sea level, from 10–400 feet, and have a minimum water table depth of 80 feet (NRCS, 2015).
- **St. Lucie-Leon-Muck complex—**This complex includes a mixture of substrates composed of 40 percent St. Lucie, 35 percent Leon, 15 percent Corolla and similar soils, and 5 percent other minor components (NRCS, 2015). It occurs between 0 and 150 feet elevation and receives abundant annual precipitation. St. Lucie substrate is described above (NRCS, 2015). Leon substrate are sandy deposits that create swales with 0–2 percent slopes. They are frequently flooded, which may result in ponding due to their poor drainage capacity. They are classified as hydric soils (NRCS, 2015). Corolla soils are semi to strongly saline, sandy substrates that create depressions with 5 percent slopes that are somewhat poorly drained. They are rarely flooded or ponded but are classified as hydric (NRCS, 2015).

[37] Electronic soil data are only as accurate as the original soil survey from which they were digitized. Changes to soils since the original publication date are not reflected in the electronic data; therefore, reported soil map units may be different than what actually exists. For example, the Baldwin County Soil Survey was originally published in 1964 (NRCS, 1964), and its authors surveyed many acres of tidal marsh soils. At the time of its original publication, tidal marsh soils may have been present; however, soils are dynamic, and any number of effects on soil formation factors can cause changes in their properties. The web soil survey was published in 2005 and updated in 2015 (NRCS, 2015) and is used to detail the affected environment. Although no formal verification of the soil surveys was performed, tidal marshes were not observed during informal site visits; therefore, it is unlikely that active tidal marsh soils are currently present in the locations identified on the soil survey maps.

Site-specific considerations related to geology and substrates for alternatives in Baldwin County are provided in Table 4-1.

Table 4-1: Site-specific Considerations for Geology and Substrates in Baldwin County

Baldwin County Alternatives	Site-specific Considerations
Gulf State Park Lodge and Associated Public Access Amenities Project	Geology: The geological characteristics of the Gulf State Park Lodge and Associated Public Access Amenities Project site are characterized in the Final Phase III ERP/PEIS (Section 11.7.6.1.1). Geologic formations that underlie the alternative site comprise alluvial and low coastal sand deposits from the Holocene era. As a general rule, the elements discussed in this RP/EIS that have been added since Phase III Early Restoration would be located within the footprint of disturbance analyzed in the Final Phase III ERP/PEIS; however, the pedestrian trail from the pier to the lodge, portions of the tram system, and possible public educational programs would be located outside of that footprint, so additional details about the affected environment related to these elements are described below. Although specific sites have not yet been determined, tram stops outside of the lodge site would be located on existing asphalt areas within Gulf State Park and would not require new ground disturbance. If any additional infrastructure (e.g., a shade shelter) is added at these sites, it would also be located on existing asphalt areas. The pedestrian trail would be located outside the area of disturbance evaluated in the Final Phase III ERP/PEIS and would be approximately 620 feet long and 8 feet wide. Any educational programs that occur outside the interpretive lobby of the lodge would likely occur on the beach. These additional areas consist of the same geologic features as the original project area. As noted under the no action alternative (Section 2.2.3), construction activities related to the lodge and conference center have commenced. The ongoing construction activities include earth moving for building construction over a total disturbed area of approximately 13 acres and have disturbed soils in this area. Substrates: The substrates at the Gulf State Park Lodge and Associated Public Access Amenities Project site are characterized in the Final Phase III ERP/PEIS (Section 11.7.6.1.1). The substrate of the site is 100% coastal beaches made up of sandy parent material with 2–20% slopes. This coastal beach substrate creates formations of a wet beach and a dune system. As a general rule, the elements in this RP/EIS that have been added since Phase III Early Restoration would be located within the footprint of disturbance analyzed in the Final Phase III ERP/PEIS; however, the pedestrian trail from the pier to the lodge, portions of the tram system, and possible public educational programs would be located outside of the footprint of disturbance analyzed in the Final Phase III ERP/PEIS. As a result, additional details about the affected environment related to these elements are described below. Although specific sites have not yet been determined, tram stops outside of the lodge site would be located on existing asphalt areas within Gulf State Park and would not require new ground disturbance. If any additional infrastructure (e.g., a shade shelter) is added at these sites, it would also be located on existing asphalt areas. The pedestrian trail would be located outside the area of disturbance evaluated in the Final Phase III ERP/PEIS and would be approximately 620 feet long and 8 feet wide. Any educational programs that occur outside the interpretive lobby of the lodge would likely occur on the beach. These additional areas consist

Baldwin County Alternatives	Site-specific Considerations
	of the same substrate types as the original project area. As noted under the no action alternative (Section 2.2.3), construction activities related to the lodge and conference center have commenced. The ongoing construction activities include earth moving for building construction over a total disturbed area of approximately 13 acres and have disturbed soils in this area.
Fort Morgan Pier Rehabilitation	Geology: The pier rehabilitation site is located on the bay side of the Gulf shoreline, bordering the Bon Secour Bay. This site is located within the Coastal Lowlands and is geologically defined by alluvial sandy deposits from the Holocene era. The base of the existing pier and most of the existing boat ramp are within this geological region. The Natural Resource Conservation Society (NRCS) defines the arm of the pier as existing in open water (NRCS, 2015). Substrates: The substrate at the pier rehabilitation site is made up almost completely of water. Along the shoreline of the project site, NRCS defines the substrate as St. Lucie sand with 0–5% slopes. See the description of St. Lucie sand above.
Fort Morgan Peninsula Public Access Improvements	Geology: The public access improvement sites are located on the Gulf side of Fort Morgan Peninsula and are also part of the Coastal Lowlands. The sites are characterized by sandy sediments from the Holocene era that are heavily tidally influenced because they border the Gulf of Mexico. Substrate: The substrate underlying the sites exclusively comprises coastal beaches (described above). To the north of the sites and south of State Highway 180 is a St. Lucie-Leon-Muck complex that creates a flat wetland area.
Gulf Highlands Land Acquisition and Improvements	Geology: The Gulf Highlands Land Acquisition and Improvements site is located west of Little Lagoon and east of Fort Morgan on the Gulf side of Fort Morgan Peninsula. The site extends inland about halfway to Bon Secour Bay and is underlain by the same alluvial deposits as other sites in southwestern Baldwin County. The coastal portion of the site begins as wet beach (8.2 acres), then transitions to frontal dunes (37.7 acres), tertiary dunes (18.7 acres), and interior scrub (45.5 acres) as it extends inland. Substrates: The site comprises two substrate types. A St. Lucie-Leon-Muck Complex (described above) begins where the vegetation line separates the beach from the more inland portion of the parcel (NRCS, 2015). The remainder of the site is composed of coastal beaches (NRCS, 2015).

Baldwin County Alternatives	Site-specific Considerations
Laguna Cove Little Lagoon Natural Resource Protection	Geology: Laguna Cove is located adjacent to Little Lagoon, a 10-mile lagoon that stretches from Fort Morgan Peninsula to the western border of Gulf State Park. The tract is situated north of State Highway 182 and extends into Little Lagoon. This area is located within the Coastal Lowlands and is geologically underlain by alluvial sand deposits from the Holocene era. These lagoons are believed to be formed through the breaching and filling of spits over time (Schwartz, 1971). Substrates: Marsh makes up the majority of the Laguna Cove site and begin in the northern portion of the tract where they are bordered by Little Lagoon. According to the NRCS Web Soil Survey (2015), soil in the marshlands is considered tidal marsh (explained below). These tidal marshes are 70% brackish, 20% salt, and about 10% other materials (NRCS, 2015). As the site extends inland, the substrate transitions from tidal marsh to relatively flat coastal beaches until the tract reaches the barrier of State Highway 182.

Mobile County

Mobile County is also located in the Coastal Plain physiographic section of Alabama and is predominately characterized by the Southern Pine Hills and the Coastal Lowlands districts. The Dauphin Island Eco-Tourism and Environmental Education Area and Mid-Island Park and Public Beach Improvements alternatives are located in the Coastal Lowlands physiographic district. As noted above, the Coastal Lowlands are composed of alluvial sand and low terrace deposits from the Holocene period.

Dauphin Island is one of the Gulf Coast Barrier Islands. The barrier islands rest on a continuous sand shelf that is about 13 feet shallower than the surrounding Gulf (Morton, 2008). The Gulf coastal deposits are composed of fine- to medium-sized quartz sand intermingled with shell fragments and some heavy minerals. The barrier island bays consist of sand of the same coarseness that is blended with silt, clay, peat, and mud (NRCS, 2015). Within the proposed alternative sites in this county, eight types of soils have been recorded, three of which occur in the proposed alternative areas. However, of the three soils occurring in the alternative areas, Osier loamy sand dominates, signifying that the majority of the land on the island is most likely wetland.

Dauphin Island is a valuable barrier island in the northern Gulf because of its location 5 miles off the southern shore of Mobile County. At 14 miles long, this island acts as a protective barrier for the coastline (USGS, n.d.). The islands and underlying alluvial deposits dissipate some of the energy of oncoming storms and help alleviate impacts on the Gulf coastline (Morton, 2008). Dauphin Island is a microtidal barrier island (Froede, 2007), meaning that wave and storm activity dominate the geomorphological processes of this island because of its sandy geologic foundation. Over the last century, the island has grown westward as a result of lateral wind deposition (Morton, 2008). However, the creation of the Mobile Bay shipping channel in the late 20th century (i.e., dredging) has disrupted the littoral sediment deposition patterns for Dauphin Island.

Increased storm intensity and frequency, combined with sea level rise and decreased sediment availability, have resulted in the erosion of Dauphin Island (USGS, 2010). Because of its degradation susceptibility, artificial sand dunes were built along the southwestern portion of the island following Hurricane Georges in 1998 and again in 2005 after Hurricane Katrina. However, both of these storms decimated the efforts to protect the island and, as a result of storm surge following Hurricane Katrina in 2005, the island was split into east and west (Froede, 2007). The sand of Dauphin Island is continually eroding (USGS, 2010). The following soil types are discussed below.

- **Fripp sand, rolling—**Fripp sand consists of extremely deep and rapidly drained soils that are highly permeable and tend to have very slow runoff rates (NRCS, 2015). Fripp soils include sandy deposits that form rolling dunes with 2–20 percent slopes. These soils are infrequently flooded and are often adjacent to beaches and water along coastlines (NRCS, 2002). These soils are not ideal for farming but are often used for recreational beach use and cottage property (NRCS, 2002).
- **Duckston sand, 0–2 percent slopes—**Duckston sands are beach sands from sedimentary rock that are poorly drained and exist in flat or concave landforms, typically between coastal dunes and marshes in elevations that are no more than five feet above tide level (NRCS, 1999).These soils are frequently flooded, classified as hydric, and consist of multiple horizons (NRCS, 1999). These soils are usually vegetated; however, their susceptibility to flooding makes them poor farmland.
- **Psamments—**Psamments are unconsolidated sandy deposits from sedimentary rock that occur within elevations of 0–10 feet (NRCS, 2015). They typically occur in dune formations and have a slope of 1–15 percent. These soils are frequently flooded, but they do not hold water well and are not classified as hydric. They are also low in nutrients and do not make for fertile farmland (NRCS, 2015).

Site-specific considerations regarding geology and substrates for the alternatives in Mobile County are discussed in Table 4-2.

Table 4-2: Site-specific Considerations for Geology and Substrates in Mobile County

Mobile County Alternatives	Site-specific Considerations
Dauphin Island Eco-Tourism and Environmental Education Area	Geology: The geology of the site comprises alluvial and Coastal Lowland deposits, which, as noted above, consist mainly of sand and silt. The main part of Dauphin Island blocks this site from the direct storm surges off the Gulf. Substrates: The center of the site encloses a small (approximately 9 acres) body of water. A small inlet on the southwestern corner of the parcel connects it to Aloe Bay. The remainder of the parcel is close to 12 acres and, according to NRCS (2015), its substrate is made up completely of psamments. As described above, psamments are non-cohesive dune sands that are not listed as hydric.
Mid-Island Parks and Public Beach Improvements (Parcels A, B, and C)	Geology: The geology of all of the Mid-Island Parks and Public Beach Improvements parcels is the same as the eco-tourism site—they all exist in the Coastal Lowlands of the multi-tidal barrier island. However, Parcel A is the most susceptible to erosion and destruction because it is located on the Gulf side of the island and is threatened by increased storm intensity and frequency. Parcel A is bordered by foredunes before abutting Bienville Boulevard on the northern edge of the parcel. Substrates: The parcels span four different soil types. Parcel A is located on the Gulf-facing beach side of the island and is composed mainly of rolling Fripp sand (NRCS, 2015). In the northwestern corner of the plot, toward the road, the substrate changes from rolling Fripp sand to Duckston sand with 0–2% slopes (NRCS, 2015). Parcel B is located between A and C and between two roads. This parcel consists completely of Psamments (described above) (NRCS, 2015). Parcel C lies on the bay side of the island and also consists exclusively of Psamments (NRCS, 2015).

Mobile County Alternatives	Site-specific Considerations
Mid-Island Parks and Public Beach Improvements (Parcels B and C)	Geology: The geology of the Parcels B and C are the same as the eco-tourism parcel. They exist within the Coastal Lowlands of the multi-tidal barrier island. Substrates: According to the NRCS Web Soil Survey (2015), both parcels are underlain by psamments substrate.

4.2.2 Hydrology and Water Quality

Baldwin County

The Coastal Lowlands of Baldwin County are in the Southern Coastal Plains Ecoregion, a subtropical region with abundant water resources. The surface hydrology of this ecoregion is characterized by lakes, karst springs, marshlands, and swamps (Drummond, 2016). All of the alternative sites in Baldwin and Mobile counties are in the Mobile and Tensaw River Basin. This basin is the sixth largest watershed in the United States and discharges 65 percent of Alabama's land area drainage (AUWRC, 2016). Mobile Bay, the outfall of the Mobile and Tensaw River Basin, is Alabama's largest estuary system (AUWRC, 2016). It has an average freshwater discharge of 62,000 cubic feet per second (AUWRC, 2016).

The most prominent elements of the Coastal Lowlands hydrologic cycle include precipitation, evapotranspiration, and groundwater discharge and recharge (Chandler et al., 1985). The Coastal Lowlands are subject to hydrologic inputs from large storm surges off of the Gulf and provide heavy precipitation to the area. This region receives between 40 and 70 inches of rain per year (Drummond, 2016; AUWRC, 2016).

Much of this region's precipitation comes from storm events (Conner et al., 1989). The Alabama coast has one of the highest rates of hurricane landfall in the country (AUWRC, 2016). Periodic hurricanes and tropical storms have been found to be beneficial to coastal ecosystems because they bring in inorganic sediments that contribute to wetland formation and productivity (Conner et al., 1989). These extreme rainfall events have increased 27 percent in the last 64 years as a result of climate change and are projected to continue to increase (USGCRP, 2014). These storms are expected to increase in both frequency and intensity (Di Liberto, 2016). Enhanced storm intensity and frequency could nullify the beneficial impacts the coastline would gain from periodic storms by overburdening this fragile ecosystem.

Precipitation is the primary groundwater recharge mechanism for the Gulf Coast area (Lambert, 2008). In Baldwin County, this precipitation feeds the Miocene-Pliocene Aquifer, which is part of the larger Coastal Lowlands Aquifer System and is also the main water source for the county (Robinson et al., 1996). The aquifer is retained between an impermeable layer of clay on the bottom, which dates back to the Oligocene epoch, and Holocene alluvial deposits on the top. The aquifer is suspended within deposits of the Miocene and Pliocene epochs. The aquifer area that extends along the Gulf Peninsula of Baldwin County has groundwater levels that are less than 5 feet above sea level, which results in groundwater water quality issues for this region because of salt intrusion.

Water quality issues also exist in the bays that border Baldwin County's western coastline and the northern coastline of Fort Morgan Peninsula. Both Mobile Bay and its sub-estuary, Bon Secour Bay, were listed on the USEPA 2016 303(d) Impaired Waters list for pathogen pollution from urban runoff and storm sewers (ADEM, 2016a). Even though the bay is listed as impaired, the surface waters on the peninsula are not listed as impaired mainly because of the high permeability of the sands that allows a

portion of the runoff to drain into the ground before reaching the surface waterbodies. The Gulf of Mexico is not listed as impaired.

Site-specific consideration for hydrology and water quality for the alternatives in Baldwin and Mobile counties are described in Tables 4-3 and 4-4, respectively.

Table 4-3: Site-specific Considerations for Hydrology and Water Quality in Baldwin County

Baldwin County Alternatives	Site-specific Considerations
Gulf State Park Lodge and Associated Public Access Amenities Project	Hydrology: The hydrologic characteristics of the Gulf State Park Lodge and Associated Public Access Amenities Project site are characterized in the Final Phase III ERP/PEIS (Section 11.7.6.2). Water that infiltrates this area is rapidly drained through the permeable soils and does not usually pond on the beach (NRCS, 2015). As a general rule, the elements discussed in this RP/EIS that have been added since Phase III Early Restoration would be located within the footprint of disturbance analyzed in the Final Phase III ERP/PEIS; however, the pedestrian trail from the pier to the lodge, portions of the tram system, and possible public educational programs would be located outside of that footprint, so additional details about the affected environment related to these elements are described below. Although specific sites have not yet been determined, tram stops outside of the lodge site would be located on existing asphalt areas within Gulf State Park and would not require new ground disturbance. If any additional infrastructure (e.g., a shade shelter) is added at these sites, it would also be located on existing asphalt areas. The pedestrian trail would be located outside the area of disturbance evaluated in the Final Phase III ERP/PEIS and would be approximately 620 feet long and 8 feet wide. Any educational programs that occur outside the interpretive lobby of the lodge would likely occur on the beach. This additional area consists of the same water features and hydrology as the original project area. Moreover, no waterbodies or features are located where additional elements would be sited, and the high permeability and drainage capacity of the soils extends throughout the location of the new elements. As noted under the no action alternative (Section 2.2.3), construction activities related to the lodge and conference center have commenced. The ongoing construction activities may alter hydrology by compacting soils and decreasing the permeability on the approximately 13 acres of disturbed area. Water Quality: The water quality characteristics of the site are characterized in the Final Phase III ERP/PEIS (Section 11.7.6.2). Gulf State Park and its waters are located in the Perdido River Basin Group, which was last monitored during the 2006–2010 River Basin Rotation schedule (ADEM, 2010). During this time, lakes in Gulf State Park were not identified as impaired. The site does not contain any standing bodies of water, and no issues with water quality have been identified on this site. As a general rule, the elements discussed in this RP/EIS that have been added since Phase III Early Restoration would be located within the footprint of disturbance analyzed in the Final Phase III ERP/PEIS; however, the pedestrian trail from the pier to the lodge, portions of the tram system, and possible public educational programs would be located outside of that footprint, so additional details about the affected environment related to these elements are described below. Although specific sites have not yet been determined, tram stops outside of the lodge site would be located on existing asphalt areas within Gulf State Park and would not require new ground disturbance. If any additional infrastructure (e.g., a

Baldwin County Alternatives	Site-specific Considerations
	shade shelter) is added at these sites, it would also be located on existing asphalt areas. The pedestrian trail would be located outside the area of disturbance evaluated in the Final Phase III ERP/PEIS and would be approximately 620 feet long and 8 feet wide. Any educational programs that occur outside the interpretive lobby of the lodge would likely occur on the beach. This additional area consists of the same water quality characteristics as the original project area and there are no waterbodies or features located where additional elements would be sited. As noted under the no action alternative (Section 2.2.3), construction activities related to the lodge and conference center have commenced. Ongoing construction activities may affect water quality by increasing sediment loading in stormwater runoff. Floodplains: The floodplain characteristics of the site are characterized in the Final Phase III ERP/PEIS (Section 11.7.6.2). The site is located in the Federal Emergency Management Agency (FEMA)-designated 100-year floodplain within zone VE, which has a base flood elevation (BFE) of 12 feet (FEMA, 2016). Floods for this site typically occur from the Gulf side of the site rather than from runoff from the northern, inland side because of the high permeability and excessive drainage capacity of the sandy substrate that stretches inland. As a general rule, the elements discussed in this RP/EIS that have been added since Phase III Early Restoration would be located within the footprint of disturbance analyzed in the Final Phase III ERP/PEIS; however, the pedestrian trail from the pier to the lodge, portions of the tram system, and possible public educational programs would be located outside of that footprint, so additional details about the affected environment related to these elements are described below. Although specific sites have not yet been determined, tram stops outside of the lodge site would be located on existing asphalt areas within Gulf State Park and would not require new ground disturbance. If any additional infrastructure (e.g., a shade shelter) is added at these sites, it would also be located on existing asphalt areas. The pedestrian trail would be located outside the area of disturbance evaluated in the Final Phase III ERP/PEIS and would be approximately 620 feet long and 8 feet wide. Any educational programs that occur outside the interpretive lobby of the lodge would likely occur on the beach. This additional area consists of the same floodplain categorization and BFE as the original project area. As noted under the no action alternative (Section 2.2.3), construction activities related to the lodge and conference center have commenced. Construction activities are ongoing in the floodplain area, but they have not changed the floodplain. Wetlands: The wetlands of the site are characterized in the Final Phase III ERP/PEIS (Section 11.7.6.2). An on-site wetland delineation designated 0.18 acre of wetlands adjacent to the conference center. A subsequent request for a preliminary jurisdictional determination of surveyed wetlands was submitted to USACE on May 29, 2013, and in a letter dated June 24, 2013, USACE approved the jurisdictional determination of wetlands (File Number: SAM-2013-00673-JEB). As a general rule, the elements discussed in this plan that have been added since Phase III Early Restoration would be located within the footprint of disturbance analyzed in the Final Phase III ERP/PEIS; however, the pedestrian trail from the pier to the lodge, portions of the tram system, and possible public educational programs would be located outside of that footprint. As a result, additional details about the affected environment related to these elements are described below.

Baldwin County Alternatives	Site-specific Considerations
	As noted above, tram stops outside of the lodge site would be located on existing asphalt areas within Gulf State Park and would not require new ground disturbance. If any additional infrastructure (e.g., a shade shelter) is added at these sites, it would also be located on existing asphalt areas. The pedestrian trail would be located outside the area of disturbance evaluated in the Final Phase III ERP/PEIS and would be approximately 620 feet long and 8 feet wide. Any educational programs that occur outside the interpretive lobby of the lodge would likely occur on the beach. No wetlands are located in the area of the proposed additional elements. As noted under the no action alternative (Section 2.2.3), construction activities related to the lodge and conference center have commenced. The ongoing construction activities include filling the wetland on site and beginning construction of new wetlands to mitigate that wetland fill.
Fort Morgan Pier Rehabilitation	Hydrology: This pier rehabilitation site extends into the Bon Secour Bay. The alternative would occur over open water. Water Quality: Bon Secour Bay is listed as impaired in the 2016 ADEM 303(d) list for an abundance of enterococci, which is an intestinal pathogen (ADEM, 2016a). However, according to ADEM's 2010 water quality report, the pollution level was only exceeded on the western shore of Baldwin County and did not extend out to the tip of Fort Morgan Peninsula (ADEM, 2010). Floodplains: The site is located in the FEMA-designated 100-year floodplain in Zone VE with a BFE of 11 feet (FEMA, 2016). Wetlands: The site extends from the coast into Bon Secour Bay, which is a wetland designated by the National Wetlands Inventory (NWI) as E1UBL (USFWS, 2016a). This designation signifies subtidal estuarine wetlands that are continually submerged and have unconsolidated base floors. No plant species are found in this wetland type. The portion of the site that is on the shoreline is designated as intertidal estuarine unconsolidated shore wetlands that are not frequently flooded (NWI code E2USP).
Fort Morgan Peninsula Public Access Improvements	Hydrology: The public access improvement sites are located on the Gulf side of Fort Morgan Peninsula and are subject to heavy precipitation and storm surges. No surface water exists in any of the improvement sites. Water Quality: Fort Morgan Beach is not listed on the 303(d) impaired waters list. The most recent water quality testing of this beach showed enterococci levels below the USEPA threshold (indicating good water quality) (ADEM, 2016a). Floodplains: All of the public access improvement sites are located in the FEMA-designated 100-year floodplain. The majority of the sites are in Zone VE with a BFE of 12 feet with most flooding coming from the Gulf side of the site (FEMA, 2016). Wetlands: All of the public access improvement sites exist outside of a designated wetland area along the coastal beach. Just south of the sites, where parts of the access walkways may extend, is a strip of wetland designated as an Intertidal Marine Wetland with irregularly flooded, unconsolidated sandy shore (NWI code M2US2P) (USFWS, 2016a). These wetlands are mainly dominated by grasses.

Baldwin County Alternatives	Site-specific Considerations
Gulf Highlands Land Acquisition and Improvements	Hydrology: The Gulf Highlands Land Acquisition and Improvements site is located along Fort Morgan Peninsula in a thin section of the landmass that extends across about 0.7 mile. The site takes up about 0.4 mile of this stretch and abuts the ocean on the south side and is scrubland on the north side. The site itself is pocketed with small standing bodies of surface water (USGS, 2016a). This area is characterized by natural Gulf Shore hydrologic processes, as mentioned above. Water Quality: No water quality issues have been reported for this site. Floodplains: The majority of the site, from the middle of the coastal beach to the northern border, is located in the FEMA-designated 500-year flood zone. The southern, coastline border of the site is in the 100-year floodplain with a BFE of 12 feet (FEMA, 2016). Wetlands: The majority of the site is not designated as a wetland; however, the site contains small pockets of emergent palustrine wetlands that are characterized by persistent species and have a temporary to seasonally flooded water regime (NWI code PEM1A) (USFWS, 2016a). Characteristic species in these wetlands include cattails, sedges, rushes, saw grass, and reed (Houston Advanced Research Center, 2011). These wetlands make up about 1.9 acres of the 113-acre site (USFWS, 2016a).
Laguna Cove Little Lagoon Natural Resource Protection	Hydrology: The site is located on Little Lagoon. Little Lagoon is an estuarine, brackish body of water on Fort Morgan Peninsula (Little Lagoon Preservation Society, 2011). It receives most of its water from precipitation, groundwater discharge, runoff, and overflow from the surrounding waterbodies of Lake Shelby and the Gulf of Mexico. Water Quality: Little Lagoon used to be listed on ADEM's 303(d) impairment list for excess nutrients. Prior to 2010, the entire waterbody was reported as being impaired (ADEM, 2008). After 2010, only the central and eastern portions of the waterbody were impaired (ADEM, 2010). Urban runoff and storm sewers have added pollution to this site that elevate nutrient levels in the lagoon (ADEM, 2010). The lagoon has not been on the impaired list since 2012 (ADEM, 2016a, 2014, 2012). Floodplains: The site is in zone AE of the FEMA-designated 100-year floodplain with a BFE of 11 feet. The coastal beach portion of the site is in the FEMA-designated 100-year floodplain zone VE with a BFE of 12 feet (FEMA, 2016). Wetlands: The tidal marshes of the Laguna Cove site are designated as wetlands. Most of the marshes are designated as intertidal estuarine wetlands, with Broad-leaved Evergreen Scrub-Shrub Irregularly Flooded (NWI code E2SS3P) wetlands existing closest to the coastal beaches. As the intertidal estuarine wetlands extend in to the lagoon, they transition mostly to persistent emergent wetlands that are irregularly flooded (NWI code E2EM1P) (USFWS, 2016a). The wetlands at the tip of the tidal marshes extend into the lagoon and are intertidal estuarine wetlands that are unconsolidated and regularly flooded (NWI code E2USN) (USFWS, 2016a). Some small pockets within the tidal marshes are categorized as subtidal estuarine wetlands that are continuously submerged and have an unconsolidated bottom (NWI code E1UBL) (USFWS, 2016b). Altogether the wetlands equate to about 39 acres within the site (USFWS, 2016a).

Mobile County

The hydrologic processes of Mobile County are generally the same as those described for Baldwin County, except Dauphin Island is not affected by runoff because it is not connected to Mobile County. Rather, the dynamics of the island are largely driven by storms. The tidal range in the north-central Gulf is very low; therefore, the hydrologic cycles of the beaches and barrier islands along the shoreline are primarily formed by waves, storms, and currents (Morton, 2008). On average, the Gulf Coast is hit by a hurricane every 52 months (Kidd, 1988). Storms are the driving agent of sediment transport and land loss on time scales relative to humans, while sea level rise is the dominant cause of land loss along coasts when analyzed on a geologic time scale (Morton, 2008). Storm forces not only affect the shape of the island, but storms that breach the Gulf-facing beaches can crash on to the island and infiltrate the aquifer beneath it (Kidd, 1988). Groundwater is the sole water source on Dauphin Island, similar to the proposed Baldwin County sites in Baldwin County, because the excessive drainage capacity of the sandy substrate removes any potential for perennial streams to exist on the island. Site-specific considerations for hydrology and water quality for the alternatives in Mobile County are detailed in Table 4-4.

Table 4-4: Site-specific Considerations for Hydrology and Water Quality in Mobile County

Mobile County Alternatives	Site-specific Considerations
Dauphin Island Eco-Tourism and Environmental Education Area	Hydrology: The site encompasses a small body of water that connects to Aloe Bay (Google Earth, 2015a), which is a sub-bay of the larger Mobile Bay. The area comprises wetlands and demonstrates hydrology consistent with that of consistently flooded estuarine marshes. Water Quality: The neighboring waterbody, Aloe Bay, is not listed on the 303(d) list and has not been listed in the recent past (ADEM, 2016a). Floodplains: The site is in the FEMA-designated 100-year floodplain. The site is in zone AE, with a BFE of 9 feet (FEMA, 2016). Wetlands: The majority of the site is composed of wetlands. The enclosed waterbody is classified as an intertidal estuarine wetland from the eastern site border of Lemoyne Drive to the western border (Aloe Bay) (USFWS, 2016a). This wetland is characterized by irregularly exposed unconsolidated shore (NWI code E2USM) (USFWS, 2016a). The northern and southern ends of the site are classified as forested, palustrine freshwater wetlands dominated by needle-leaved evergreen that are modified by temporary floods of tidal surface water (NWI code PSS4S) (USFWS, 2016a). Approximately 10% of the site is uplands.
Mid-Island Parks and Public Beach Improvements (Parcels A, B, and C)	Hydrology: The Mid-Island Parks and Public Beach parcels (A, B, and C) stretch across Dauphin Island and are bordered on the bay side (Parcel C) by Bayou Second and on the ocean side (Parcel A) by the Gulf (Google Earth, 2015a). Bayou Second is characterized by deep water wetland hydrology, and the Gulf exhibits subtropical open ocean hydrology (USFWS, 2016a). No identifiable surface water exists on any of the parcels (USGS, 2016b). Water Quality: Bayou Second and its bay, Graveline Bay, are not listed on the 303(d) list and have not been listed in the recent past. During mid-summer 2016, the east end of Dauphin Island was closed for swimming because of unacceptable levels of enterococci (Stokes, 2016); however, the poor water quality did not migrate far enough west to affect the beach at the site. The Dauphin Island Public Beach (Parcel A) generally has unimpaired water quality readings (i.e., in 2016, only

Mobile County Alternatives	Site-specific Considerations
	1 sample out of 17 was above water quality standards) and had a 100% pass rate from 2012–2015 (Mobile Baykeeper, 2016). Floodplains: All of the parcels are in the FEMA-designated 100-year floodplain. Parcels B, C, and approximately half of A are in Zone AE with a BFE of 9 feet. The other half of Parcel A is in zone VE with a BFE of 12 feet (FEMA, 2016). Wetlands: The parcels are not designated wetland areas. Parcel C is bordered by subtidal estuarine deepwater that connects to estuarine and marine wetlands within Bayou Second. The Gulf, on the south side of the parcels, is designated as estuarine and marine deepwater (USFWS, 2016a). There is a small sliver of estuarine and marine wetland on the Gulf side of Parcel A, but it is not in the parcel boundaries.
Mid-Island Parks and Public Beach Improvements (Parcels B and C)	Hydrology: Parcels B and C begin north of Bienville Boulevard and extend to Bayou Second (Google Earth, 2015a). Bayou Second is characterized by deepwater wetland hydrology, and the Gulf exhibits subtropical open ocean hydrology but is not within the parcel boundaries, as noted above (USFWS, 2016a). No identifiable surface water exists on any of the parcels (USGS, 2016b). Water Quality: Bayou Second and its bay, Graveline Bay, are not listed on the 303(d) list and have not been listed in the recent past (ADEM, 2016a). Floodplains: See above (Dauphin Island Access: Mid-Island Parks and Public Beach Improvements [Parcels A, B, and C; Floodplain]). Wetlands: The parcels are not designated wetland areas. Parcel C is bordered by subtidal estuarine deepwater that connects to estuarine and marine wetlands within Bayou Second (USFWS, 2016a). The water on the south side of the parcel is estuarine and marine deepwater.

4.2.3 Air Quality

USEPA defines ambient air in 40 CFR Part 50 as “that portion of the atmosphere, external to buildings, to which the general public has access.” In compliance with the 1970 Clean Air Act (CAA) and the 1977 and 1990 CAA Amendments, USEPA promulgated National Ambient Air Quality Standards (NAAQS). The NAAQS include primary standards that set limits to protect public health, including the health of “sensitive” populations such as asthmatics, children, and the elderly. To date, USEPA has issued NAAQS for seven criteria pollutants: carbon monoxide, sulfur dioxide, particles with a diameter less than or equal to a nominal 10 micrometers (PM_{10}), particles with a diameter less than or equal to a nominal 2.5 micrometers ($PM_{2.5}$), ozone, nitrogen dioxide, and lead. Individual states may promulgate their own ambient air quality standards for these “criteria” pollutants, provided that they are at least as stringent as the federal standards. Table 4-5 provides the state and federal ambient standards.

The Air Quality Index (AQI) monitoring program was developed from the NAAQS baseline standards. According to USEPA, AQIs of under 50 are considered good air quality. As AQIs advance beyond 50, air quality begins to get worse, and AQIs of over 300 are classified as hazardous (USEPA, 2016e).

Table 4-5: State and Federal Ambient Standards for Criteria Air Pollutants

Pollutant	Averaging Period	Federal Primary Standard	Alabama State Standard
Ozone	8-hour	0.075 ppm	Same as federal
$PM_{2.5}$	Annual (arithmetic mean) 24-hour	15.0 µg/m^3 35 µg/m^3	Same as federal Same as federal
PM_{10}	24-hour	150 µg/m^3	Same as federal
Carbon monoxide	8-hour 1-hour	9 ppm 35 ppm	Same as federal Same as federal
Nitrogen dioxide	Annual (arithmetic mean) 1-hour	0.053 ppm 0.100	Same as federal Same as federal
Lead	1-hour	0.100 ppm	Same as federal
Sulfur dioxide	1-hour	75 ppb	Same as federal

Notes: ppm – parts per million; ppb – parts per billion; µg/m^3 – micrograms per cubic meter
Source: USEPA, 2011a

Baldwin County

Baldwin County is listed as in attainment for all NAAQS pollution metrics (USEPA, 2016b) (i.e., it is in compliance with all air quality standards). Baldwin County has overall good air quality (USEPA, 2015a). Between the years of 2010 and 2015, Baldwin County maintained an average AQI of 39 (USEPA, 2010a, 2011b, 2012b, 2013a, 2014a, 2015a), which is well under the poor air quality threshold of 50. The quality of the air has increased over the last ten years in Baldwin County (USEPA 2017a). In 2015, the county had good air quality for 87 percent of the AQI recorded days (USEPA, 2015a). This could be attributed to the low population density and industry level in the Gulf Shores area. ADEM's 2015 Air Quality Ambient Air Plan reported that the Daphne-Fairhope Core Based Statistical Area in Baldwin County has a Population Weighted Emissions Index (PWEI) of 125 million persons-tons per year, in comparison to Birmingham's PWEI of 150,568 million persons-tons per year and Montgomery's 2,136 million persons-tons per year (ADEM, 2015).

Mobile County

Mobile County is also listed as in attainment for all NAAQS pollution metrics (USEPA, 2016b). Mobile County has overall good air quality, with 75 percent of its AQI recorded days falling under the 50 threshold (USEPA, 2015b). Between the years of 2010 and 2015, Mobile County maintained an average AQI of 38 (USEPA, 2010b, 2011c, 2012c, 2013b, 2014b, 2015b) However, in 2015, ADEM reported that the city of Mobile core based statistical area had the second highest PWEI in the State behind Birmingham. This required the county to get a get a sulfur dioxide monitor in the Mobile metropolitan statistical area. Still, over the last ten years air quality has improved in the area (USEPA, 2017b).

4.2.4 Climate Change

Climate change is projected to lead to a number of impacts in the southeastern United States, including increases in air and water temperatures, decreased water availability, an increase in the frequency of severe weather events, and ecosystem change. Average annual temperatures are predicted to increase 3 to 10 degrees Fahrenheit by the end of the next century (USGCRP, 2014). It is suggested that heavier rainfall is expected, separated by increased dry periods, which would result in increased risk of flooding and drought (USGCRP, 2014). Coastal environments are expected to be at increasing risk due to sea level

rise and increases in hurricane intensity and storm surge. Some areas in Texas and Louisiana are experiencing subsiding land elevations, which are further exacerbating effects of sea level rise (NOAA, 2013). In the Gulf Coast region, the sea level rise threat is moderate in comparison to other geologically sensitive areas (USGCRP, 2014).

Climate change will likely have a number of impacts on the aquatic ecosystems of the northern Gulf of Mexico. Higher ocean temperatures are expected to increase coral bleaching (Scavia et al., 2002). Sea level rise and increasingly frequent coastal storms and hurricanes and associated storm surges will affect shorelines, altering coastal wetland hydrology, geomorphology, biotic structure, and nutrient cycling (Michener et al., 1997). Furthermore, an increase in atmospheric carbon dioxide (CO_2) concentrations is projected to increase freshwater discharge from the Mississippi River to the ocean, decrease aquatic oxygen content, and expand the hypoxic zone in the northern Gulf of Mexico (Justić et al., 1997). Sea level rise could result in more frequent flooding of low-lying areas, which would permanently alter some ecological communities (USGCRP, 2014).

In addition to effects on natural resources, climate change effects will likely cause damage to transportation infrastructure, affecting travel and damaging roads and bridges (USGCRP, 2014). Hurricanes and storms will continue to damage property. Long-term development and projects will need to consider climate-related effects in design stages to improve structure resiliency.

4.2.5 Noise

Baldwin County

Under certain conditions, the sound levels on the Gulf Coast are generated by high waves and wind. Vehicular traffic, typical landscaping activities, maintenance of commercial buildings, and limited seasonal recreational activities influence noise levels at the Gulf State Park Lodge and Associated Public Access Amenities Project site for all the proposed project elements. Otherwise, the predominant sources of noise experienced at the Gulf State Park Lodge and Associated Public Access Amenities Project and the Laguna Cove Little Lagoon Natural Resource Protection sites are automobile and truck traffic from State Highway 182 and State Highway 180 to the north of the sites and beach-related recreational activity to the south. Laguna Cove is close to the Bon Secour National Wildlife Refuge and experiences noise from many types of wildlife, especially birds. Other noise sources include ground maintenance and occasional watercraft traffic on the adjacent lagoon and the Gulf of Mexico. On Mobile Point where the Fort Morgan Pier Rehabilitation and Peninsula Public Access Improvement sites are located, noise is primarily driven by wind and wildlife because there is less development in this area than in the sites closer to the mainland. Fort Morgan was designated as an Important Bird Area because birds use the area during the fall and spring avian migration periods. Much of the noise in the area during these periods can be attributed to avian vocalization. At the Fort Morgan Pier Rehabilitation site, some noise exists from boat traffic from the boat launch just east of the pier.

Mobile County

Similar to Baldwin County, Mobile County experiences a great deal of noise from high winds. This is especially true on Dauphin Island because it is located in the open ocean and receives the strongest winds from the Gulf. The Dauphin Island Eco-Tourism and Environmental Education Area experiences less noise from winds than Mid-Island Parks and Public Beach Improvement sites because it is located in Mobile Bay and not directly along the Gulf. The Eco-Tourism and Environmental Education Area also experiences noise from Lemoyne Road, which is the main road that goes to the Town of Dauphin Island from the shore of the mainland. The Mid-Island Parks and Public Beach Improvement sites experience noise from traffic along Bienville Boulevard, which is the main road that stretches from east Dauphin

Island to the west and serves as the main route for beach access for tourists. These sites also experience more noise from general beach activity because they encompass the Dauphin Island public beach area. Dauphin Island is one of the top locations for witnessing spring avian migrations (Dauphin Island Park and Beach, 2016a). During migratory periods, avian vocalization is noticeable along Dauphin Island's shoreline and bays.

4.3 BIOLOGICAL ENVIRONMENT

Biological resources include native or naturalized plant and animal species and the habitats within which they occur. Plant associations are referred to generally as vegetation, and animal species are referred to as wildlife. Habitat can be defined as the resources and conditions present in an area that support a plant or animal. Although the existence and preservation of biological resources are intrinsically valuable, these resources also provide aesthetic, recreational, and socioeconomic values to society. For the purpose of this document, these resources focus on species or vegetation types that are important to the function of the surrounding ecosystem, are of societal importance, or are protected under federal or state laws or statutes. The resources are divided into habitats, wildlife species, marine and estuarine fauna, and protected species within Baldwin and Mobile counties.

4.3.1 Habitats

Baldwin County

Several plant communities are present within Baldwin County, including maritime forests/uplands, SAV, wetlands, coastal barrier island/dunes/beaches, bogs, marshes, and wet longleaf pine savannah. Each of these plant communities supports a different array of plant species. Although there is some crossover of species in the transition zone between habitats, the majority of the plant communities maintain a specific set of plant species. Each of these communities is described in detail below, followed by site-specific considerations.

- **Maritime forest—**maritime forests contain primarily upland forest species. These areas are dominated by large trees such as pignut hickory (*Carya glabra*), oaks (*Quercus* sp.), pines (*Pinus* sp.), Southern magnolia (*Magnolia grandifolia*), and red maple (*Acer rubrum*). Beneath the trees, the maritime forest contains a thick understory of shrubs and herbaceous species, including blueberries (*Vaccinium* spp.), dwarf huckleberry (*Gaylussacia dumosa*), wax myrtle (*Myrica cerifera*), hollies (*Ilex* sp.), and coreopsis (*Coreopsis tinctoria*) (Alabama State Parks, 2013).
- **Wetlands/low wetlands—**wetlands/low wetlands are dominated primarily by plants that are adapted to living in saturated soils, but not in frequently inundated soils. Low wetlands include palustrine forested wetlands, dominated by pines, oaks, and water tupelo (*Nyssa aquatic*); palustrine scrub-shrub wetlands, dominated by black willow (*Salix nigra*), elder berry (*Sumbucus canadensis*), saw palmetto (*Serenoa repens*), and sweet bay (*Magnolia virginiana*); and palustrine emergent wetlands, dominated by a number of herbaceous species, including cardinal flower (*Lobelia cardinalis*), cinnamon fern (*Osmunda cinnamomea*), chain fern (*Woodwardia fimbriata*) and royal fern (*Osmunda regalis*) (Alabama State Parks, 2013).
- **Dunes—**dunes include hills of sand built by wind or the flow of water. Dunes require a healthy plant community for survival because the root structure of the plants holds the easily shifted sands in place. Dune habitats are separated into four different sections: primary dunes that reside closest to the water, secondary dune, tertiary dune, and scrubland. Observed dune plants include sand pine (*Pinus clausa*), short leaf pine (*Pinus echinata*), sand live oak (*Quercus geminata*), sea oats (*Uniola paniculata*), panic grasses (*Panicum* spp.), coastal bluestem

(*Schizachyrium maritimum*) beach grass (*Panicum amarum*), and beach sunflower (*Helianthus debilis*). Scrubland occurs on areas of deep, well-washed, sterile sands in temperate or subtropical environments. They consist of dense hardwood patches of low-growing oaks interspersed with bare areas of white sand and are dominated by myrtle oak (*Quercus myrtifolia)*, Chapman's oak (*Qercus chapmanii*), sand live oak (*Quercus geminata*), scrub holly (*Ilex cumulicola*), scrub plum (*Prunus geniculate*), scrub hickory (*Carya floridana*), gray false rosemary (*Conradina canescens*), and saw palmetto (*Serenoa repens*) (Alabama State Parks, 2013).

- **Bogs—**bogs are generally defined as depressional areas with no large inflows or outflows of water; water is generally acidic, and the soils are low in nutrient content. Additionally, bog soils are often composed of decaying plant matter, usually mosses, and have very little mineral material. Hydric soils are the primary location of bogs within the project sites. Not only do the bogs in the region contain unique plant species, they also contain state rare species such as bog buttons (*Lachnocaulon anceps*), hatpins (*Eriocaulon compressum*), meadow beauties (*Rhexia* sp.), pitcher plants (*Sarracenia* sp.), purple bladderwort (*Utricularia purpurea*), and yellow-eyed grass (*Xyris iridifolia*) (Alabama State Parks, 2013).
- **Marshes—**marshes include areas with plants whose root system can withstand more frequent durations of inundation than plants located in the low wetlands. Observed plant species in the marshes include cattail (*Typha latifolia*), rushes (*Juncus* sp.), bulrushes (*Scirpus* sp.), sawgrass (*Cladium jamaicense*) and water lily (*Nymphaea odorata*). Marshes also provide food for wintering waterfowl, spawning and foraging for commercially important finfish and shellfish, and support endangered and threatened species such as sea turtles and manatees (Alabama State Parks, 2013).
- **Beach—**beaches are landforms that consist of coastal accumulations of sandy sediment deposits that are shaped by wave and tidal activity (USGS, 2016c). Beaches provide a productive habitat for a number of species including sea turtles, beach mice, birds, and shellfish (USFWS, 2017). Beach dunes are also important habitat for a variety of coastal plants, such as the sea oat (USFWS, 2017). risk
- **Nearshore—**nearshore habitats consist of shallow, aquatic environments bordering shorelines and banks. These habitats are created from natural processes and are primarily made up of intertidal, subtidal, and benthic zones and are important for nesting, feeding, and migrating for a variety of species (NOAA, 2012).

Table 4-6 describes the site-specific considerations regarding habitats for the alternatives located in Baldwin County.

Table 4-6: Site-specific Considerations for Habitats in Baldwin County

Baldwin County Alternatives	Site-specific Considerations
Gulf State Park Lodge and Associated Public Access Amenities Project	The habitat characteristics of the Gulf State Park Lodge and Associated Public Access Amenities Project site are characterized in the Final Phase III ERP/PEIS (Section 11.7.6.6). The approximately 26-acre site intersects with maritime forest, wetlands, dunes, bogs, and marshes. The dunes at the site comprise coastal beaches that contain weathered sands that are infrequently flooded. Beaches are moderately trafficked. As a general rule, the elements discussed in this RP/EIS that have been added since Phase III Early Restoration would be located within the footprint of disturbance analyzed in the Final Phase III ERP/PEIS; however, the pedestrian trail from the pier to the lodge, portions of the tram system, and possible public educational programs would be located outside of that footprint. As a result, additional details about the affected environment related to these elements are described below. Although specific sites have not yet been determined, tram stops outside of the lodge site would be located on existing asphalt areas within Gulf State Park and would not require new ground disturbance. If any additional infrastructure (e.g., a shade shelter) is added at these sites, it would also be located on existing asphalt areas. The pedestrian trail would be located outside the area of disturbance evaluated in the Final Phase III ERP/PEIS and would be approximately 620 feet long and 8 feet wide. Any educational programs that occur outside the interpretive lobby of the lodge would likely occur on the beach. These additional areas consist of the same habitat features as the original project area. Areas for future tram stop locations do not currently include habitat because they are asphalt. As noted under the no action alternative (Section 2.2.3), construction activities related to the lodge and conference center have commenced. Habitats and their associated vegetation within the approximately 13-acre site of disturbance are being removed to accommodate construction.
Fort Morgan Pier Rehabilitation	The site, which consists of an approximately 0.39-acre pier, intersects with dune and beach habitats but would occur mostly over water in the nearshore habitat. The pier is supported by barges that may provide important habitat for encrusting organisms, which may in turn provide food sources for fish. Beach habitat is found where the site intersects land area. Beach and dune habitats on the site are moderately trafficked, although the site could have been heavily trafficked before the original pier closed. Dunes comprise sandy marine deposits that are excessively drained.

Baldwin County Alternatives	Site-specific Considerations
Fort Morgan Peninsula Public Access Improvements	Overall, the 11 sites consist of disturbed dune and beach habitat. These sites range in size from 0.18 to 0.88 acre. Dunes comprise coastal beaches that contain weathered sands that are infrequently flooded. Beaches range from light to moderate foot traffic. Habitat and vegetation at these sites consist of the following: Site #1: Total site area is 0.52 acre. The site is approximately 40–50% vegetated. The area is currently used as parking resulting in disturbed beach in this ROW area. Site #2: Total site area is 0.13 acre. The site is approximately 60% vegetated. Relative to the other proposed access points, this site has less disturbance. Site #3: Total site area is 0.24 acre. The site is approximately 10% vegetated. The majority of the site is an active ROW and is disturbed beach. Site #4: Total site area is 0.25 acre. The site is approximately less than 5% vegetated. The majority of the site is an active ROW and is disturbed beach. Site #5: Total site area is 0.24 acre. The site is approximately 15–20% vegetated. The majority of the site is an active ROW and is disturbed beach. Site #6: Total site area is 0.24 acre. The site is approximately 10% vegetated. The majority of the site is an active ROW and is disturbed beach. Site #7: Total site area is 0.18 acre. The site is approximately less than 5% vegetated. The majority of the site is an active ROW and is disturbed beach. Site #8: Total site area is 0.24 acre. The site does not have any vegetation and is 100% disturbed beach with an active ROW. Site #9: Total site area is 0.88 acre. The site is approximately 70% vegetated with dune restoration recently occurring at the site. The reminder of the site is an active ROW and is disturbed beach. Site #10: Total site area is 0.24 acre. The site is approximately 70% vegetated. The remainder of the site is an active ROW and is disturbed beach. Site #11: Total site area is 0.21 acre. The site is approximately 25% vegetated. The majority of the site is an active ROW and is disturbed beach.
Gulf Highlands Land Acquisition and Improvements	The area includes approximately 113 acres with more than 2,700 feet of Gulf-fronting beach. Habitat types associated with Gulf Highlands include wet beach (8.2 acres), frontal dunes (37.7 acres), tertiary dunes (18.7 acres), interior scrub (45.5 acres), wetlands (1.9 acres), and their associated vegetative structure. The dunes include a mix of substrates that range from excessively drained to frequently flooded sands (see Geology and Substrates). Foot traffic is minimal to none.
Laguna Cove Little Lagoon Natural Resource Protection	The site totals 53.36 acres and includes approximately 27 acres of wetlands and 26 acres of maritime forests/uplands.

Mobile County

Several plant communities are present within Mobile County, including marshes, wetlands, beaches, dunes, and barrier islands. Each of these plant communities supports a different array of plant species. Although some crossover of species occurs in the transition zone between habitats, the majority of the

plant communities maintain a specific set of plant species. General descriptions for marshes, wetlands, beach, and dunes are described above. Barrier islands are made up of natural offshore deposits that run parallel to the coastline. These islands are long and narrow and occur in series along the East Coast and the Gulf of Mexico. (NOAA, 2016a). In 1995, Noss et al. surmised that close to half of the barrier islands and their supporting habitats along the coasts of the United States had already been lost to development. Along the Atlantic and Gulf of Mexico coasts, almost one-third of the barrier islands have been protected as parks, wildlife management areas, and national seashores. In addition to the habitats found in Baldwin County, the habitat type "Barrier Island" is found in the Mobile County sites. Primary barrier islands comprise shifting sands, beach/dune complexes, coastal wetlands, and fringing upland communities that buffer mainland areas from the effects of coastal storms and surges. Strongly influenced by the physical forces of ocean currents, tides, wind, salt spray and erosion, barrier island plants and animals are diverse and dynamic. Some barrier island plants include saltmeadow cordgrass (*Spartina patens*), seaside goldenrod (*Solidago sempervirens*), seashore elder (*Iva imbricata*), dahoon holly (*Ilex cassine*), and marsh elder (*Iva frutescens*) (NRCS, n.d.a).

Site-specific considerations regarding habitat for the alternatives located in Mobile County are detailed in Table 4-7.

Table 4-7: Site-specific Considerations for Habitats in Mobile County

Mobile County Alternatives	Site-specific Considerations
Dauphin Island Eco-Tourism and Environmental Education Area	The site consists of approximately 100 acres of wetland and upland. The approximately 90 acres of wetlands on this site demonstrate vegetative and hydrological characteristics associated with typical estuarine marshes. The remaining approximately 10 acres on this site are uplands.
Mid-Island Parks and Public Beach Improvements (Parcels A, B, and C)	The site consists of approximately 10 acres of Gulf of Mexico-fronting property to protect and enhance dune and beach habitats. • Dunes – range from deep rapid draining soils to unconsolidated sandy deposits that are frequently flooded and contain both vegetated (Parcel A) and unconsolidated sand dunes (Parcels B and C) • Beach – 1,200 linear feet of beachfront ranging from zero to little foot traffic • Barrier Island
Mid-Island Parks and Public Beach Improvements (Parcels B and C)	The site consists of approximately 2–3 acres designed to protect existing beach and dune habitats. • Dunes – predominately unconsolidated sandy deposits that are frequently flooded • Beaches – with currently zero to little foot traffic • Barrier Island • Coastal marshes

4.3.2 Wildlife Species (Including Birds)

Wildlife includes all native and naturalized vertebrate and invertebrate species of animals. This section focuses on common and typical species that have the potential to occur or are known to occur at the alternative sites, as well as those of general interest and importance to the ecosystem. Special-status species (or threatened and endangered species) are discussed in more detail in Section 4.1.3.4. Bird

species protected under the Migratory Bird Treaty Act (MBTA) are found at project sites and are also given special consideration under Executive Order (EO) 13186, "Responsibilities of Federal Agencies to Protect Migratory Birds."

Alternative sites within Baldwin and Mobile counties provide habitat that supports a variety of wildlife species, including mammals, reptiles, amphibians, birds, fish, and invertebrates. This includes 73 native amphibians, 420 bird species (migratory and native), 62 native mammals, and 93 native reptiles (Gulf Shores and Orange Beach Tourism, 2016a). Mammals that would likely be present include species such as opossum, white-tailed deer, squirrels, beaver, and bobcat. Commonly observed reptiles and amphibians include various types of turtles, skinks, snakes, and frogs. Birds include passerines (songbirds), hawks, and shorebirds. Several species of fish such as minnows and sunfish likely inhabit the inland aquatic areas. Invertebrates include worms, snails, insects, and crustaceans.

Many of the wildlife species, particularly those that are mobile, such as mammals, birds, and some amphibians and reptiles, may frequent the alternative sites, but are not necessarily present at all times.

Migratory Birds. Migratory birds include not only neotropical (long-distance) migrants, but also temperate (short-distance) migrants and resident species. Neotropical migratory birds are Western Hemisphere species in which the majority of individuals breed in areas north of the Tropic of Cancer in the spring/early summer and spend the winter in areas south of the Tropic of Cancer. Approximately 200 species of neotropical migratory birds are known in the Western Hemisphere. The majority are passerines (songbirds) such as the red-eyed vireo *(Vireo olivaceus)*, hooded warbler *(Setophaga citrine),* American redstart *(Setophaga ruticilla)*, and common yellowthroat *(Geothlypis trichas)* (USFWS, 2004).

The MBTA is the primary legislation in the United States protecting migratory birds. It prohibits taking, killing, or possessing migratory birds unless permitted by regulation. Species protected by the MBTA appear in Title 50, Section 10.13 of the Code of Federal Regulations (50 CFR § 10.13). Most bird species found in project sites are covered under the MBTA; species such as European starlings and house sparrows (both invasive species) are not covered.

Numerous species of migratory birds have been observed at the alternative sites over the course of the year. Neotropical migratory birds in particular, such as the warblers, use scrub dune habitats and pine woodlands as stopover habitats during spring and fall migrations across the Gulf of Mexico.

Migratory birds may be present or pass through the alternative areas, but because of limited habitat diversity, are likely to be fewer in number. Because of their mobility, it is possible that many of the species could be present at the alternative sites at a given time, although they would not likely reside there permanently. Site-specific consideration for wildlife species for the alternatives in Baldwin and Mobile counties are described in Tables 4-8 and 4-9, respectively.

Table 4-8: Site-specific Considerations for Wildlife Species in Baldwin County

Baldwin County Alternatives	Site-specific Considerations
Gulf State Park Lodge and Associated Public Access Amenities Project	Wildlife species present (including birds, reptiles, amphibians, and terrestrial species) at the Gulf State Park Lodge and Associated Public Access Amenities Project site are characterized in the Final Phase III ERP/PEIS (Section 11.7.6.7) and include the following species: <u>Birds</u>: shorebirds (Order *Charadriiformes*), including terns, gulls, oystercatchers, and sandpipers; neotropical migratory birds, including fly-catchers (Order Passeriformes) and woodpeckers (Order *Piciformes*)

Baldwin County Alternatives	Site-specific Considerations
	Reptiles/amphibians: lizards, including fence, eastern glass, five-lined; skinks, including broadhead and ground; sea turtles (see Section 4.4.4, Protected Species); turtles (sea turtles are addressed in the protected species section, below), including eastern box, eastern mud, and snapping; snakes, including black racer, eastern coachwhip, and eastern diamondback rattlesnake; toads, including American, oak and gulf coast; and frogs, including chorus and common Terrestrial: beaver, red fox, squirrels, chipmunks, coyotes, bats, deer, mice, gophers, voles, woodrats, fox, skunks, raccoons, black bears, and bobcats (Alabama State Parks, 2013; ADCNR, 2013) As a general rule, the elements in this plan that have been added since Phase III Early Restoration would be located within the footprint of disturbance analyzed in the Final Phase III ERP/PEIS; however, the pedestrian trail from the pier to the lodge, portions of the tram system, and possible public educational programs would be located outside of that footprint. As a result, additional details about the affected environment related to these elements are described below. Although specific sites have not yet been determined, tram stops outside of the lodge site would be located on existing asphalt areas within Gulf State Park and would not require new ground disturbance. If any additional infrastructure (e.g., a shade shelter) is added at these sites, it would also be located on existing asphalt areas. The pedestrian trail would be located outside the area of disturbance evaluated in the Final Phase III ERP/PEIS and would be approximately 620 feet long and 8 feet wide. Any educational programs that occur outside the interpretive lobby of the lodge would likely occur on the beach. These additional areas include the same types of wildlife described for the original project area because the beach and areas of the pedestrian trail are adjacent to the lodge site. Where future tram stops would be located, the areas are asphalt and do not provide habitat for wildlife. As noted under the no action alternative (Section 2.2.3), construction activities related to the lodge and conference center have commenced. Ongoing construction activities have disturbed an area of approximately 13 acres that is no longer available to wildlife species. On the rest of the approximately 22-acre site, species that may have been displaced during construction are expected to return to available habitat. Additional wetland habitat is currently under construction.
Fort Morgan Pier Rehabilitation	Birds: shorebirds (Order *Charadriiformes*), including terns, gulls, oystercatchers, and sandpipers; neotropical migratory birds, including fly-catchers (Order *Passeriformes*) and woodpeckers (Order *Piciformes*) Reptiles/amphibians: lizards, including fence, eastern glass, and five-lined; skinks, including broadhead and ground; turtles, including eastern box, eastern mud, and snapping; snakes, including black racer, eastern coachwhip, eastern diamondback and rattlesnake; toads, including American, oak and gulf coast; frogs, including chorus and common; and sea turtles (see Section 4.4.4, Protected Species) Terrestrial: black bear, coyotes, squirrels, bats, beaver, red fox, deer, bobcat, raccoons, skunks, mice, gophers, voles, and chipmunks
Fort Morgan Peninsula Public Access Improvements	Birds: shorebirds (Order *Charadriiformes*), including terns, gulls, oystercatchers, and sandpipers; neotropical migratory birds, including fly-catchers (Order *Passeriformes*) and woodpeckers (Order *Piciformes*)

Baldwin County Alternatives	Site-specific Considerations
	Reptiles/amphibians: lizards, including fence, eastern glass, and five-lined; skinks, including broadhead and ground; turtles, including eastern box, eastern mud, and snapping; snakes, including black racer, eastern coachwhip, and eastern diamondback rattlesnake; toads, including American, oak, and gulf coast; frogs, including chorus and common; and sea turtles (see Section 4.4.4, Protected Species) Terrestrial: black bears, coyotes, squirrels, chipmunks, bats, beavers, red fox, deer, bobcats, mice, skunks, gophers, voles, and raccoons
Gulf Highlands Land Acquisition and Improvements	Birds: shorebirds (Order *Charadriiformes*), including oystercatchers, sandpipers, gulls, and terns; neotropical migratory birds, including golden-winged warbler, wood thrush, prairie warbler, bay-breasted warbler, cerulean warbler, prothonotary warbler, worm-eating warbler, Kentucky warbler, blue-winged warbler, and Swainson's warbler Reptiles/amphibians: lizards, including fence, eastern glass, and five-lined; skinks, including broadhead, ground; turtles, including eastern box, eastern mud, and snapping; snakes, including black racer, eastern coachwhip, and eastern diamondback rattlesnake; toads, including American, oak, and gulf coast; frogs, including chorus and common; and sea turtles (see Section 4.4.4, Protected Species) Terrestrial: black bears, coyotes, squirrels, bats, beavers, red fox, deer, bobcats, voles, mice, chipmunks, and gophers
Laguna Cove Little Lagoon Natural Resource Protection	Birds: all migratory and native birds in the region, see Appendix H Reptiles/amphibians: lizards, including fence, eastern glass, and five-lined; skinks, including broadhead and ground; turtles, including eastern box, eastern mud, and snapping; snakes, including black racer, eastern coachwhip, and eastern diamondback rattlesnake; toads, including American, oak, and gulf coast; and frogs, including chorus and common Terrestrial: black bears, coyotes, squirrels, bats, beavers, red fox, deer, bobcats, voles, mice, chipmunks, and gophers

Table 4-9: Site-specific Considerations for Wildlife Species in Mobile County

Mobile County Alternatives	Site-specific Considerations
Dauphin Island Eco-Tourism and Environmental Education Area	Birds: shorebirds (Order *Charadriiformes*), including terns, gulls, oystercatchers, and sandpipers; neotropical migrants, including fly-catchers (Order *Passeriformes*) and woodpeckers (Order *Piciformes*) Reptiles/amphibians: lizards, including fence, eastern glass, and five-lined; skinks, including broadhead and ground; turtles, including eastern box, eastern mud, and snapping; snakes, including black racer, eastern coachwhip, and eastern diamondback rattlesnake; toads, including American, oak, and gulf coast; frogs, including chorus and common; and sea turtles (see Section 4.4.4, Protected Species) Terrestrial: squirrels, chipmunks, coyotes, nutria, and bats

Mobile County Alternatives	Site-specific Considerations
Mid-Island Parks and Public Beach Improvements (Parcels A, B, and C)	Birds: a variety of coastal birds; shorebirds (Order *Charadriiformes*), including terns, gulls, oystercatchers, and sandpipers, neotropical migrants, and others Reptiles/amphibians: lizards, including fence, eastern glass, and five-lined; skinks, including broadhead and ground; turtles, including eastern box, eastern mud, and snapping; snakes, including black racer, eastern coachwhip, and eastern diamondback rattlesnake; toads, including American, oak, and gulf coast; frogs, including chorus and common; and sea turtles (see Section 4.4.4, Protected Species) Terrestrial: squirrels, chipmunks, coyotes, nutria, and bats
Mid-Island Parks and Public Beach Improvements (Parcels B and C)	Birds: a variety of coastal birds; shorebirds (Order *Charadriiformes*), including terns, gulls, oystercatchers, and sandpipers, neotropical migrants, and others Reptiles/amphibians: lizards, including fence, eastern glass and five-lined; skinks, including broadhead and ground; turtles, including eastern box, eastern mud, and snapping; snakes, including black racer, eastern coachwhip, and eastern diamondback rattlesnake; toads, including American, oak, and gulf coast; frogs, including chorus and common; and sea turtles (see Section 4.4.4, Protected Species) Terrestrial: squirrels, chipmunks, coyotes, nutria, and bats

4.3.3 Marine and Estuarine Fauna (Fish, Shellfish, and Benthic Organisms)

A variety of habitats support marine and estuarine fauna in the Gulf Coast of Alabama, including soft-bottom habitats consisting of sand or mud, hard substrate habitats, mesophotic reefs, and deep-sea coral communities. Waters of the northern Gulf of Mexico support many of the nation's most commercially and recreationally important fish and shellfish species, such as oysters, shrimp, red snapper, and tuna; as well as other marine species, including whales, dolphins, and sea turtles (NOAA, 2016a). In this restoration plan, the majority of alternative sites are on land; therefore, very few marine and estuarine fauna would be disturbed. Tables 4-10 and 4-11 describe the site-specific considerations for marine and estuarine fauna for the alternatives located in Baldwin and Mobile counties, respectively.

Table 4-10: Site-specific Considerations for Marine and Estuarine Fauna in Baldwin County

Baldwin County Alternatives	Site-specific Considerations
Gulf State Park Lodge and Associated Public Access Amenities Project	None: the alternative would occur in upland area where these species are not present
Fort Morgan Pier Rehabilitation	Marine mammals: manatees and dolphins Fish: nearshore fish including redfish, trout, flounder, ground mullet, speckled trout, Spanish mackerel, and sharks Shellfish: oysters, shrimp, and crabs Benthic organisms: snails, worms, and sponges

Baldwin County Alternatives	Site-specific Considerations
Fort Morgan Peninsula Public Access Improvements	None: the improvements would occur in an upland area where these species are not present
Gulf Highlands Land Acquisition and Improvements	Benthic organisms: snails, worms, and other wetland species
Laguna Cove Little Lagoon Natural Resource Protection	Fish: speckled trout, redfish, and flounder Shellfish: shrimp, oysters and crabs Benthic organisms: snails and worms

Table 4-11: Site-specific Considerations for Marine and Estuarine Fauna in Mobile County

Mobile County Alternatives	Site-specific Considerations
Dauphin Island Eco-Tourism and Environmental Education Area	Fish: nearshore fish, including redfish, trout, flounder, ground mullet, specks, and Spanish mackerel Shellfish: oysters, shrimp, and crabs Benthic organisms: snails, worms, and other wetland species
Mid-Island Parks and Public Beach Improvements (Parcels A, B, and C)	None: the improvements would occur in an upland area where none of these species are present
Mid-Island Parks and Public Beach Improvements (Parcels B and C)	None: the improvements would occur in an upland area where none of these species are present

4.3.4 Protected Species

Both Baldwin and Mobile counties harbor species protected under the ESA. The ESA and subsequent amendments provide for the conservation of federally listed threatened and endangered species and their habitats. The ESA prohibits jeopardizing endangered and threatened species or adversely modifying critical habitats essential to their survival. Section 7 of the ESA requires consultation with the National Marine Fisheries Service (NMFS) and USFWS to determine whether any federally listed endangered or threatened species under their jurisdiction may be affected by a proposed project.

Section 10 of the ESA regulates activities that may potentially affect any species designated as threatened or endangered or any habitat upon which they depend. Section 10 prohibits any such activities without a valid incidental take permit. An incidental take permit is required for any non-federal activity that may result in take of threatened or endangered species, where “take” is defined as any action that may harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect any threatened or endangered species, and can include any significant habitat modification that may indirectly result in take. An incidental take permit must be accompanied by a HCP, which is designed to ensure that the effects of the authorized incidental take are adequately minimized and mitigated.

Alabama does not implement state level regulatory protection for endangered and threatened species, except for those species that are protected under the *Alabama Regulations on Game and Fish and Fur Bearing Animals,* which is updated on an annual basis (Alabama Administrative Code r. 220-1-1 *et seq.*) (ANHP, 2016). These regulations are used as the mechanism to protect relevant species in Alabama and are administered by ADCNR. The Nongame Species Regulation also provides some species protection. The Alabama Natural Heritage Program maintains species inventory lists to help promote state level conservation efforts (ANHP, 2016).

Baldwin and Mobile counties are hosts to several federally listed special-status species. This section focuses on the species that are most likely to occur in or around the proposed alternative locations. Protected species lists for each alternative site were determined by downloading information from the USFWS Information for Planning and Conservation system, reviewing scientific literature, and using professional judgment. Protected species known to occur or which may potentially occur at the alternative locations include:

- Alabama beach mouse (*Peromyscus polionotus ammobates*) and its critical habitat
- Red knot (*Calidris canutus rufa*)
- Wood stork (*Mycteria americana*)
- Piping plover (*Charadrius melodus*)
- Eastern indigo snake (*Drymarchon corais couperi*)
- Gulf sturgeon (*Acipenser oxyrinchus desotoi*)
- Loggerhead sea turtle (*Caretta caretta*) and its critical habitat
- Kemp's ridley sea turtle (*Lepidochelys kempii*)
- Green sea turtle *(Chelonia mydas)*
- Leatherback sea turtle (*Dermochelys coriacea*)
- Hawksbill sea turtle (*Eretmochelys imbricata*)
- Alabama red-bellied turtle (*Pseudemys alabamensis*)
- Gopher tortoise (*Gopherus polyphemus*)
- West Indian manatee (*Trichechus manatus*)

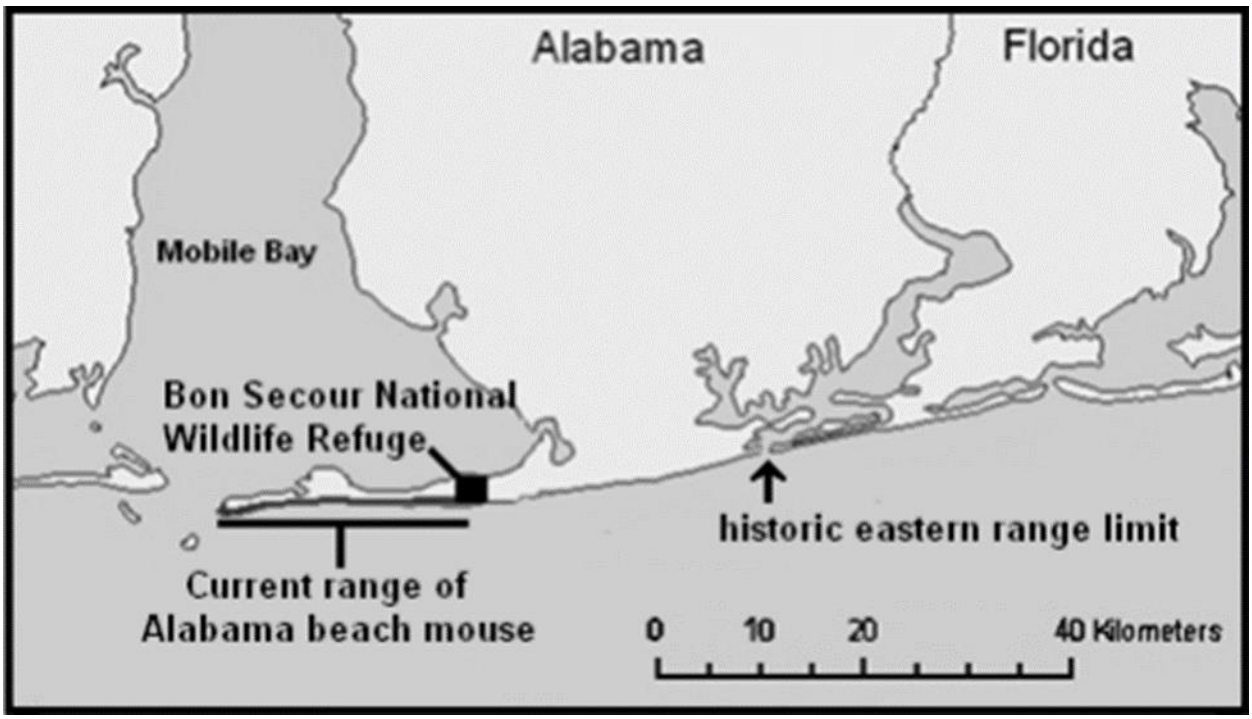
A more detailed discussion of these species follows.

Alabama Beach Mouse

The Alabama beach mouse is a federally listed endangered species known to occupy sparsely vegetated areas on Fort Morgan Peninsula and suitable coastal habitat. Their range is shown in Figure 4-1. This small gray and white mouse with a dark stripe running down the upper surface of its tail is a nocturnal rodent inhabiting burrows in frontal, secondary, and scrub dunes along the Alabama Gulf Coast.

In frontal dune areas, Alabama beach mice feed on seeds of sea oats, beach grass, evening primrose *(Oenothera* sp.*)*, ground cherry *(Physalis* sp.*),* saltmeadow cordgrass *(Spartina patens)*, bluestem *(Schizachrium maritimum)*, and panic grass *(Panicum amarum).* Alabama beach mice forage plants in scrub areas include sand live oak *(Quercus geminate),* bluestem, greenbrier (*Smilax rotundifolia)*, gopher apple *(Licania michauxii),* and jointweed *(Polygonella* spp.*)* (USFWS, 2004).

The Alabama beach mouse was listed as an endangered species in 1985. The mice historically occurred in frontal, secondary, and scrub dunes from Fort Morgan eastward about 32 miles to Ono Island in Perdido Bay. At its time of listing in 1985, the Alabama beach mouse was considered extirpated on Ono Island, but present elsewhere throughout its original range. However, the Alabama beach mouse was only found in small parcels of habitat east of Gulf State Park at Romar Beach (USFWS, 2004). At that time, the species was believed to be extirpated, but critical habitat still existed. USFWS reintroduced Alabama beach mouse in 2010, and since that time their population numbers have increased considerably (USFWS, 2013a).



Source: Falcy, 2011

Figure 4-1: Alabama Beach Mouse Range

Numerous surveys have documented the presence and relative abundance of Alabama beach mice on Fort Morgan Peninsula (USFWS, 2004). Relative abundance of the species as surveyed throughout its geographic range, using live trap/capture and release methods, has varied from 1.69 to 61.0 mice per 100 trap-nights (i.e., 100 trap-nights refers to 100 mousetraps set for one night). However, relative abundance has typically ranged from 3 to 10 mice per 100 trap-night.

Alabama beach mice populations fluctuate within and among sites on a monthly, seasonal, and annual basis. These spatial and temporal differences have been attributed to habitat type, food availability, recruitment following peak reproductive periods, temperature, predation, and storms. Scrub dunes occupied by the mice can function as crucial refuge during severe hurricanes that overwash, flood, and destroy most of the lower frontal and secondary dunes.

Relative abundance of Alabama beach mice in certain types of scrub dunes can be comparable to that within primary and secondary dunes (USFWS, 2004). In coastal environments, the term “scrub dune” refers to habitat or vegetation types where scrub oaks dominate a community adjacent to and landward of secondary/ primary dunes. Substantial variation exists in scrub oak density and coverage within and

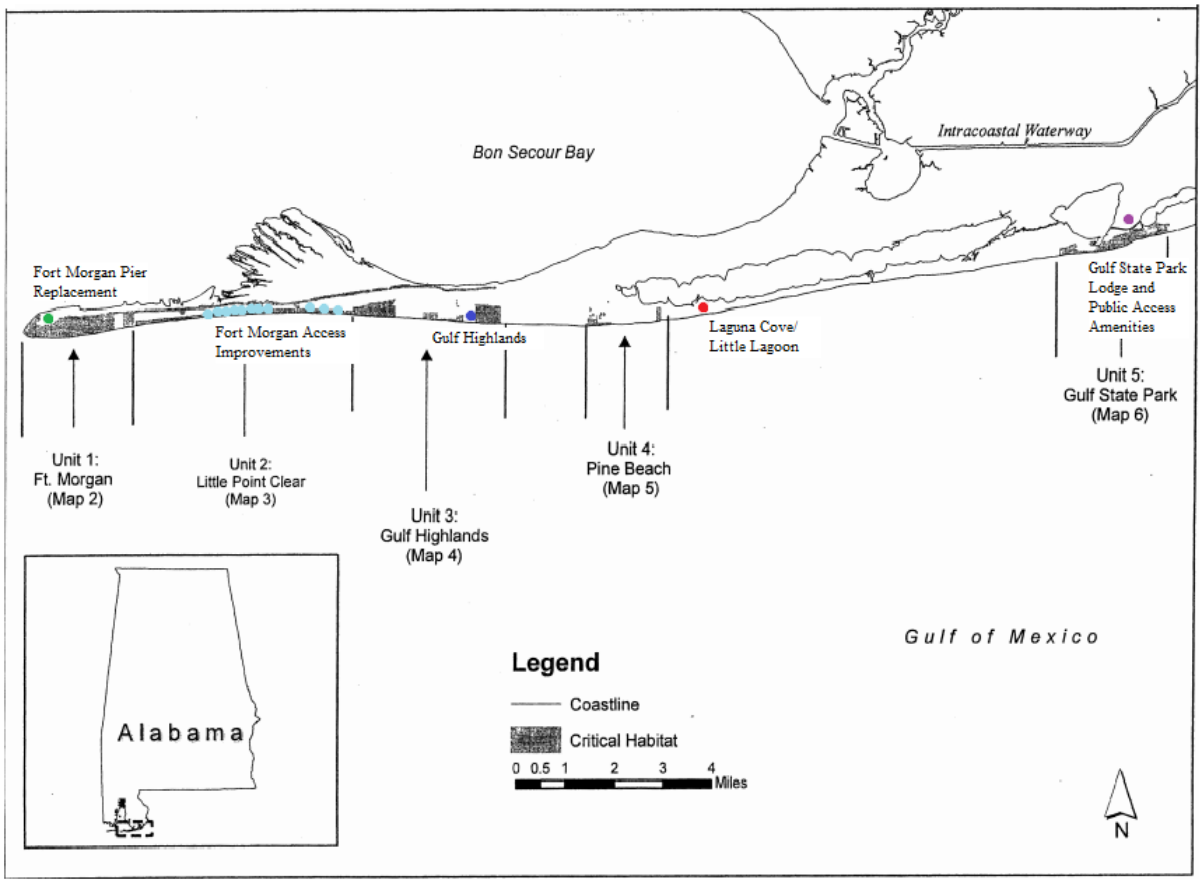
among scrub dunes throughout the geographic range of Alabama beach mice. Such variation, resembling an ecological gradient, is represented by scrub oak woodland with a relatively closed canopy at one end of the continuum and relatively open scrub dunes with patchy scrub ridges and intervening swales or interdunal flats dominated by herbaceous plants at the other end of the gradient. The relative abundance of Alabama beach mice in this open, patchy scrub environment is comparable to that in primary and secondary dunes.

When the Alabama beach mouse was listed in 1985, critical habitat was designated and subsequently revised on January 30, 2007 (72 FR 4329). In the final rule, USFWS identified 1,211 acres in five units that met the standard for critical habitat (see Figure 4-2).

USFWS is required to base critical habitat determinations on the best scientific data available and to focus on those physical and biological features (primary and constituent elements [PCEs]) that are essential to the conservation of the species and may require special management considerations or protection. Such requirements include, but are not limited to: space for individual and population growth and for normal behavior; food, water, air, light, minerals, or other nutritional or physiological requirements; cover or shelter; sites for breeding, reproduction, and rearing of offspring; and habitats that are protected from disturbance or are representative of the historic geographic and ecological distribution of a species.

USFWS identified the following PCEs in the revised critical habitat for the Alabama beach mouse:

1. Continuous mosaic of primary, secondary, and scrub (i.e., interconnected frontal and tertiary dunes and interior scrub) vegetation and dune structure, with a balanced level of competition and few or no competitive or predaceous nonnative species present, that collectively provide foraging opportunities, cover and burrow sites;
2. Frontal dunes, generally dominated by sea oats, that, despite occasional temporary impacts and reconfiguration from tropical storms and hurricanes, provide abundant food resources, burrow sites, and protection from predators;
3. Scrub (i.e., tertiary dune/suitable interior scrub) dunes, generally dominated by scrub oaks (*Quercus* spp.), that provide food resources and burrow sites, and provide elevated refugia during and after intense flooding from rainfall and/or hurricane-induced storm surge;
4. Unobstructed habitat connections that facilitate genetic exchange, dispersal, natural exploratory movements, and recolonization of locally extirpated areas; and
5. Natural light regime within the coastal dune ecosystem, compatible with the nocturnal activity of beach mice, necessary for normal behavior, growth, and viability of all life stages.



Source: 72 FR 4359

Figure 4-2: Alabama Beach Mouse Critical Habitat

Red Knot

The red knot was listed as threatened throughout its range as of January 12, 2015 (79 FR 73705). This medium-sized bird species is a migratory species that uses coastal beaches and marine intertidal areas as stopover feeding locations or staging areas on the way to and from their wintering grounds in South America and breeding areas in the Arctic. Foraging on ocean beaches, mud and sand flats, and salt marshes occurs from March to April during the northward spring migration and September and October during the southward autumn migration (USFWS, 2013b). Roosting and resting habitat includes areas above the high tide line such as reefs and high sand flats (USFWS, 2013b). Records show that 17 individual red knot have been sighted from 1981 (2 sighted at Alabama Point) to 2013 (2 sighted at Lake Shelby in Gulf State Park) (Ebird, 2016). These observations suggest that the red knot is an infrequent visitor to Alabama beaches.

Wood Stork

The wood stork was listed as endangered under the ESA but was upgraded to threatened on June 26, 2014 (79 FR 37077). This large, white, subtropical and tropical bird is a resident breeder in lowland wetlands with trees where it can build large stick nests. Nesting is restricted to Florida, Georgia, and South Carolina in the United States where it is the only stork that breeds in North America, and from Mexico to northern Argentina. Both populations migrate north after breeding season, which typically

ends in July and August. These waders feed on minnows in shallow water, typically isolated pools where fish congregate, by using their bills to perform rare and effective fishing techniques.

Piping Plover

Piping plover was listed as threatened under the ESA on December 11, 1985 (50 FR 50726). Piping plover in Alabama are limited to a few sites presenting optimal foraging conditions, with birds possibly present from August to May and peak numbers in winter. Most of these sites are in Mobile County. Little Dauphin Island, Pelican Island, and parts of Dauphin Island are traditional wintering sites. Occasionally birds are seen in Baldwin County on the western tip of Fort Morgan Peninsula around washover pools along the shoreline. In 2001, wintering critical habitat was designated in Alabama that encompassed the tidal zones, flats, and associated dune systems of Dauphin Island, Little Dauphin Island, Pelican Island, Isle Aux Herbes, and the western tip of Fort Morgan Peninsula (see Figure 4-5) (66 FR 36038). Only 29 piping plovers were sited in Alabama in 2006 (USFWS, 2009). Figure 4-3 shows the habitat range of the piping plover.

Eastern Indigo Snake

The eastern indigo snake was listed as threatened under the ESA on March 3, 1978 (43 FR 4026). The easing indigo snake is the longest snake (60–84 inches) native to the United States and is limited in Alabama and restricted to areas of xeric pine-oak sand hills where they use gopher tortoise burrows as shelter during winter and as nesting and refuge during summer (ADCNR, 2016b). Breeding season occurs between October and February before the warmer months arrive, and they begin to move to nearby wetland edges where food is abundant (Godwin, 2016). It is presumed that the species was extirpated, and sightings in Alabama were extremely rare by the 1960s before experimental releases were completed in the 1970s and 1980s in both Baldwin and Mobile counties. With growing interest to restore longleaf pine and other favorable habitats, recovery of the species looks promising (Grosse, 2003).

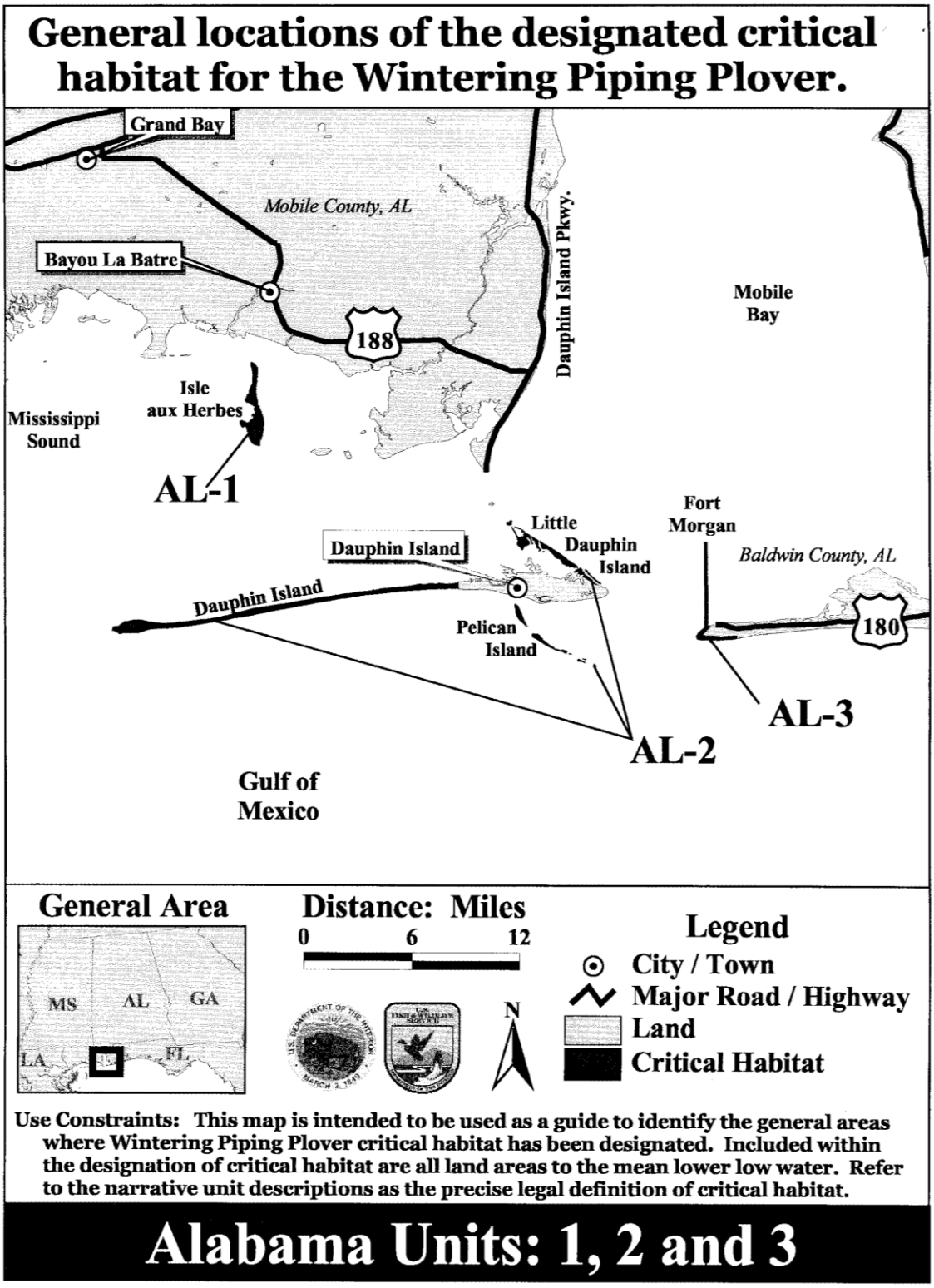


Figure 4-3: Wintering Piping Plover Critical Habitat

Gulf Sturgeon

The Gulf sturgeon is a subspecies of the Atlantic sturgeon (*Acipenser oxyrinchus*) and is among the oldest fish species in the world. The Gulf sturgeon was listed as threatened under the ESA on September 30, 1991 (56 FR 49653). Gulf sturgeon are anadromous (i.e., they live in the ocean and brackish waters and spawn and spend their first few years in freshwater). Males migrate a month earlier into freshwater during March and April. Because of slow reproduction and a lifespan similar to humans, rebound of the species is slow and often goes unnoticed. Their diet consists of worms, snails, shellfish, crustaceans, and small fish as well as a large amount of mud and debris (Atlantic). The Gulf sturgeon was once distributed widely throughout the coastal rivers of the northeastern Gulf of Mexico occurring primarily from the Mississippi River east to Tampa Bay, including the states of Louisiana, Mississippi, Alabama, and Florida and occurring sporadically as far west as the Rio Grande in Texas and as far south as Florida Bay in southern Florida. The current range of the species extends from Lake Pontchartrain and the Pearl River system in Louisiana and Mississippi east to the Suwannee River in Florida. While the Gulf sturgeon does not occur in great abundance in the Mobile Bay watershed and the Mobile River and its tributaries, individuals are consistently reported in these areas (USFWS and GSMFC, 1995). Occurrences of Gulf sturgeon in the vicinity of the proposed projects would be rare, occurring only briefly during spring and fall migrations. Although no listed critical habitat is present in the project areas, critical habitat does exist on the Gulf Coast of bordering Mississippi and Florida with minimal designation in Alabama near the borders of Mississippi and Florida (USFWS, 2016b).

Sea Turtles

Sea turtles that occur in the United States are federally listed as either threatened or endangered. Loggerhead sea turtles have designated critical habitat along the shores of Mobile Bay-Little Lagoon Pass, Gulf State Park-Perdido Pass, and the Perdido Pass-Florida-Alabama line in Baldwin County. In general, sea turtles can be found in the nearshore waters and in some of the estuaries in Alabama. While five species (loggerhead, greens, Kemp's ridley, hawksbill, and leatherback) of sea turtles have been documented in Alabama waters, only loggerhead and Kemp's ridley sea turtles have been documented to nest on Alabama's Gulf side beaches.

Loggerhead Sea Turtle. The loggerhead turtle (Northwest Atlantic Distinct Population Segment) was listed as threatened under the ESA on July 23, 1978 (43 FR 32800). This species is circum-global, preferring temperate and tropical waters. In the southeastern United States, 50,000 to 70,000 nests are deposited annually, about 90 percent of which occur in Florida. Most nesting in the Gulf outside of Florida appears to be along the Alabama Gulf Coast. Although loggerhead sea turtles are observed offshore the Chandeleur Islands of Louisiana, little documentation of nesting is available. The loggerhead turtle (northwest Atlantic distinct population segment) is by far the most common sea turtle found along beaches in coastal Alabama (USFWS, 2004).

USFWS proposed to designate critical habitat for the Northwest Atlantic Distinct Population Segment of the loggerhead sea turtle on March 25, 2013, effective August 11, 2014 (79 FR 51264). In total, 685 miles of loggerhead sea turtle nesting beaches are designated as critical habitat in North Carolina, South Carolina, Georgia, Florida, Alabama, and Mississippi. The beaches of Fort Morgan Peninsula are within the Northern Gulf of Mexico Recovery Unit, which consists of 135.5 miles of shoreline in the Florida panhandle, Alabama, and Mississippi. The designated critical habitat includes areas that are extra-tidal or dry sandy beaches from the mean high water line to the toe of the secondary dune (Figure 4-4). NMFS has also designated critical habitat for the Northwest Atlantic Distinct Population Segment of the loggerhead sea turtle. NMFS designated critical habitat consists of offshore open waters extending from Texas to Delaware.

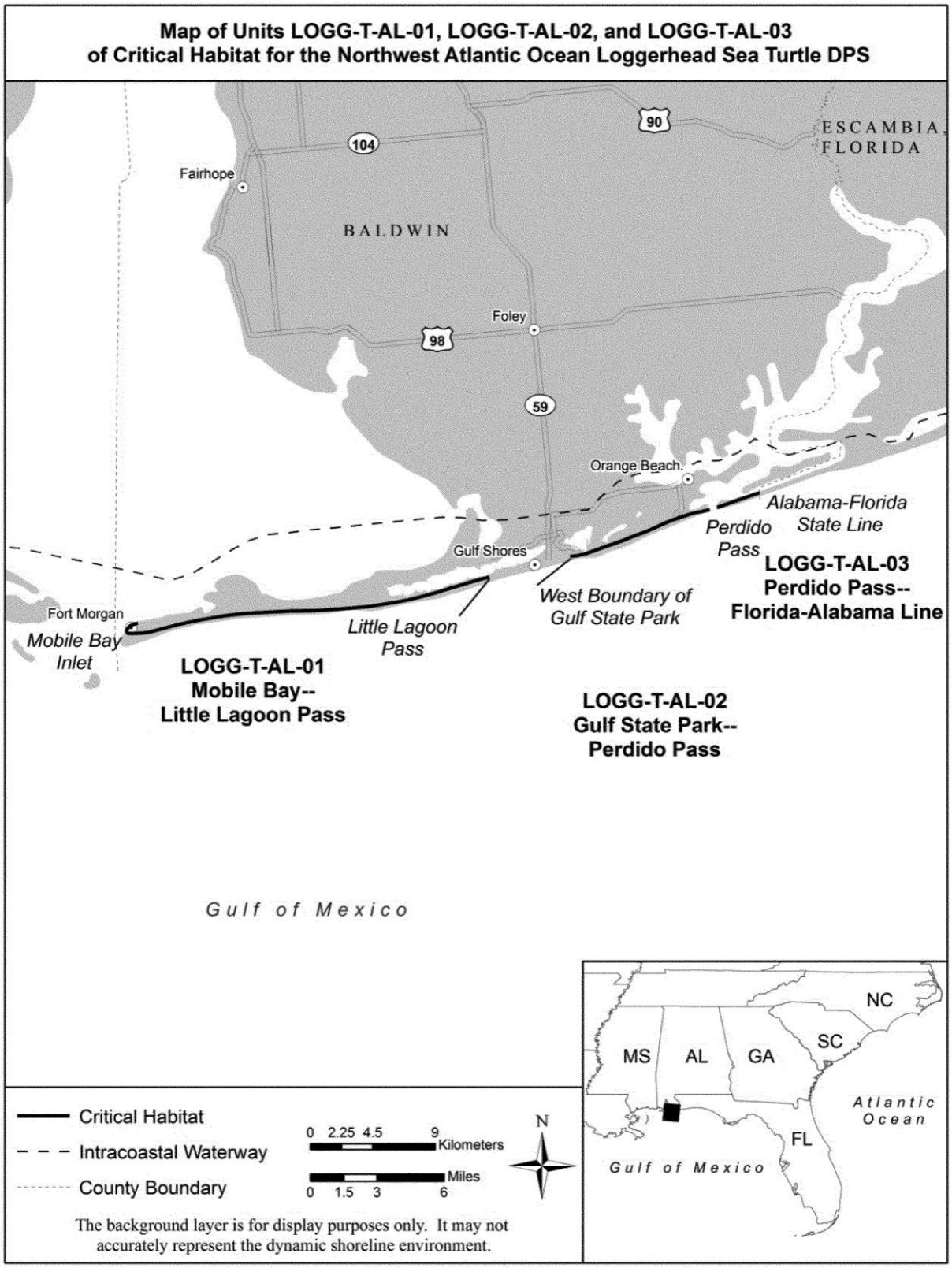


Figure 4-4: Loggerhead Sea Turtle Critical Habitat

These areas are capable of supporting a high density of nests or serving as an expansion area for beaches with a high density of nests that are well distributed within each state or region and representative of total nesting to be a physical or biological feature for the species. Additionally, the natural coastal processes or activities that mimic these processes (particularly the dynamic process of erosion and accretion) are also identified as a physical or biological feature for this species. The PCEs are the specific elements of the physical or biological features that provide for a species' life history processes and are essential to the conservation of the species. PCEs for loggerhead critical habitat include:

- Suitable nesting beach habitat that:
  - has relatively unimpeded nearshore access from the ocean to the beach for nesting females and from the beach to the ocean for both post-nesting females and hatchlings; and
  - is located above mean high water to avoid being inundated frequently by high tides.
- Sand that:
  - allows for suitable nest construction;
  - is suitable for facilitating gas diffusion conducive to embryo development; and
  - is able to develop and maintain temperatures and moisture content conducive to embryo development.
- Suitable nesting beach habitat with sufficient darkness to ensure that nesting turtles are not deterred from emerging onto the beach, and hatchlings and post-nesting females orient to the sea.

Kemp's Ridley Sea Turtle. Kemp's ridley sea turtle was listed as endangered on December 2, 1970 (35 FR 18319) and is considered to be endangered throughout its range. Adults are found mainly in the Gulf of Mexico. Immature turtles can be found along the Atlantic coast as far north as Massachusetts and Canada. The species' historic range is tropical and temperate seas in the Atlantic Basin and in the Gulf of Mexico. Nesting occurs primarily in Tamaulipas, Mexico, where virtually the entire population of these turtles nests along about 10 miles of beach. Recent observations at this nesting beach indicate that there was a substantial increase in the number of nesting females using that site during the 2000 nesting season compared to nesting records from 1999. The species occasionally nests in Texas and other southern states, including an occasional nest in North Carolina and Alabama. From 2006 to 2010 there were seven confirmed Kemp's ridley nests along the Alabama coast (Alabama State Parks, 2013). An active petition, submitted in 2010, would designate critical habitat for Kemp's ridley sea turtles due to the severity of endangerment, which could include the areas designated for the loggerhead sea turtle (discussed above) (USFWS, 2016c).

Green Sea Turtle. The green turtle (North Atlantic Distinct Population Segment) was listed as threated under the ESA on May 6, 2016 (81 FR 20057). This species is circum-global in tropical and sub-tropical waters. In the continental United States, green turtles occur from Texas to Massachusetts. The Florida breeding population is federally listed as endangered, and elsewhere the species is listed as threatened. Primary nesting beaches in the southeastern United States occur in a 6-county area of east-central and southeast Florida where nesting activity ranges from approximately 350 to 2,300 nests annually (USFWS, 2004). Although potentially present in Alabama waters, this species has not been documented to nest on Alabama beaches.

Leatherback Sea Turtle. The leatherback sea turtle was listed as endangered on June 2, 1970 (35 FR 8491). Leatherback sea turtles are the largest, deepest diving, and most migratory sea turtles.

Leatherbacks are listed as endangered throughout the range. Adult females require sandy nesting beaches backed with vegetation and sloped sufficiently so the distance to dry sand is limited. Preferred beaches are near deep water and rough seas. Unlike other sea turtles, leatherbacks are more dependent on prey and reproductive requirements than temperature when it comes to their distribution. Leatherbacks are able to regulate their internal temperature more than the other turtles discussed here; therefore, they range from the tropics into cool temperate waters (USFWS, 2016d). Although potentially present in Alabama waters, this species has not been documented to nest on Alabama beaches.

Hawksbill Sea Turtle. The hawksbill sea turtle was listed as a federally endangered species on June 2, 1970 (35 FR 8491). One of the smaller sea turtles, it has overlapping scutes (plates) that are thicker than those of other sea turtles. This protects them from being battered against sharp coral and rocks during storm events. Adults range in size from 30 to 36 inches (0.8 to 1.0 meters) carapace length, and weigh 100 to 200 pounds (45 to 90 kilograms). Its carapace (upper shell) is an attractive dark brown with faint yellow streaks and blotches and a yellow plastron (under shell). The name “hawksbill” refers to the turtle's prominent hooked beak. Although potentially present in Alabama waters, this species has not been documented to nest on Alabama beaches.

Alabama Red-Bellied Turtle. The Alabama red-bellied turtle was listed as endangered under the ESA on June 16, 1987 (52 FR 22939). This large, freshwater turtle feeds almost entirely on aquatic plants. Their range is restricted to the Mobile-Tensaw River Delta in Mobile and Baldwin counties adjacent to Mobile Bay. Systematic sampling of major tributaries in coastal Alabama have shown them to be present in major rivers and tributaries of the Mobile Bay; Bayou La Batre; and Fowl, Dog, Fish, Magnolia, and Bon Secour rivers. Specimens have also been recorded from Daphne and Point Clear, Alabama (USFWS, 2016e).

Gopher Tortoise. The gopher tortoise was listed as a threatened species wherever found west of the Mobile and Tombigbee rivers in Alabama, Mississippi, and Louisiana on July 7, 1987 (52 FR 25376). The gopher tortoise is currently a candidate species for protection under ESA in Baldwin County, Alabama. The gopher tortoise is a large-shelled (i.e., 15 to 37 centimeters or 5.9 to 14.6 inches long), dark-brown to grayish-black terrestrial turtle with elephantine hind feet, shovel-like forefeet, and a gular projection beneath the head on the yellowish, hingeless plastron or undershell (Ernst and Barbour, 1972). Gopher tortoises are dry-land turtles that usually live in relatively well-drained, sandy soils generally associated with longleaf pine and dry oak sandhills. They also live in scrub, dry hammock, pine flatwoods, dry prairie, coastal grasslands and dunes, mixed hardwood-pine communities, and a variety of habitats that have been disturbed or altered by man, such as power line ROWs and along roadsides. An active petition exists to designate critical habitat and maintain their threatened status (USFWS, 2016f).

West Indian Manatee

The West Indian manatee was listed as endangered throughout its range on March 11, 1967 (32 FR 4001), and is also protected under the MMPA, which prohibits the take of all marine mammals (USFWS, 2016g). There is a currently an active petition to downlist the West Indian manatee from endangered to threatened (USFWS, 2016g). West Indian manatees have large, seal-shaped bodies with paired flippers and a round, paddle-shaped tail (NWF, 2016). Because manatees prefer shallow, slow-moving waters of rivers, estuaries, saltwater bays, canals, and coastal areas, many deaths are contributed to watercraft engines that unexpectedly hit the mammals (Florida Fish and Wildlife Conservation Commission, 2016). Their diet consists of aquatic plants, requiring them to eat between 40 and 60 pounds of plants a day over a 5 to 8 hour period (NWF, 2016). This makes them especially vulnerable to development within their range. In Alabama, West Indian manatees frequently occur in coastal waters, as far north as the

Mobile-Tensaw Delta, in both Mobile and Baldwin counties, during summer months (Dauphin Island Sea Lab, 2016a).

4.3.5 Essential Fish Habitat

The Magnuson-Stevens Fishery Conservation and Management Act, which was first passed in 1976, is the primary law governing marine fisheries management in federal waters of the United States and fosters long-term biological and economic sustainability of the nation's marine fisheries out to 200 nautical miles. The key objectives to the act are to prevent overfishing, rebuild overfished stocks, increase long-term economic and social benefits, and ensure a safe and sustainable supply of seafood. The act provides a transparent and robust process of science, management, innovation, and collaboration with the fishing industry to evaluate and determine if a stock status is subject to overfishing or is overfished (NOAA, 2016b).

EFH is defined in the Magnuson-Stevens Fishery Conservation and Management Act as "those waters and substrates necessary for fish to spawn, breed, feed, or grow to maturity." The designation and conservation of EFH seeks to minimize adverse effects on habitat caused by fishing and non-fishing activities. Any federal agency that takes an action that could adversely affect EFH by reducing the quantity or quality of habitat must work with NMFS to identify impacts and steps for conserving the habitat and reducing the impact of the action (NOAA, 2016b). NMFS has identified EFH habitats for the Gulf of Mexico in its Fisheries Management Plan (FMP) Amendments. These habitats include estuarine emergent wetlands; seagrass beds; algal flats; mud, sand, shell, and rock substrates; and the estuarine water column. The EFH components within the areas of the alternatives include emergent wetlands, mud substrate, and estuarine water columns.
The areas of the alternatives also provides habitat for prey species (e.g., Gulf menhaden, shad, croaker, and spot) that are consumed by larger, commercially important species. In addition, these areas provide habitat for spotted sea trout, striped mullet, southern flounder, Atlantic croaker, and Gulf menhaden. Table 4-12 provides a list of the species that NMFS manages under the federally Implemented FMPs in the vicinity of the alternatives.

Table 4-12: List of Species Managed by NMFS in Vicinity of the Project Sites

Management Unit / Species	Lifestage(s) Found at Location	NOAA Fisheries Management Plan
Red Drum (*Sciaenops ocellatus*)	All	Red Drum
Highly Migratory Species		
Scalloped hammerhead shark (*Sphyrna lewini*)	Neonate, Juvenile	Highly Migratory Species
Bonnethead shark (*Sphyrna tiburo*)	Neonate, Juvenile, Adult	Highly Migratory Species
Blacktip shark (*Carcharhinus limbatus*)	Neonate, Juvenile, Adult	Highly Migratory Species
Bull shark (*Carcharhinus leucas*)	Juvenile	Highly Migratory Species
Spinner shark (*Carcharhinus brevipinna*)	Juvenile	Highly Migratory Species
Atlantic sharpnose shark (*Rhizoprionodon terraenovae*)	Neonate, Juvenile, Adult	Highly Migratory Species
Finetooth shark (*Carcharhinus isodon*)	Neonate, Juvenile, Adult	Highly Migratory Species

Management Unit / Species	Lifestage(s) Found at Location	NOAA Fisheries Management Plan
Blacknose shark (*Carcharhinus acronotus*)	Adult	Highly Migratory Species
Great hammerhead shark (*Sphyrna mokarran*)	All	Highly Migratory Species
Shrimp		
Brown shrimp (*Farfantepenaeus aztecus*)	All	Shrimp
White shrimp (*Litopenaeus setiferus*)	All	Shrimp
Pink shrimp (*Farfantepenaeus duararum*)	All	Shrimp
Royal red shrimp (*Pleoticus robustus*)	All	Shrimp
Coastal Migratory Pelagics		
King mackerel (*Scomberomorus cavalla)*	All	Coastal Migratory Pelagics
Spanish mackerel (*Scomberomorus maculatus*)	All	Coastal Migratory Pelagics
Cobia (*Rachycentron canadum*	All	Coastal Migratory Pelagics
Reef Fish		
Balistidae - Triggerfishes		
Gray triggerfish (*Balistes capriscus*)	All	Reef Fish
Carangidae - Jacks		
Greater amberjack (*Seriola dumerili*)	All	Reef Fish
Lesser amberjack (*Seriola fasciata*)	All	Reef Fish
Almaco jack (*Seriola rivoliana*)	All	Reef Fish
Banded rudderfish (*Seriola zonata*)	All	Reef Fish
Labridae - Wrasses		
Hogfish (*Lachnolaimus maximus*)	All	Reef Fish
Lutjanidae - Snappers		
Queen snapper (*Etelis oculatus*)	All	Reef Fish
Mutton snapper (*Lutjanus analis*)	All	Reef Fish
Schoolmaster (*Lutjanus apodus*)	All	Reef Fish
Blackfin snapper (*Lutjanus buccanella*)	All	Reef Fish
Red snapper (*Lutjanus campechanus*)	All	Reef Fish
Cubera snapper (*Lutjanus cyanopterus*)	All	Reef Fish
Gray (mangrove) snapper (*Lutjanus griseus*)	All	Reef Fish
Dog snapper (*Lutjanus jocu*)	All	Reef Fish
Mahogany snapper (*Lutjanus mahogoni)*	All	Reef Fish
Lane snapper *(Lutjanus synagris)*	All	Reef Fish

Management Unit / Species	Lifestage(s) Found at Location	NOAA Fisheries Management Plan
Silk snapper (*Lutjanus vivanus*)	All	Reef Fish
Yellowtail snapper (*Ocyurus chrysurus*)	All	Reef Fish
Wenchman (*Pristipomoides aquilonaris*)	All	Reef Fish
Vermilion snapper (*Rhomboplites aurorubens*)	All	Reef Fish
Malacanthidae – Tilefishes		
Goldface tilefish (*Caulolatilus chrysops*)	All	Reef Fish
Blackline tilefish (*Caulolatilus cyanops*)	All	Reef Fish
Anchor tilefish (*Caulolatilus intermedius*)	All	Reef Fish
Blueline tilefish (*Caulolatilus microps*)	All	Reef Fish
Golden Tilefish (*Lopholatilus chamaeleonticeps*)	All	Reef Fish
Serranidae – Groupers		
Dwarf sand perch (*Diplectrum bivittatum*)	All	Reef Fish
Sand perch (*Diplectrum formosum*)	All	Reef Fish
Rock hind (*Epinephelus adscensionis*)	All	Reef Fish
Speckled hind (*Epinephelus drummondhayi*)	All	Reef Fish
Yellowedge grouper (*Epinephelus flavolimbatus*)	All	Reef Fish
Red hind (*Epinephelus guttatus*)	All	Reef Fish
Goliath grouper (*Epinephelus itajara*)	All	Reef Fish
Red grouper (*Epinephelus morio*)	All	Reef Fish
Misty grouper (*Epinephelus mystacinus*)	All	Reef Fish
Warsaw grouper (*Epinephelus nigritus*)	All	Reef Fish
Snowy grouper (*Epinephelus niveatus*)	All	Reef Fish
Nassau grouper (*Epinephelus striatus*)	All	Reef Fish
Marbled grouper (*Epinephelus inermis*)	All	Reef Fish
Black grouper (*Mycteroperca bonaci*)	All	Reef Fish
Yellowmouth grouper (*Mycteroperca interstitialis*)	All	Reef Fish
Gag (*Mycteroperca microlepis*)	All	Reef Fish
Scamp (*Mycteroperca phenax*)	All	Reef Fish
Yellowfin grouper (*Mycteroperca venenosa*)	All	Reef Fish

Source: NMFS, 2015

4.3.6 Managed Fish Species

The seasonal and year-round locations of designated EFH for the managed fisheries (Figure 4-5) are available on the NMFS website (http://sero.nmfs.noaa.gov/hcd/efh.htm), and both inshore and offshore species abundance maps are available on the National Ocean Service website (http://www.habitat.noaa.gov/protection/efh/habitatmapper.html). EFH figures for Highly Migratory Species (HMS) are found in the 2009 amendments to the Consolidated Atlantic Highly Migratory Species FMP. EFH for each managed fishery within the alternatives' footprints is described below:

- **Red drum FMP—**EFH for red drum consists of all Gulf of Mexico estuaries; waters and substrates extending from Vermilion Bay, Louisiana, to the eastern edge of Mobile Bay, Alabama, out to depths of 25 fathoms; Crystal River, Florida, to Naples, Florida, between depths of 5 and 10 fathoms; and Cape Sable, Florida, to the boundary between the areas covered by the Gulf of Mexico Fishery Management Council (GMFMC) and the South Atlantic Fishery Management Council (SAFMC) between depths of 5 and 10 fathoms.
- **Reef fish and coastal migratory pelagics FMPs—**EFH for reef fish and coastal migratory pelagics includes all Gulf of Mexico estuaries and the U.S./Mexico border to the boundary between the areas covered by the GMFMC and the SAFMC from estuarine waters out to depths of 100 fathoms.
- **Highly migratory species—**HMS may be found in large expanses of the world's oceans, straddling jurisdictional boundaries. Although many of the species frequent other oceans of the world, the Magnuson-Stevens Fishery Conservation and Management Act only authorizes the description and identification of EFH in federal, state, or territorial waters, including areas of the U.S. Caribbean, the Gulf of Mexico, and the Atlantic coast of the United States, to the seaward limit of the U.S. Exclusive Economic Zone (waters 3 to 200 miles offshore). These areas are connected by currents and water patterns that influence the occurrence of HMS at particular times of the year. Because of the habitat specific requirements of each species, EFH for each HMS potentially occurring in the vicinity of the proposed alternative site is described below (EFH information from NMFS, 2009):
  - Scalloped hammerhead shark
    - ✓ Neonate/Young of Year (YOY) (≤60 centimeters total length [cm TL]): Coastal areas in the Gulf of Mexico from Texas to the southern west coast of Florida; Atlantic coast from the mid-east coast of Florida to southern North Carolina.
    - ✓ Juveniles (61 to 179 cm TL): Coastal areas in the Gulf of Mexico from the southern to mid-coast of Texas, eastern Louisiana to the southern west coast of Florida, and the Florida Keys; offshore from the mid-coast of Texas to eastern Louisiana; Atlantic coast of Florida through New Jersey.
    - ✓ Adults (≥180 cm TL): Coastal areas in the Gulf of Mexico along the southern Texas coast and eastern Louisiana through the Florida Keys; offshore from southern Texas to eastern Louisiana; Atlantic coast of Florida to Long Island, New York.
  - Bonnethead shark
    - ✓ Neonate/YOY (≤55 cm TL): Coastal areas in the Gulf of Mexico along Texas, and from eastern Mississippi through the Florida Keys; Atlantic coast from the midcoast of Florida to South Carolina.
    - ✓ Juveniles (56 to 81 cm TL): Coastal areas in the Gulf of Mexico along Texas, and from eastern Mississippi through the Florida Keys; Atlantic coast from the mid-coast of Florida to South Carolina.

    - ✓ Adults (≥82 cm TL): Coastal areas in the Gulf of Mexico along Texas, and from eastern Mississippi through the Florida Keys; Atlantic east coast from the mid-coast of Florida to Cape Lookout, North Carolina.

  - Blacktip Shark
    - ✓ Neonate/YOY (≤75 cm TL): Coastal areas in the Gulf of Mexico from Texas through the Florida Keys; Atlantic coastal areas from northern Florida through Georgia and the mid-coast of South Carolina.
    - ✓ Juvenile (76 to 136 cm TL): Coastal areas in the Gulf of Mexico from Texas through the Florida Keys; Atlantic coastal areas localized off of the southeast Florida coast and from West Palm Beach, Florida to Cape Hatteras, North Carolina.
    - ✓ Adult (≥137 cm TL): Coastal areas in the Gulf of Mexico from Texas through the Florida Keys. In Atlantic coastal areas southeast Florida to Cape Hatteras.

  - Bull Shark
    - ✓ Neonate/YOY (≤95 cm TL): Gulf of Mexico coastal areas along Texas, and localized areas off of Mississippi, the Florida Panhandle, and west coast of Florida; as well as the Atlantic mid-east coast of Florida.
    - ✓ Juveniles (96 to 219 cm TL): Gulf of Mexico coastal areas along the Texas coast, eastern Louisiana to the Florida Panhandle, and the west coast of Florida through the Florida Keys; Atlantic coastal areas localized from the mid-east coast of Florida to South Carolina.
    - ✓ Adults (≥220 cm TL): Gulf of Mexico along the southern and mid-coast of Texas to western Louisiana, eastern Louisiana to the Florida Keys; Atlantic coast from Florida to South Carolina.

  - Spinner Shark
    - ✓ Neonate/YOY (≤70 cm TL): Localized coastal areas in the Gulf of Mexico along Texas, eastern Louisiana, the Florida Panhandle, Florida west coast, and the Florida Keys; Atlantic coast of Florida to southern North Carolina.
    - ✓ Juveniles (71 to 179 cm TL): Gulf of Mexico coastal areas from Texas to the Florida Panhandle and the mid-west coast of Florida to the Florida Keys; Atlantic coast of Florida through North Carolina.
    - ✓ Adults (≥180 cm TL): Localized areas in the Gulf of Mexico off of southern Texas, Louisiana through the Florida Panhandle, and from the mid-coast of Florida through the Florida Keys; Atlantic coast throughout Florida and localized areas from South Carolina to Virginia.

  - Atlantic Sharpnose Shark
    - ✓ Neonate/YOY (≤60 cm TL): Gulf of Mexico coastal areas from Texas through the Florida Keys; Atlantic from the mid-coast of Florida to Cape Hatteras, North Carolina.
    - ✓ Juveniles (61 to 71 cm TL): Gulf of Mexico coastal areas from Texas through the Florida Keys; Atlantic from the mid-coast of Florida to Cape Hatteras, North Carolina, and a localized area off of Delaware.
    - ✓ Adults (≥72 cm TL): Gulf of Mexico from Texas through the Florida Keys out to a depth of 200 meters; Atlantic from the mid-coast of Florida to Maryland.

- **Shrimp FMP—**EFH for shrimp consists of Gulf of Mexico waters and substrates extending from the US/Mexico border to Fort Walton Beach, Florida, from estuarine waters out to depths of 100 fathoms; Grand Isle, Louisiana, to Pensacola Bay, Florida, between depths of 100 and 325 fathoms; Pensacola Bay, Florida, to the boundary between the areas covered by the GMFMC

and the SAFMC out to depths of 35 fathoms, with the exception of waters extending from Crystal River, Florida, to Naples, Florida, between depths of 10 and 25 fathoms and in Florida Bay between depths of 5 and 10 fathoms.

- **Coastal migratory pelagics FMPs—**EFH for coastal migratory pelagics consists of Gulf of Mexico waters and substrates extending from the US/Mexico border to the boundary between the areas covered by the GMFMC and the SAFMC from estuarine waters out to depths of 100 fathoms. Managed fish in this fishery include king mackerel, Spanish mackerel, and cobia. Non-managed fish in this fishery include cero mackerel, little tunny, dolphin, and bluefish.
- **Reef fish FMP—**EFH for reef fish consists of Gulf of Mexico waters and substrates extending from the US/Mexico border to the boundary between the areas covered by the GMFMC and the SAFMC from estuarine waters out to depths of 100 fathoms.

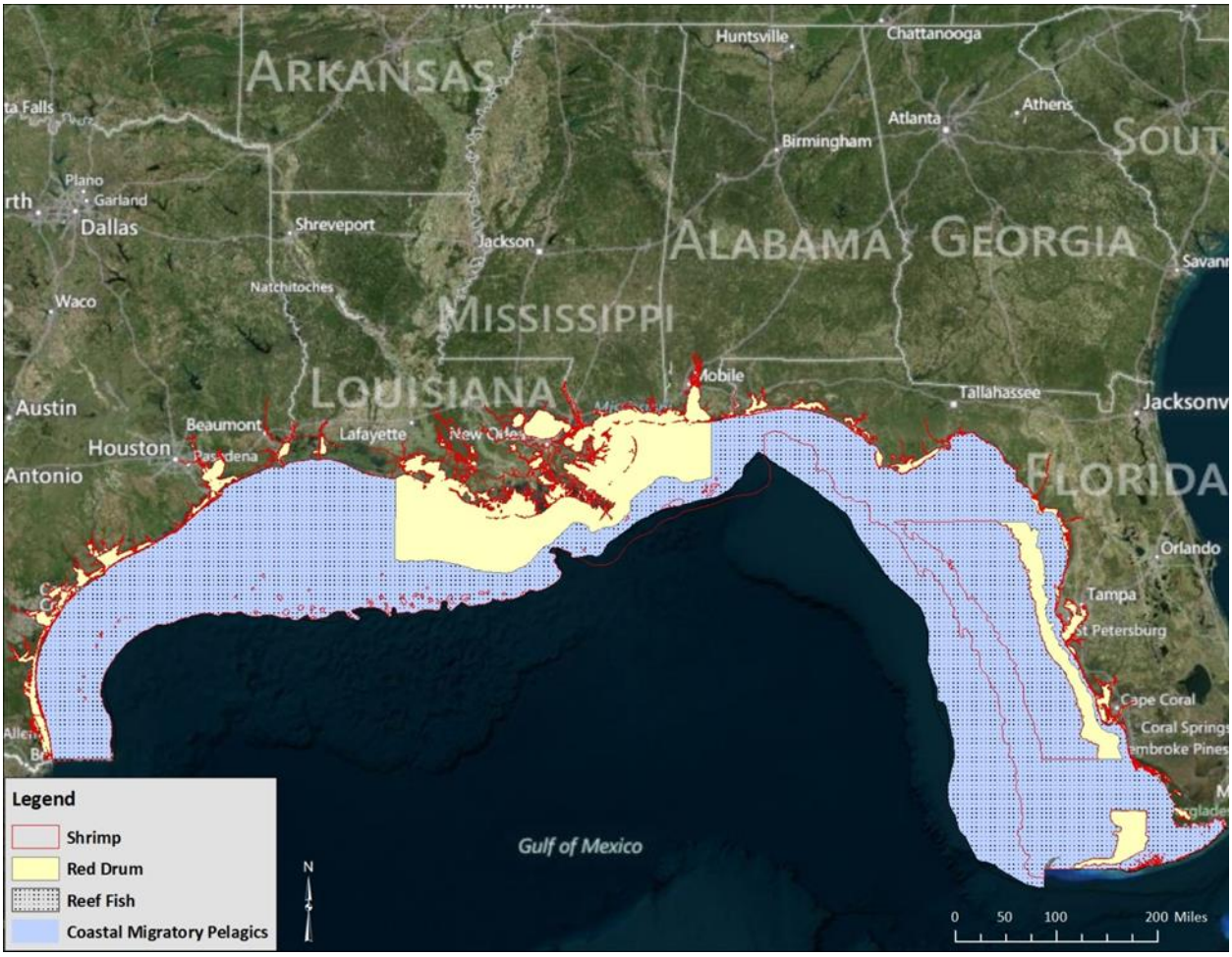


Figure 4-5: Essential Fish Habitat in the Gulf of Mexico

4.3.7 Marine Mammal Protection Act

The MMPA was enacted on October 21, 1972, to prohibit, with certain exceptions, the "take" of marine mammals in waters of the United States or by United States citizens on the high seas, and the importation of marine mammals and marine mammal products into the United States. The MMPA was passed based on findings that some marine mammal species or stocks were in danger of extinction as a

result of human activity, measures needed to be taken to replenish stocks, there is inadequate knowledge of the ecology and population dynamics, and marine mammals have proven to be a resource of international significance (NOAA, 2016c). Marine mammals that may occur within the vicinity of the proposed projects include West Indian manatees (*Trichechus manatus*) and bottlenose dolphins (*Tursiops truncatus*).

Table 4-13 details the site-specific considerations regarding protected species and habitat for the alternatives located in Baldwin County.

Table 4-13: Site-specific Considerations for Protected Species and Habitat in Baldwin County

Baldwin County Alternatives	Site-specific Considerations
Gulf State Park Lodge and Associated Public Access Amenities Project	<u>Species and Habitat</u>: Protected species and their habitats that are known to occur or potentially occur at the lodge site are characterized in the Final Phase III ERP/PEIS (Section 11.7.6.8). In summary, protected species and habitats known to occur or potentially occurring within the area include: • Alabama beach mouse – known to occupy parts of Gulf State Park • Sea turtles known to occur in coastal waters: green, loggerhead, Kemp's ridley, hawksbill, and leatherback turtles; only loggerhead and Kemp's ridley known to nest in Alabama • West Indian manatee – likely to be present in coastal waters • Piping plover – potentially present during the overwintering period • Red knot – potentially present during seasonal migrations • Wood stork – not likely to be present in action area • Alabama red-bellied turtle – not likely to be present in action area • Eastern indigo snake – not likely to be present in action area • Gopher tortoise – not likely to be present in action area <u>Habitat</u>: • Alabama beach mouse critical habitat • Loggerhead sea turtle critical habitat As a general rule, the elements described in this RP/EIS that have been added since Phase III Early Restoration would be located within the footprint of disturbance analyzed in the Final Phase III ERP/PEIS; however, the pedestrian trail from the pier to the lodge, portions of the tram system, and possible public educational programs would be located outside of that footprint. As a result, additional details about the affected environment related to these elements are described below. Although specific sites have not yet been determined, tram stops outside of the lodge site would be located on existing asphalt areas within Gulf State Park and not include new ground disturbance. If any additional infrastructure (e.g., a shade shelter) is added at these sites, it would also be located on existing asphalt areas. The pedestrian trail would be located outside the area of disturbance evaluated in the Final Phase III ERP/PEIS and would be approximately 620 feet long and 8 feet wide. Any educational programs that occur outside the interpretive lobby of the lodge would likely occur on the beach. These additional areas consist of the same protected species and habitat as the original project area. Additional tram stops outside the lodge site would be located on asphalt where there are no

Baldwin County Alternatives	Site-specific Considerations
	species or habitats. As noted under the no action alternative (Section 2.2.3), construction activities related to the lodge and conference center have commenced. Ongoing construction activities have the potential to disturb species, included protected species, in the approximately 13-acre disturbed area. However, conservation measures are being implemented as stated in the Final Phase III ERP/PEIS to minimize impacts on protected species.
Fort Morgan Pier Rehabilitation	Protected species and their habitats that are known to occur or may potentially occur at the pier rehabilitation site include: <u>Species</u>: • Alabama beach mouse – known to occupy parts of Fort Morgan Peninsula and likely to be present within the site • Sea turtles known to occur in coastal waters: green, Kemp's ridley, loggerhead, leatherback and hawksbill – may occur within or near site; only loggerhead and Kemp's ridley are known to nest in Alabama • Bottlenose dolphin – likely to be present in coastal waters • West Indian manatee – likely to be present in coastal waters • Gulf sturgeon – potentially present in coastal waters • Piping plover – potentially present during the overwintering period • Red knot – potentially present during seasonal migrations • Wood stork – not likely to be present in the area • Alabama red-bellied turtle – not likely to be present in the area • Eastern indigo snake – not likely to be present in the area • Gopher tortoise – not likely to be present in the area <u>Habitat</u>: • Alabama beach mouse non-critical habitat • Loggerhead sea turtle critical habitat – nesting • Potential Kemp's ridley sea turtle non-critical nesting habitat • Bird stopover or wintering habitat (non-critical) for red knots and piping plover • EFH – Coastal migratory pelagics, shrimp, red drum, reef fish, and highly migratory species
Fort Morgan Peninsula Public Access Improvements	Protected species and their habitats that are known to occur or may potentially occur at Fort Morgan Peninsula Public Access Improvement sites include: <u>Species</u>: • Alabama beach mouse – known to occupy parts of Fort Morgan Peninsula and likely to be present within action area • Sea turtles known to occur in coastal waters: green, Kemp's ridley, loggerhead, leatherback and hawksbill – may occur within adjacent waters; only loggerhead and Kemp's ridley known to nest in Alabama • Bottlenose dolphin – likely to be present in coastal waters • West Indian manatee – likely to be present in coastal waters • Gulf sturgeon – potentially present in coastal waters • Piping plover – potentially present during the overwintering period • Red knot – potentially present during seasonal migrations • Wood stork – not likely to be present in action area • Gopher tortoise – not likely to be present in action area

Baldwin County Alternatives	Site-specific Considerations
	Habitat: • Alabama beach mouse critical habitat • Loggerhead sea turtle critical habitat - nesting • Potential Kemp's ridley sea turtle non-critical nesting habitat • Bird stopover habitat (non-critical) for red knots and piping plover
Gulf Highlands Land Acquisition and Improvements	Protected species, and their habitats, which are known to occur or may potentially occur at this site include: Species: • Alabama beach mouse – known to occupy parts of Fort Morgan Peninsula and likely to be present within project site • Sea turtles: green, Kemp's ridley, loggerhead, leatherback and hawksbill – may occur within adjacent waters; only loggerhead and Kemp's ridley known to nest in Alabama; the beachfront portion of the Gulf Highlands parcel accounts for approximately 51% of Alabama's sea turtle nesting • West Indian manatee – likely to be present in coastal waters • Bottlenose dolphin – likely to be present in coastal waters • Gulf sturgeon – potentially present in coastal waters • Piping plover – potentially present during the overwintering period • Red knot - potentially present during seasonal migrations • Wood stork – not likely to be present in action area • Eastern indigo snake – not likely to be present in action area • Gopher tortoise – not likely to be present in action area Habitat: • Alabama beach mouse critical habitat (48.1 acres) • Loggerhead sea turtle critical habitat – nesting • Potential Kemp's ridley sea turtle non-critical nesting habitat • Bird stopover habitat (non-critical) for red knots and piping plover
Laguna Cove Little Lagoon Natural Resource Protection	Protected species and their habitats that are known to occur or may potentially occur at this site include: Species: • Alabama beach mouse – likely to be present within the site • Sea turtles: green, Kemp's ridley, loggerhead, leatherback, and hawksbill – not likely to be present at the site because the area does not contain Gulf-fronting beaches • West Indian manatee – likely to be present in Little Lagoon • Bottlenose dolphin – likely to be present in coastal waters • Gulf sturgeon – potentially occurring but not likely to be present in Little Lagoon • Piping plover – potentially present during the overwintering period • Red knot - potentially present during seasonal migrations • Wood stork – not likely to be present in the area • Eastern indigo snake – not likely to be present in the area • Gopher tortoise – not likely to be present in action area

Baldwin County Alternatives	Site-specific Considerations
	Habitat: • Alabama beach mouse non-critical habitat (26.25 acres) • Bird stopover habitat (non-critical) for red knots and piping plover • EFH – coastal migratory pelagics, red drum, reef fish, and shrimp

Table 4-14: Site-specific Considerations for Protected Species and Habitat in Mobile County

Mobile County Alternatives	Site-specific Considerations
Dauphin Island Eco-Tourism and Environmental Education Area	Protected species and their habitats, which are known to occur or may potentially occur at this site include: Species: • Sea turtles: green, Kemp's ridley, loggerhead, leatherback and hawksbill – not likely to be present at project site because project area does not contain Gulf fronting beaches • West Indian manatee – likely to be present in coastal waters • Bottlenose Dolphin – likely to be present in coastal waters • Gulf sturgeon – known to be present in near-shore environments; may occur near project area • Piping plover – not likely to be present in action area • Red knot – not likely to be present in action area • Wood stork – not likely to be present in action area Habitat: • EFH – Coastal migratory pelagics, shrimp, red drum, reef fish, and highly migratory species
Mid-Island Parks and Public Beach Improvements (Parcels A, B, and C)	Protected species, and their habitats, which are known to occur or may potentially occur at this site include: Species: • Sea turtles: green, Kemp's ridley, loggerhead, leatherback and hawksbill – may occur within adjacent coastal waters; only loggerhead and Kemp's ridley known to nest in Alabama (potentially Parcel A) • West Indian manatee – likely to be present in coastal waters • Bottlenose dolphin – likely to be present in coastal waters • Gulf sturgeon – known to occupy nearshore environments; may occur near project area • Piping plover – potentially present during the overwintering period • Red knot – potentially present during seasonal migrations • Wood stork – not likely to be present in action area Habitat: • Bird stopover habitat (non-critical) for red knots and piping plover • Potential sea turtle non-critical nesting habitat (Parcel A) for loggerhead and Kemp's ridley

Mobile County Alternatives	Site-specific Considerations
Mid-Island Parks and Public Beach Improvements (Parcels B and C)	Protected species, and their habitats, which are known to occur or may potentially occur at this site include: Species: • Sea turtles: green, Kemp's ridley, loggerhead, leatherback and hawksbill – not likely to be present at project site because project area does not contain Gulf fronting beaches • West Indian manatee – likely to be present in coastal waters • Bottlenose dolphin – likely to be present in coastal waters • Gulf sturgeon – known to occupy nearshore environments; may occur near project area • Piping plover – potentially present during the overwintering period • Red knot – potentially present during seasonal migrations • Wood stork – not likely to be present in action area Habitat: • Bird stopover habitat (non-critical) for red knots and piping plover

4.4 SOCIOECONOMIC ENVIRONMENT

4.4.1 Socioeconomics and Environmental Justice

In addition to the ecological significance of its natural resources and rarity of its many habitats, the Gulf of Mexico is economically important to the people of the region and the nation. The Gulf region's economy is highly intertwined with its natural resources, which includes oil and gas deposits; commercial and recreational fisheries; waterfowl, migratory birds, and other wetland-dependent life; and coastal beaches and waterways for ports, waterborne commerce, and tourism. Natural habitats in the region also provide critical natural protection to coastal communities against powerful and persistent storms, often referred to as a first line of defense. The economy, population characteristics, and employment sectors in Baldwin and Mobile counties differ substantially. The Gulf State Park Lodge and Associated Public Access Amenities Project, Gulf Highlands Land Acquisition and Improvements, Fort Morgan Peninsula Public Access Improvements, and the Fort Morgan Pier Rehabilitation alternatives would be implemented within Baldwin County, which has a lower percentage minority population and lower household income than Mobile County. Thus, the two counties were evaluated separately. Within Baldwin County, the Town of Gulf Shores, where the Gulf State Park Lodge and Associated Public Access Amenities Project, Gulf Highlands Land Acquisition and Improvements, Fort Morgan Peninsula Public Access Improvements, and the Fort Morgan Pier Rehabilitation exist was evaluated separately from the rest of the county. In Mobile County, Dauphin Island, where the Dauphin Island Eco-Tourism and Environmental Education Area and the Mid-Island Parks and Public Beach Improvements are located, was compared to the rest of the county's statistics. The information below provides the most accurate and updated socioeconomic information since the Final Phase III ERP/PEIS analysis.

Baldwin County

Population Characteristics. As of July 1, 2015, according to the 2011-2015 American Community Survey 5-year estimate, the estimated year-round population of Baldwin County is 195,121 people. Of the estimated population, 51.2 percent are female and 48.8 percent are male. The population is 83 percent

White (not Hispanic or Latino), 9.5 percent Black, 4.5 percent Hispanic, 0.7 percent Asian, 0.5 percent Native American, and 1.8 percent identify as Other (USCB, 2015a).

The Gulf Coast area has a notably higher concentration of residents who identify themselves as White alone than Baldwin County (see table 4-15). Even though coastal counties along the Gulf are more ethnically diverse than they used to be (Cutter and Emrich, 2006), fewer than 1 percent of residents in the Gulf Shores area identify themselves as Black or African American alone (USCB, 2015b), which is notably lower than the Baldwin County percentage of 9.5.

Table 4-15: Racial and Ethnic Composition of Study Area Geographies, 2014

Race/Ethnicity	Gulf Shores, AL	Baldwin County, AL
White alone	89.1%	83.1%
Black or African American alone	0%	9.5%
American Indian and Alaska Native alone	0.4%	0.6%
Asian alone	2.3%	0.7%
Native Hawaiian and Other Pacific Islander alone	0%	0%
Hispanic or Latino origin	2.9%	4.5%
Other*	5.1%	1.7%
Minority**	10.9%	16.9%
Total	**10,703**	**195,121**

Notes: *Other includes all those who identify themselves as being of Some Other Race or Two or More Races.
**EO 12898 defines a minority as any person who identifies themselves as being of a race other than Non-Hispanic White alone.

Sources: USCB, 2015a, 2015b

EO 12898, "Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations" defines a minority as any person who identifies themselves as being of a race other than Non-Hispanic White alone. According to the CEQ, the *Fifty Percent* analysis can be used to determine if an affected area necessitates a more robust analysis into environmental justice issues. If an affected area has a minority population of more than 50 percent or the minority population percentage of the affected area is meaningfully greater than the minority population percentage in the general population or other appropriate unit of geographic analysis, then environmental justice issues should be considered (USEPA, 2016c). In the Gulf Shores, the number of individuals who identify themselves as minority is notably smaller than the number in Baldwin County and is significantly less than 50 percent. The analyses in this RP/EIS comply with EO 128898 and guidance provided by the CEQ.

Economic Characteristics. Baldwin County has the largest number of travel-related employees out of any county in the state and the highest amount of travel-related revenue (Alabama Tourism Department, 2015). These employees and this revenue is mainly concentrated in the retail trade sector, which employs the highest percentage of people in the City of Gulf Shores (see table 4-16). At 23.3 percent, this employment percentage is notably higher than the Baldwin County retail sector employment percentage (USCB, 2015c, 2015d). The location of Gulf Shores and the availability of recreational activities help support employment in the arts, entertainment, recreation, and accommodation and food services sector. The arts, entertainment, recreation and accommodation and

food services sector is one of the top three employment sectors in each municipality, which could be related to the high volume of tourists visiting the county.

Table 4-16: Employment by Industry of Study Area Geographies, 2015

Industry	Gulf Shores, AL	Baldwin County, AL
Civilian employed population 16 years and over	4,759	85,953
Agriculture, forestry, fishing and hunting, and mining	0.3%	1.5 %
Construction	8.5%	8.0%
Manufacturing	4.5%	9.3%
Wholesale trade	1.1%	2.8%
Retail trade	**23.3%**	**15.2%**
Transportation and warehousing, and utilities	1.5%	4.6%
Information	0.3%	1.6%
Finance, insurance, real estate, and rental and leasing	11.7**%**	6.4%
Professional, scientific, and management, and administrative and waste management services	10.3%	9.8**%**
Educational services, and health care and social assistance	**13.2%**	**19.9%**
Arts, entertainment, and recreation, and accommodation and food services	**20.4%**	**11.4%**
Other services, except public administration	2.8%	4.9%
Public administration	2.3%	4.7%

Note: **Bold indicates the top three industries in each geographic area of comparison.
Sources: USCB, 2015c, 2015d

Gulf Shores has a higher unemployment rate than Baldwin County. Baldwin County reports an unemployment rate of approximately 7.5 percent, and Gulf Shores reports 14 percent (USCB, 2015c, 2015d). Military employment in the area is small, with armed forces making up only 0.4 percent of the Gulf Shores labor force and 0.3 percent of the Baldwin County labor force (see table 4-17).

Table 4-17: Employment and Unemployment Characteristics, 2015

Employment Status	Gulf Shores, AL	Baldwin County, AL
In labor force	5,561	93,167
Civilian labor force	5,536	92,925
Employed	*96%*	*92.5%*
Unemployed	*14%*	*7.5%*
Armed Forces	25	242
Not in labor force	3,477	63,212

Sources: USCB, 2015c, 2015d

The median household income in Baldwin County as of 2015 was $50,254 with a per capita income of $27,317 (USCB, 2015c). Typically, an income gap is geographically prevalent along coastal communities where wealthy people live along the coast and wealth decreases inland (Cutter and Emrich, 2006). In Gulf Shores the median household income is higher relative to the county at $57,712.

In accordance with EO 12898, "Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations," high concentrations of low-income populations are identified if the percentage of low-income individuals is greater than an appropriate geographic area of comparison. The percentage of Gulf Shores' residents living below the poverty line exceeds the Baldwin County average (see table 4-18).

Table 4-18: Poverty Status and Earnings, 2015

Indicator	Gulf Shores, Total	Number Gulf Shores Below Poverty Level	Percent Gulf Shores Below Poverty Level	Baldwin County, Total	Number Baldwin County Below Poverty Level	Percent Baldwin County Below Poverty Level
Population for whom poverty status is determined	10,694	1,779	16.6%	192,355	25,798	13.4%
Age: Under 18 years	1,976	438	22.2%	43,247	8,282	19.2%
Age: Related children under 18 years	1,8976	438	22.2%	42,131	8,211	19%
Age: 18 to 64 years	6,196	1,090	17.6%	114,299	15,042	13.2%
Age: 65 years and over	2,522	251	10.0%	34,809	2,474	7.1%
Median Household Income	$57,712	--	--	$50,254	--	--
Per Capita Income	$31,877	--	--	$27,317	--	--

Note: Poverty status is determined for the 12 months prior to reporting.
Sources: USCB, 2015c, 2015d, 2015e, 2015f

Mobile County

Population Characteristics. Mobile County has a total population of 414,251, of which 52.2 percent are female and 47.8 percent are male; 58.1 percent identify as White alone, 35 percent are Black, 2.6 percent are Hispanic, 0.6 percent are Native American, 1.9 percent are Asian, and 1.7 percent identify as Other (USCB, 2015g).

Dauphin Island deviates substantially from the county demographics (see table 4-19). Mobile County's population is made up of almost 42 percent minorities, while Dauphin Island has only a 3.4 percent minority population. This is specifically noticeable when looking at the percentage of Black or African American individuals on Dauphin Island compared to the county as a whole. Dauphin Island's Black population is less than one percent of the population recorded in Mobile County.

Table 4-19: Racial and Ethnic Composition of Study Area Geographies, 2014

Race/Ethnicity	Dauphin Island, AL	Mobile County, Alabama
White alone	96.7%	58.1%
Black or African American alone	0.4%	35%
American Indian and Alaska Native alone	1.0%	0.6%
Asian alone	0.2%	1.9%
Native Hawaiian and Other Pacific Islander alone	0%	0%
Other*	1.1%	1.7%
Hispanic or Latino origin	0.7%	2.6%
Minority**	3.4%	41.8%
Total	**1,238**	**414,251**

Notes: *Other category includes all those who identify themselves as being of Some Other Race or Two or More Races.
**EO 12898 defines a minority as any person who identifies themselves as being of a race other than Non-Hispanic White alone.

Sources: USCB, 2015g, 2015f

Economic Characteristics. On Dauphin Island, the biggest employment sector is educational services, health care, and social assistance (USCB, 2015h). The high percentage of employment in health care and social assistance may correlate with the number of elderly people who reside on the Island. About 34 percent of the town's population is 60 or older (USCB, 2015f), while the percentage over 60 in Mobile County is only around 20 percent (USCB, 2015g).

The second largest employment sector on Dauphin Island is the manufacturing sector followed by the arts, entertainment and recreation and accommodation and food sector (see table 4-20) (USCB, 2015i). The prominence of the arts, entertainment, and recreation, accommodation and food services sector is most likely due to the fact that Dauphin Island is a vacation destination for tourists from around the country. Tourists, along with the island's large number of retirees, are also spending their time on leisure activities, and therefore tap into the arts, entertainment, and recreation resources available on the island.

Table 4-21 includes data on employment. The unemployment rate on Dauphin Island (6.4 percent) is lower than the rate in Mobile County (9.8 percent) and slightly higher than the 2014 national average (6.2 percent). No members of the labor force on Dauphin Island participate in the Armed Forces (USCB, 2015i).

Table 4-20: Employment by Industry of Study Area Geographies, 2014

Industry	Dauphin Island, AL	Mobile County, AL
Civilian employed population 16 years and over	559	170,900
Agriculture, forestry, fishing and hunting, and mining	3.9%	1.2%
Construction	9.1%	6.8%
Manufacturing	**14.1%**	**12.0%**
Wholesale trade	3.9%	2.9%
Retail trade	2.7%	**13.0%**
Transportation and warehousing, and utilities	9.5%	5.3%
Information	0.4%	1.7%
Finance, insurance, real estate, and rental and leasing	8.8%	5.2%
Professional, scientific, and management, and administrative and waste management services	9.3%	9.7%
Educational services, health care and social assistance	**17.9%**	**24.1%**
Arts, entertainment, and recreation, and accommodation and food services	**13.2%**	9.0%
Other services, except public administration	0.7%	5.5%
Public administration	6.4%	3.7%

Note: **Bold indicates the top three industries in each geographic area of comparison.
Sources: USCB, 2015h, 2015i

Table 4-21: Employment and Unemployment Characteristics, 2014

Employment Status	Dauphin Island, AL	Mobile County, AL
In labor force	595	190,415
Civilian labor force	595	189,544
Employed	*94%*	*90.2%*
Unemployed	*6%*	*9.8%*
Armed Forces	0	871
Not in labor force	496	134,737

Sources: USCB, 2015h, 2015i

The Mobile County median household income in 2015 was estimated to be $43,809, with a per capita income of $22,953 (USCB, 2015h). Dauphin Island reports higher median household and per capita incomes of $63,594 and $34,281, respectively (USCB, 2015i). Furthermore, Mobile County's percentage of people below the poverty line is about five times the Dauphin Island below poverty percentage (see table 4-22).

Table 4-22: Poverty Status and Earnings, 2014

Indicator	Dauphin Island Total	Dauphin Island Number Below Poverty Level	Dauphin Island, Percent Below Poverty Level	Mobile County, Total	Mobile County, Number Below Poverty Level	Mobile County, Percent Below Poverty Level
Population for whom poverty status is determined	1,287	46	3.6%	404,329	77,917	19.3%
Age: Under 18 years	241	10	4.1%	99,080	27,808	28.1%
Age: Related children under 18 years	241	10	4.1%	98,867	27,624	27.9%
Age: 18 to 64 years	726	36	5%	248,189	44,484	17.5%
Age: 65 years and over	320	0	0.00%	57,060	6,625	11.6%
Median Household Income	$63,594	--	--	$43,809	--	--
Per Capita Income	$34,281	--	--	$22,953	--	--

Note: Poverty status is determined for the 12 months prior to reporting.
Sources: USCB, 2015h, 2015i, 2015j, 2015k, 2015l

4.4.2 Cultural Resources

Cultural resources provide insight into the lifestyles of preceding persons. These resources may include old structures such as homes, buildings, villages, roads, burial sites, entrenchments, mounds, and canals. They may also include historic artifacts, objects, and inscriptions. Cultural resources can act as an indication of how earlier societies functioned (NRCS, n.d.b).

Although neither NEPA nor any other federal law defines “cultural resource,” several laws and EOs deal with resources that are cultural in character (National Preservation Institute, 2016), including:

- The National Historic Preservation Act (NHPA), which sets forth government policy and procedures regarding “historic properties” (i.e., districts, sites, buildings, structures, and objects included in or eligible for the National Register of Historic Places [NRHP]).
- The Native American Graves Protection and Repatriation Act, which requires federal agencies and federally assisted museums to return “Native American cultural items” to the federally recognized Indian tribes or Native Hawaiian groups with which they are associated.
- The American Indian Religious Freedom Act, which obligates the U.S. government to respect and protect the rights of Indian tribes to the free exercise of their traditional religions.
- The Archeological Resources Protection Act, which prohibits the excavation of archaeological resources (anything of archaeological interest) on federal or Indian lands without a permit from the land manager.
- The Archeological Data Preservation Act or Archeological and Historic Preservation Act, which requires agencies to report any perceived impacts that their projects and programs may have on archaeological, historical, and scientific data and requires them to recover such data or assist the Secretary of the Interior in recovering them.

- The Federal Records Act, which requires that agencies manage documents in such a way as to protect their historical value, and the Abandoned Shipwrecks Act, which asserts U.S. title to abandoned shipwrecks and transfers title to the states.
- EO 12898, which requires that agencies try to avoid disproportionate and adverse environmental impacts on low-income and minority populations.
- EO 13006, which requires that agencies give priority to using historic buildings in historic districts in central business areas to meet their mission requirements.
- EO 13007, which requires that agencies try not to damage "Indian sacred sites" on federal land and avoid blocking access to such sites by traditional religious practitioners (National Preservation Institute, 2016).

The Alabama Gulf Coast was home to a number of Indian tribes (City of Gulf Shores, 2017). The coast served as a source of sustenance to the Native Americans well before European settlers arrived in America. The first European settlers arrived in the area in the 1500s. National or state historic sites that are located within the alternatives are detailed below.

Baldwin County

Gulf State Park. Gulf State Park is rich in history and archaeology. Along the 2 miles of coast, Native Americans arrived to gather shellfish, fish, and other natural resources (City of Gulf Shores, 2017; University of Southern Alabama, 2006). The park was established in 1939; its creation began to draw people to the area, and the town transitioned from a small fishing community to a growing area (City of Gulf Shores, Alabama, n.d.).

Fort Morgan State Historic Site. Fort Morgan is a military fort that has survived four wars, including the Civil War, the Spanish-American War, and World Wars I and II. Fort Morgan was preceded by Fort Bowyer, which was an earthen fort built in 1813 and was vital in two battles of the War of 1812 (Hickey, 2012) Fort Morgan was erected in 1834. It is most well-known for its role in the Battle of Mobile Bay during the civil war (Alabama Tourism Department, 2017a). Between 1900 and 1923, Fort Morgan served as the largest permanent military post in the United States (Alabama Tourism Department, 2017a). Site-specific considerations regarding cultural resources for the alternatives located in Baldwin County are described in Table 4-23.

Table 4-23: Site-specific Considerations for Cultural Resources in Baldwin County

Baldwin County Alternatives	Site-specific Considerations
Gulf State Park Lodge and Associated Public Access Amenities Project	Cultural resources that are known to occur or may potentially occur at the Gulf State Park Lodge and Associated Public Access Amenities Project site are characterized in the Final Phase III ERP/PEIS (Section 11.7.6.9.3). Surveys were conducted in the areas disturbed as part of that project. As a general rule, the elements described in this RP/EIS that have been added since Phase III Early Restoration would be located within the footprint of disturbance analyzed in the Final Phase III ERP/PEIS; however, the pedestrian trail from the pier to the lodge, portions of the tram system, and possible public educational programs would be located outside of that footprint. As a result, additional details about the affected environment related to these elements are described below. Although specific sites have not yet been determined, tram stops outside of the lodge site would be located on existing asphalt areas within Gulf State Park and

Baldwin County Alternatives	Site-specific Considerations
	would not require new ground disturbance. If any additional infrastructure (e.g., a shade shelter) is added at these sites, it would also be located on existing asphalt areas. The pedestrian trail would be located outside the area of disturbance evaluated in the Final Phase III ERP/PEIS and would be approximately 620 feet long and 8 feet wide. Any educational programs that occur outside the interpretive lobby of the lodge would likely occur on the beach. These additional areas consist of the same cultural resources as the original project area. As noted under the no action alternative (Section 2.2.3), construction activities related to the lodge and conference center have commenced, and all construction is occurring in compliance with the previous State Historic Preservation Office consultation. Any additional cultural resources that may be found within the additional elements will be addressed following federal guidelines with the assistance of the Alabama Historical Commission. The ongoing construction activities include earth moving for building construction over a total disturbed area of approximately 13 acres and have disturbed soils in this area.
Fort Morgan Pier Rehabilitation	Cultural resources associated with Fort Morgan State Historic Site could potentially occur at the Fort Morgan Pier Rehabilitation site. It is likely that submerged cultural resources are present. Any cultural resources that may be found within the site will be addressed following federal guidelines with the assistance of the Alabama Historical Commission.
Fort Morgan Peninsula Public Access Improvements	Coordination with the Alabama Historical Commission regarding the extent and nature of cultural resources at the site is ongoing. As part of this coordination, the nature of the affected environment at this site in regards to cultural resources will be identified prior to any work commencing on the site. As noted under Section 5.2.4.2, a complete review of this alternative under Section 106 of the NHPA is ongoing and would be completed prior to any activities that would restrict consideration of measures to avoid, minimize or mitigate any adverse effects on historic properties located within the project area. This alternative would be implemented in accordance with all applicable laws and regulations concerning the protection of cultural and historic resources.
Gulf Highlands Land Acquisition and Improvements	Coordination with the Alabama Historical Commission regarding the extent and nature of cultural resources at the site is ongoing. As part of this coordination, the nature of the affected environment at this site in regards to cultural resources will be identified prior to any work commencing on the site. As noted under Section 5.2.4.2, a complete review of this alternative under Section 106 of the NHPA is ongoing and would be completed prior to any activities that would restrict consideration of measures to avoid, minimize or mitigate any adverse effects on historic properties located within the project area. This alternative would be implemented in accordance with all applicable laws and regulations concerning the protection of cultural and historic resources.

Baldwin County Alternatives	Site-specific Considerations
Laguna Cove Little Lagoon Natural Resource Protection	Coordination with the Alabama Historical Commission regarding the extent and nature of cultural resources at the site is ongoing. As part of this coordination, the nature of the affected environment at this site in regards to cultural resources will be identified prior to any work commencing on the site. As noted under Section 5.2.4.2, a complete review of this alternative under Section 106 of the NHPA is ongoing and would be completed prior to any activities that would restrict consideration of measures to avoid, minimize or mitigate any adverse effects on historic properties located within the project area. This alternative would be implemented in accordance with all applicable laws and regulations concerning the protection of cultural and historic resources.

Mobile County

Dauphin Island. Dauphin Island's vast natural resources attracted Native Americans and became a popular site for fishing and hunting and gathering oysters and other shellfish that grew in Mobile Bay. Shellfish debris from ancient Native American meals resulted in the preservation of mounds of shell middens within the park (Dauphin Island Park and Beach, 2016b). The French arrived on Dauphin Island in 1699 and established a settlement, but were raided by pirates in 1711. The settlement survived, and by 1717, Dauphin Island was the home of the French Governor General of Louisiana (Dauphin Island Park and Beach, 2016b). The British and Spanish later controlled the island before it became part of the United States.

Shell Mound Park. Located on the north shore of Dauphin Island, Shell Mound Park is believed to be remnants of the massive amounts oysters, shellfish, and other delicacies consumed by early Native Americans from A.D. 1100–1550 (University of South Alabama, 2006) . It is believed that Native Americans would migrate down to Dauphin Island to gather and roast shellfish in the later winter and spring. Over the centuries, the waste from shellfish consumption formed massive mounds of shells and bones (University of South Alabama, 2006). Table 4-24 describes the site-specific considerations regarding cultural resources for the alternatives located in Mobile County.

Table 4-24: Site-specific Considerations for Cultural Resources in Mobile County

Mobile County Alternatives	Site-specific Considerations
Dauphin Island Eco-Tourism and Environmental Education Area	Coordination with the Alabama Historical Commission regarding the extent and nature of cultural resources at the site is ongoing. As part of this coordination, the nature of the affected environment at this site in regards to cultural resources will be identified prior to any work commencing on the site. As noted under Section 5.2.4.2, a complete review of this alternative under Section 106 of the NHPA is ongoing and would be completed prior to any activities that would restrict consideration of measures to avoid, minimize or mitigate any adverse effects on historic properties located within the project area. This alternative would be implemented in accordance with all applicable laws and regulations concerning the protection of cultural and historic resources.

Mobile County Alternatives	Site-specific Considerations
Mid-Island Parks and Public Beach Improvements (Parcels A, B, and C)	Coordination with the Alabama Historical Commission regarding the extent and nature of cultural resources at the site is ongoing. As part of this coordination, the nature of the affected environment at this site in regards to cultural resources will be identified prior to any work commencing on the site. As noted under Section 5.2.4.2, a complete review of this alternative under Section 106 of the NHPA is ongoing and would be completed prior to any activities that would restrict consideration of measures to avoid, minimize or mitigate any adverse effects on historic properties located within the project area. This alternative would be implemented in accordance with all applicable laws and regulations concerning the protection of cultural and historic resources.
Mid-Island Parks and Public Beach Improvements (Parcels B and C)	Coordination with the Alabama Historical Commission regarding the extent and nature of cultural resources at the site is ongoing. As part of this coordination, the nature of the affected environment at this site in regards to cultural resources will be identified prior to any work commencing on the site. As noted under Section 5.2.4.2, a complete review of this alternative under Section 106 of the NHPA is ongoing and would be completed prior to any activities that would restrict consideration of measures to avoid, minimize or mitigate any adverse effects on historic properties located within the project area. This alternative would be implemented in accordance with all applicable laws and regulations concerning the protection of cultural and historic resources.

4.4.3 Infrastructure

Baldwin County

The proposed project sites in Baldwin County are all located along the Gulf Coast or along Mobile Bay. These are low-development areas with limited infrastructure. Infrastructure that exists within or around the proposed sites includes traffic and transportation infrastructure; utility infrastructure (for power and water resources); and structures such as public restrooms or fishing piers.

Three main roads serve as access routes to the Gulf Shores area—State Highways 59, 182, and 180 (Google Earth, 2015b). State Highway 59 is the main route to the Gulf Shores area from Foley, Alabama, which is a little more than 11 miles inland from the coast. State Highway 182 is the primary transportation route east to west along the coast between the towns of Gulf Shores and Orange Beach. It stretches over 17 miles, entirely in Baldwin County, starting south of Little Lagoon on Fort Morgan Peninsula where it begins at a cul-de-sac and runs along the coast until it reaches Florida (Google Earth, 2015b). It crosses State Highway 59 before entering Gulf State Park where it bisects State Highway 135 just north of the Gulf State Park fishing pier. State Highway 182 then extends all the way through Orange Beach until it reaches Florida. State Highway 180 stems from State Highway 135 along the northern boundary of the park. It then crosses State Highway 59 and runs along the northern part of Fort Morgan Peninsula, north of Little Lagoon, until it reaches Fort Morgan and serves as the main access route to the historic site.

Gulf State Park offers a 496-site campground, with recreational vehicle pullouts and is approximately 1.5 miles from the beach shore (Alabama State Parks, 2016). Shuttle services to the Gulf Shores, provided through a variety of private companies, are located at the airport, select hotels, and in the

tourist neighborhoods areas of Baldwin County (Gulf Shores and Orange Beach Tourism, 2016b). The Baldwin Regional Area Transit System offers the BeachLinc Ride to and from Gulf Shores. Riders must schedule trips to the area 24 to 48 hours in advance (Baldwin County, 2016a).

Two main water and sewer providers serve the Gulf Shores area—Gulf Shores Utilities (public) and Baldwin County Sewer System (private). Both companies run lines parallel to State Highways 182 and 180 along Fort Morgan Peninsula (BCSS, 2014). However, not all of the residents along the peninsula use a public or private sector water supplier. Many of them have their own wells and/or septic tanks.

Baldwin EMC, a member-owned cooperative supplying electric service to more than 60,000 members throughout Baldwin County and southern Monroe County in southwestern Alabama, supplies electricity to Gulf State Park and surrounding communities. Its service territory is located between Mobile, Alabama, and Pensacola, Florida, and includes Gulf Shores and Orange Beach.

The structures present are more variable site to site than the other infrastructure types. Table 4-25 details the site-specific considerations for the alternatives located in Baldwin County.

Table 4-25: Site-specific Considerations for Infrastructure in Baldwin County

Baldwin County Alternatives	Site-specific Considerations
Gulf State Park Lodge and Associated Public Access Amenities Project	Utilities (water and energy): The utilities of the Gulf State Park Lodge and Associated Public Access Amenities Project site are characterized in the Final Phase III ERP/PEIS (Section 11.7.6.9.4). Existing water and power lines exist in the vicinity of the site. As a general rule, the elements described in this RP/EIS that have been added since Phase III Early Restoration would be located within the footprint of disturbance analyzed in the Final Phase III ERP/PEIS; however, the pedestrian trail from the pier to the lodge, portions of the tram system, and possible public educational programs would be located outside of that footprint. As a result, additional details about the affected environment related to these elements are described below. Although specific sites have not yet been determined, tram stops outside of the lodge site would be located on existing asphalt areas within Gulf State Park and would not require new ground disturbance. If any additional infrastructure (e.g., a shade shelter) is added at these sites, it would also be located on existing asphalt areas. The pedestrian trail would be located outside the area of disturbance evaluated in the Final Phase III ERP/PEIS and would be approximately 620 feet long and 8 feet wide. Any educational programs that occur outside the interpretive lobby of the lodge would likely occur on the beach. These additional project elements would not require utility hooks ups or place a demand on utilities. The ongoing construction activities include bringing the utilities in the vicinity of the lodge to the project site. Because it is currently under construction, the lodge is not putting demands on the capacity of the local utilities. Traffic and Transportation: Current and projected traffic and transportation conditions at the Gulf State Park Lodge and Associated Public Access Amenities Project site are characterized in the Final Phase III ERP/PEIS (Section 11.7.6.9.4).The site is bordered on the northern side by the four-lane State Highway 182 (Google Earth, 2015b). Just east of the site, State Highway 182 intersects with State Highway 135, which crosses over State Highway 182 and turns into an access road for the Gulf State Park fishing pier parking lot and extends toward the coast about 615 feet until reaching the lot (Google Earth, 2015b). As a

Baldwin County Alternatives	Site-specific Considerations
	general rule, the elements described in this RP/EIS that have been added since Phase III Early Restoration would be located within the footprint of disturbance analyzed in the Final Phase III ERP/PEIS; however, the pedestrian trail from the pier to the lodge, portions of the tram system, and possible public educational programs would be located outside of that footprint. As a result, additional details about the affected environment related to these elements are described below. Although specific sites have not yet been determined, tram stops outside of the lodge site would be located on existing asphalt areas within Gulf State Park. If any additional infrastructure (e.g., a shade shelter) is added at these sites, it would also be located on existing asphalt areas. The pedestrian trail would be located outside the area of disturbance evaluated in the Final Phase III ERP/PEIS and would be approximately 620 feet long and 8 feet wide. Any educational programs that occur outside the interpretive lobby of the lodge would likely occur on the beach. These additional areas consist of the same traffic and transportation conditions as the original project area because they are, for the most part, adjacent to the existing project area. As noted under the no action alternative (Section 2.2.3), construction activities related to the lodge and conference center have commenced. The ongoing construction activities include earth moving for building construction over a total disturbed area of approximately 13 acres and have disturbed soils in this area. Traffic and transportation patterns have not changed except for the closure of the main road through the center of the park in anticipation of full implementation of the transportation infrastructure and services linked to the lodge project (e.g., the tram, rental bicycles). This closure has not affected traffic operation in the area of the park. <u>Structures</u>: Structures were not addressed in the Final Phase III ERP/PEIS. The proposed Gulf State Park Lodge and Associated Public Access Amenities Project site is located on a formerly developed lodge site. At the time of the Final Phase III ERP/PEIS, all that remained of the previous development was a portion of the building foundation. The structures that formerly existed on the site were destroyed in Hurricane Ivan in 2004. A large parking lot and public pier are to the west of the proposed alternative site. The fishing pier is 1,540 feet long and 20 feet wide (Google Earth, 2015b). The fishing pier parking lot is about 2.26 acres and is connected to create a four-way intersection with State Highways 182 and 135 (Google Earth, 2015b). Construction on the new lodge is underway, and elements of a new structure are in place but not yet completed. The current construction includes the foundation and walls (core and shell) for the lodge and conference center.
Fort Morgan Pier Rehabilitation	<u>Utilities</u>: *Water:* Water and sewer mains run parallel along State Highway 180 all the way to Fort Morgan (Gulf Shores Utilities, 2016). *Energy*: Powerlines run above ground along State Highway 180 to Fort Morgan. One single line runs across the parking lot of the fishing pier site to power a light that stands between the fishing pier and the boat ramp on the parking lot (Google Earth, 2015b). <u>Traffic and Transportation</u>: The proposed site lies along the north side of State Highway 180, which is the main access road for Fort Morgan and Mobile Point.

Baldwin County Alternatives	Site-specific Considerations
	Structures: The existing fishing pier is approximately 500 feet long and is located in the Fort Morgan State Historic Site. The pier, which is more than 40 years old, has fallen in disrepair. In 2014, the Alabama Historical Commission closed the pier to the public. A public access boat ramp, about 40 feet east of the fishing pier (Google Earth, 2015b), includes two ramps, each about 14 feet wide and 73 feet long, and a courtesy dock in the center of the two ramps that extends into the water about 37 feet (Google Earth, 2015b). East of the boat ramp is a human-made gravel berm that extends into the water about 265 feet and is about 15 feet wide. A parking lot for about 10 cars is adjacent to the pier and ramp, off of State Highway 180 (ADCNR, 2014).
Fort Morgan Peninsula Public Access Improvements	Utilities: *Water*: Underground utility lines run along the corridor where the access improvement sites would be located. *Energy*: There are above-ground transmission lines along the corridor. Traffic and Transportation: The Fort Morgan Peninsula Public Access Improvements would occur south of State Highway 180. The western access improvements would be located off of Ponce De Leon Court, which is a residential two-way street south of State Highway 180 that runs parallel to the Gulf. The eastern access improvement sites would be off of Beach Boulevard, which is another residential street paralleling the Gulf. Structures: No existing structures are located on the access improvement sites besides the private homes to the east and west of the proposed sites.
Gulf Highlands Land Acquisition and Improvements	Utilities: *Water:* No known utility infrastructure exists in the area, but a site survey should be completed to verify this fact. *Energy:* Transmission lines exist along the western border of the parcel, but site surveys should be completed to verify this and list any additional existing transmission lines. Traffic and Transportation: The site is south of State Highway 180, but the boundaries are not adjacent to this major road. The parcel is bordered on the east by Gulfway Street, which is a small dirt road that extends from State Highway 180 to the coastline (Google Earth, 2015b). West of the parcel is Plantation Road, which is a paved, two-lane road that serves as access to various beach condominiums and the Gulf Highlands Golf Course (Google Earth, 2015b). Structures: The only existing structure in the boundaries of the Gulf Highlands Land Acquisition and Improvements area is a 0.4-acre tennis court in the northwest outcropping of the parcel. Past the proposed alternative boundary, bordering the within-bounds tennis court, is another larger tennis court of about 0.56 acre. High-rise housing units and an adjoining parking area border the western site boundary. The entire adjoining impervious housing area is about 8.4 acres. The eastern border along the beach adjoins another housing complex for about 200 feet until it transitions to open beach.

Baldwin County Alternatives	Site-specific Considerations
Laguna Cove Little Lagoon Natural Resource Protection	Utilities: *Water:* Gulf Shores Utilities runs sewer and water lines along State Highway 182 until the western end of the road (Gulf Shores Utilities, 2016). Baldwin County Sewer System, the private sewer company, runs lines parallel to the town's lines along State Highway 182. These lines are on the southern side of State Highway 182 and do not directly border the site. *Energy*: Baldwin EMC runs above-ground power lines along State Highway 182 from its western end on Fort Morgan Peninsula to the Gulf Shores area (Google Earth, 2015b). Traffic and Transportation: State Highway 182 borders the south side of the proposed site. West of the parcel, the road forms a rectangle with Starfish Lane and Sea Horse Circle (Google Earth, 2015b). North of Sea Horse Circle, Marsh Point offshoots and runs along Little Lagoon for about 400 feet (Google Earth, 2015b). These roads are used to access the residences along the beach and the lagoon. Structures: No public facilities are located on the proposed site. The only structures around the site are the private homes located south of State Highway 182 along the Gulf and west of the parcel along Sea Horse Circle (Google Earth, 2015b).

Mobile County

Dauphin Island has a total population of 1,238 people, according to the 2010 U.S. Census (USCB, 2010). However, even though the population is small, the infrastructure on areas such as Dauphin Island must be robust enough to handle the population swell that occurs every summer.

The water system for Dauphin Island is public and is managed by the Dauphin Island Water and Sewer Authority. Water is pumped from the underlying aquifer from a well toward the center of the island through 6- to 8-inch water mains (Mobile County Commission and Economic Recovery Council, 1980). The wastewater system was installed in 1956, and it uses a secondary treatment plant and nine pumping stations that receive wastewater through 8-, 12-, and 15-inch lines (Mobile County Commission and Economic Recovery Council, 1980). The lines run along State Highway 193 to the treatment plant, located south of the bridge, to Dauphin Island on Chugae Point where the effluent is discharged into Aloe Bay (Mobile County Commission and Economic Recovery Council, 1980). Transmission lines also run down State Highway 193 above ground all the way into Dauphin Island.

State Highway 193 is main road that provides access to Dauphin Island via a causeway. The route begins in east Theodore and extends as a two-lane road for 26.6 miles into Dauphin Island. Once on Dauphin Island, State Highway 193 ends at its confluence with Bienville Boulevard, which travels east and west along the island and is the main thoroughfare traversing the island.

The structures present vary at each site. Table 4-26 provides site-specific considerations for each proposed alternative site within Mobile County.

Table 4-26: Site-specific Considerations for Infrastructure in Mobile County

Mobile County Alternatives	Site-specific Considerations
Dauphin Island Eco-Tourism and Environmental Education Area	Utilities: *Water*: Water and sewer mains are assumed to run along State Highway 193; however, site assessments would be conducted to confirm. *Energy*: Above-ground electricity transmission lines run along State Highway 193, which is the eastern boundary of the alternative's site. Traffic and Transportation: As noted above, State Highway 193 borders the eastern side of the site. This is a two-lane road that serves as the sole traveling route for cars going to Dauphin Island. The northern part of the parcel abuts El Dorado Avenue, which is a 0.08-mile, dead-end stretch of road that is used to access residential mobile homes north of it (Google Earth, 2015a). Structures: No structures are located on or around the site. Across State Highway 193, the Dauphin Island Marina is used for boat slips, charter fishing, and nature tours (Dauphin Island Marina, 2015).
Mid-Island Parks and Public Beach Improvements (Parcels A, B, and C)	Utilities: *Water:* See above for water utility line evaluation. *Energy:* See above for transmission assessment of Parcels B & C. Transmission lines run along the northern border of Parcel A. Traffic and Transportation: See below for transportation evaluation for Parcels B and C. Parcel A is bordered to the north by Bienville Boulevard. Structures: No existing structures are located on any of the mid-island park parcels.
Mid-Island Parks and Public Beach Improvements (Parcels B and C)	Utilities: *Water*: Bienville Boulevard acts as the southern border of Parcel B. Presumably, water and sewer mains run along this road out to the Dauphin Island site, but site assessments would be conducted to confirm. Water utility lines are unknown surrounding Parcel C and need to be evaluated on site. *Energy*: Above-ground electricity lines run along the south side of Bienville Boulevard, down the western border of the site, which is along the east side of Pirates Cove Street, and on the north side of Cadillac Avenue, which borders the parcel to the north. Cadillac Avenue also borders Parcel C to the south. Parcel C is also marked by transmission lines on the east side of the site to the west of Pirates Cove Street. These lines stretch across the parcel to the western border on Pineda Street. Traffic and Transportation: Parcel B is bordered on the south by Bienville Boulevard, on the west by Pirates Cove Street, on the east by Perdido Street, and on the north by Cadillac Avenue. All of these streets are low traffic residential streets except for Bienville Boulevard. This street is the main means of transportation east and west across the island. Along the mid-island parks parcels, this route splits into a four-lane road separated by a median.

Mobile County Alternatives	Site-specific Considerations
	Structures: No existing structures are located on any of the mid-island park parcels.

4.4.4 Land and Marine Management

Projects within both Baldwin and Mobile counties are located in a coastal area regulated by the federal CZMA of 1972. The CZMA defines coastal zones wherein development must be managed to protect areas of natural resources unique to coastal regions. The act provides the basis for protecting, restoring, and responsibly developing coastal communities and resources. The program takes a comprehensive approach to balance competing and conflicting demands of coastal resource use, economic development, and conservation. The goal of the program is to coordinate local, state, and federal agency activities using existing laws to ensure that Alabama's coast is as valuable to future generations as it is today. In the State of Alabama, the Coastal Management Program is administered by ADCNR and ADEM (NOAA, 2016d). Public lands in the vicinity of the alternative sites within Baldwin and Mobile counties include Gulf State Park, Gulf Islands National Seashore, and the Bon Secour National Wildlife Refuge. The presence and management of these areas could potentially work in regulating and guiding future nearby site development. The management of these areas is administered by the Alabama State Parks, NPS, and USFWS, respectively.

Baldwin County

Several comprehensive plans form a vision of land management in Baldwin County. These comprehensive plans guide acceptable and preferred future development of the sites that would be consistent with the community's vision and goals and local and federal ordinances and regulations. The Baldwin County Planning District 25 regulates Fort Morgan Peninsula, west of the Laguna Cove Little Lagoon Natural Resource Protection site to the westernmost point. The eastern section of the peninsula is under the comprehensive plan for the City of Gulf Shores. The City of Gulf Shores has a vision plan, strategic plan, and land use plan that are intended to serve as guidance for the community's future and strengthen the quality of life, protect and preserve natural resources, enhance a sense of place, embed sustainability, and boost competition in the market place (City of Gulf Shores, Alabama, 2015). In addition, restoration projects within Gulf State Park are guided by Gulf State Park Master Plan (Sasaki, 2016). The master planning process aims to create a national model for natural resource restoration and economic revitalization along the historic Alabama Gulf Coast. The master plan sets forth components to guide restoration projects that include enhancing the visitor experience and restoring the dunes and establishes goals of building an environmental information center, creating a research and education center, and rebuilding a lodge in Gulf State Park.

The alternative sites in Baldwin County are situated west of Orange Beach to the tip of Fort Morgan Peninsula with smaller communities of southern Baldwin County to the north. The sites are zoned as open space and preservation (Gulf State Park Lodge and Associated Public Access Amenities Project), outdoor recreation (Fort Morgan Pier Rehabilitation, Fort Morgan Peninsula Public Access Improvements, and Gulf Highlands Land Acquisition and Improvements) and light residential ranging from single to two family parcels (Laguna Cove Little Lagoon Natural Resource Protection, Fort Morgan Peninsula Public Access Improvements, and Gulf Highlands Land Acquisition and Improvements) (Baldwin County, 2016b; City of Gulf Shores, Alabama, 2015). Outdoor recreation throughout and near the alternative sites includes a variety of activities, including fishing, boating, and swimming, golfing, zip lining, shopping, and visiting museums and historical sites (Gulf Shores and Orange Beach Tourism,

2016c). The area between the proposed Gulf State Park Lodge and Associated Public Access Amenities Project and Fort Morgan pier is approximately 21 miles. In between, facilities include recreational beaches, fishing piers, lodging camping, swimming lakes, marinas, and golf courses. In addition, there are swimming pools, tennis courts, and a recreational trail system throughout Gulf State Park. Table 4-27 provide site-specific considerations regarding land and marine management for the alternatives located in Baldwin County.

Table 4-27: Site-specific Considerations for Land and Marine Management in Baldwin County

Baldwin County Alternatives	Site-specific Considerations
Gulf State Park Lodge and Associated Public Access Amenities Project	Land Use Patterns: Land use characteristics along the shore and through the park at the Gulf State Park Lodge and Associated Public Access Amenities Project site are characterized in Final Phase III ERP/PEIS (Section 11.7.6.9.5). Surrounding the park, land use is predominately residential to the north; tourism businesses are to the southwest. Parcels directly west of the park are zoned for amusement and theme park and house the Alabama Gulf Coast Zoo and a water park. Gulf Shores, located farther west of the park, is also a highly developed, rapidly growing residential area and tourist destination consisting of single and multifamily dwellings, condominiums, and high and low-rise hotels. As a general rule, the elements described in this RP/EIS that have been added since Phase III Early Restoration would be located within the footprint of disturbance analyzed in the Final Phase III ERP/PEIS; however, the pedestrian trail from the pier to the lodge, portions of the tram system, and possible public educational programs would be located outside of that footprint. As a result, additional details about the affected environment related to these elements are described below. Although specific sites have not yet been determined, tram stops outside of the lodge site would be located on existing areas within Gulf State Park. If any additional infrastructure (e.g., a shade shelter) is added at these sites, it would also be located on existing asphalt areas. The pedestrian trail would be located outside the area of disturbance evaluated in the Final Phase III ERP/PEIS and would be approximately 620 feet long and 8 feet wide. Any educational programs that occur outside the interpretive lobby of the lodge would likely occur on the beach. These additional areas consist of the same land use characteristics as the original project area—they are adjacent to the original project site. As noted under the no action alternative (Section 2.2.3), construction activities related to the lodge and conference center have commenced. Land use at the site is guided by the Gulf State Park Master Plan, which considers the future development of the park with a goal of enhancing visitor experience, restoring the dunes, and rebuilding a lodge in in the park.
Fort Morgan Pier Rehabilitation	Land Use Patterns: The pier rehabilitation would mostly occur in water, but land development would occur on the open space outdoor recreation parcel that ranges from the most western tip of Fort Morgan Peninsula eastward approximately 1.5 miles. The Alabama Historical Commission owns the land and Baldwin County has zoned it as Open Space and Recreation. Zoning for the local business district begins on the north side of the peninsula, about 0.5-mile east of the pier rehabilitation site, although no development in that zoning district exists until reaching the residential districts farther east, which includes single, two family, and multifamily residential. North, west, and south of the pier rehabilitation site is zoned Open Space and Recreation or is open water.

Baldwin County Alternatives	Site-specific Considerations
Fort Morgan Peninsula Public Access Improvements	Land Use Patterns: Zoning along the majority of the Gulf Coast in the Fort Morgan Peninsula Public Access Improvements area consists of two-family residential parcels with an occasional tax, outdoor recreation, or single family residential parcel. The sites would mainly consist of county-owned parcels that are ROWs. Sites north of the alternative are mostly single family homes, although there is zoning for development of a general business district and multi-family housing.
Gulf Highlands Land Acquisition and Improvements	Land Use Patterns: The Gulf Highlands Land Acquisition and Improvements site is currently zoned for multi-family development with one parcel of open space outdoor recreation and approximately six single family residential parcels. Zoning north of the site is multi-family and single family residential. West of the site is zoned multi-family and single family residential with a golf course. Directly east of the site is The Beach Club, a beach resort with condominiums and cottages. The area beyond that is zoned for single family residences, although most parcels have not been developed.
Laguna Cove Little Lagoon Natural Resource Protection	Land Use Patterns: The site is currently zoned as single family, medium density residential (Zoning district R-1-4) (City of Gulf Shores, Alabama, 2016). This zoning district allows Recreation and Community Facilities by right (Bauer, 2017). Additional single family, medium density residential land is directly west of the site before land is designated as open space for recreational use with minimal single family residential. Directly south of the site along the coast, land use is waterfront single family residential. Little Lagoon is north of the site and just beyond that is more land designated for outdoor recreation. Overall, the area has little to no development aside from medium density single family residential areas, predominately to the east of the site.

Mobile County

The alternative sites within Mobile County are restricted to Dauphin Island. Mobile County does not have a land use plan of any kind, but the island does have a strategic plan and a land use plan developed to promote climate resiliency. Together, the goal of the two plans is to make Dauphin Island more resilient to a changing climate, protect natural resources, enhance economic sustainability, and improve community facilities (Five E's Unlimited, 2007; Janasie and Deal, 2015).

Three alternative sites are located in Mobile County. The Dauphin Island Eco-Tourism and Environmental Education Area and the Mid-Island Parks and Public Beach Improvements (Parcels A, B, and C) are located on Dauphin Island, a small 6.2-square mile island approximately 4 miles west/northwest of Fort Morgan Peninsula. The eco-tourism site is situated on the northern part of the island, surrounded by Aloe Bay to the west, Dauphin Island Marina to the east, the Dauphin Island community to the south, and Cedar Island to the north. Parcel A is situated on beach and dune habitat in the middle of the island. Areas to the north and west are residential, while resorts, including Dauphin Island Beach Club, Holiday Isle, and Minnie Memories, are to the east. To the south is the Gulf of Mexico. Parcels B and C are just north of Parcel A across Bienville Boulevard and are situated on dune habitat. The parcels are located in areas zoned for resort commercial developments areas (Parcels A and B) and two-family residential construction areas (Parcel C) (Janasie and Deal, 2015). Outdoor recreational opportunities throughout and near the parcels include fishing, bird watching, beach activities, and multi-use trails. The distance between the Mid-Island Parks and Beach Improvement sites and the Dauphin Island Eco-Tourism and

Environmental Education Area is approximately 2 miles. In between, facilities include recreational beaches, lodging, camping, marinas, and a golf course. Table 4-28 details the site-specific considerations regarding land and marine management for the alternatives located in Mobile County.

Table 4-28: Site-specific Considerations for Land and Marine Management in Mobile County

Mobile County Alternatives	Site-specific Considerations
Dauphin Island Eco-Tourism and Environmental Education Area	Land Use Patterns: The site consists of approximates 100 acres of land located north of the Alabama Deep Sea Fishing Rodeo site west of Lemoyne Drive on a parcel zoned for working waterfront. North of the site is open water and the State Highway 193 which leads to the mainland. West of the site, land use is working waterfront, resort commercial, and two-family residential. Directly south continues with working waterfront land use before getting into the central business district zoning. The open water on the site is privately owned water bottom but is not zoned for these uses.
Mid-Island Parks and Public Beach Improvements (Parcels A, B, and C)	Land Use Patterns: Parcels A, B, and C include approximately 10 acres of land located centrally on the island just north and south of Bienville Boulevard. Attributes for Parcel A are the same as for Parcels B and C (described below), but Parcel A is located on the south side of Bienville Boulevard in a resort commercial zoning district.
Mid-Island Parks and Public Beach Improvements (Parcels B and C)	Land Use Patterns: Parcels B and C include approximately 2 to 3 acres of land located centrally on the island just north of Bienville Boulevard. For Parcel B, the two lots bordering Bienville Blvd. are zoned as Resort Commercial District (RC) and the third parcel (which borders Cadillac Ave. to the south) is zoned Multi-Family Residential (RM-2) which allows up to 6 dwelling units. On Parcel C, the southernmost lot is zoned Multi-Family residential (RM-2) and the northernmost lot on Parcel C (abutting Bayou Heron) is zoned Multi-Family Residential (RM-3) which allows up to 10 dwelling units (see Ordinance 96, Sections 4, 5 and 6, South Alabama Regional Planning Commission, 2014). For all of these three zoning districts, "Public Parks and Recreational Areas" are an allowable use and as part of the zoning process (Collier, 2017). South of the parcels are more parcels zoned for resort commercial where the Dauphin Island Beach Club, Holiday Isle, and Minnie Memories are located. Land use north of the parcels includes conservation park and open water. West of the parcels is predominately single family residential and land use to the east consists of a central business district before heading into more single family residential.

4.4.5 Tourism and Recreational Use

Baldwin County

The proposed alternative sites are located on Alabama's Gulf Coast, which boasts white sand beaches adjacent to turquoise waters. Numerous opportunities are available for visitors to enjoy the natural resources present in the area. The main attraction of the Gulf Coast of Alabama is the beach. In 2015, Baldwin County was one of the top five visited counties in the State of Alabama (Alabama Tourism Department, 2015) with 6.1 million visitors to the county (Sharp, 2016). It has one of the largest concentrations of travelers in the state and demonstrates more seasonal visitors than any county in the state. (Alabama Tourism Department, 2015). Combined with Jefferson, Madison, Mobile, and

Montgomery counties, Baldwin County accounts for 68 percent of all tourists in Alabama (Alabama Tourism Department, 2015). Gulf State Park is the most visited state park in Alabama, with its revenue accounting for 23 percent of the total visitor revenue and 45 percent of the guest attendance of all of the state parks combined (Alabama State Parks, 2015). From 2007 through 2009 (before the DWH oil spill), park managers estimate that annual attendance at Gulf State Park averaged 2.5 million visitor days. Gulf Shores also entertains visitors with its outdoor activities, restaurants, and shops (Alabama Tourism Department, 2017b). Traditional lodging opportunities are available for visitors, primarily along the shoreline in between Gulf State Park and Fort Morgan Peninsula, as well as along the Gulf Coast Parkway. Many of these lodging options require multiple-night stays.

Tourism opportunities extend beyond just the beach. Visitors can also fish, camp, and golf (Gulf Shores and Orange Beach Tourism, 2016c). The Bon Secour National Wildlife Refuge is along Fort Morgan Peninsula, west of Gulf State Park. The refuge abuts Little Lagoon and provides visitors opportunities to hike, view wildlife, and learn about the island's flora and fauna. Farther west along Fort Morgan Peninsula is the Fort Morgan State Historic Site. The site is located on Mobile Point on the peninsula and contains historic battle fields, an old military fort (on which visitors can stand and enjoy views of the Gulf and Mobile Bay), a museum, trails, and a boat launch (Fort Morgan State Historic Site, 2016).

The beautiful beaches, attractions, and activities along Baldwin County's coastline have made this area a tourism hotspot. Overall, it is estimated that Alabama's Gulf Coast had approximately 4.6 million visitors in 2009. Each proposed site was evaluated for its existing tourism and recreational amenities in Table 4-29.

Table 4-29: Site-specific Considerations for Tourism and Recreational Use in Baldwin County

Baldwin County Alternatives	Site-specific Considerations
Gulf State Park Lodge and Associated Public Access Amenities Project	Tourism and recreational use for the Gulf State Park Lodge and Associated Public Access Amenities Project site are characterized in the Final Phase III ERP/PEIS (Section 11.7.6.9.7). The park is the public property of the State of Alabama and has proven to be a popular tourist destination throughout the years. The site is located on 22 acres of beachfront property that served as prime public beach access for tourists and Baldwin County residents. As a general rule, the elements described in this RP/EIS that have been added since Phase III Early Restoration would be located within the footprint of disturbance analyzed in the Final Phase III ERP/PEIS; however, the pedestrian trail from the pier to the lodge, portions of the tram system, and possible public educational programs would be located outside of that footprint. As a result, additional details about the affected environment related to these elements are described below. Although specific sites have not yet been determined, tram stops outside of the lodge site would be located on existing asphalt areas within Gulf State Park and would not require new ground disturbance. If any additional infrastructure (e.g., a shade shelter) is added at these sites, it would also be located on existing asphalt areas. The pedestrian trail would be located outside the area of disturbance evaluated in the Final Phase III ERP/PEIS and would be approximately 620 feet long and 8 feet wide. Any educational programs that occur outside the interpretive lobby of the lodge would likely occur on the beach. These additional areas are adjacent to the original project area and have the same characteristics related to tourism and recreation. As noted under the no action alternative (Section 2.2.3), construction activities related to the lodge and conference center have commenced and the area of construction area is temporarily closed to visitors.

Baldwin County Alternatives	Site-specific Considerations
Fort Morgan Pier Rehabilitation	The fishing pier once served as a popular public recreational fishing site but has been closed since 2010 due to structural deficiencies (Bland, 2014). The boat ramp adjacent to the fishing pier remains operational and provides private boat owners recreational access to Mobile Bay and the Gulf. The ramp offers two boat launching spots and a convenience dock in the center.
Fort Morgan Peninsula Public Access Improvements	The sites are located along county and state-owned beach areas. However, tourists do not frequent these sites because neither parking nor easy beach access is available.
Gulf Highlands Land Acquisition and Improvements	The beach section of the site contains 2,700 feet of privately owned beach that is not readily accessible by tourists. This is the largest privately owned beach along Alabama's Gulf Coast.
Laguna Cove Little Lagoon Natural Resource Protection	Little Lagoon is a 10-mile-long brackish lagoon west of Gulf Shores on Fort Morgan Peninsula. This body of water is not a major tourist destination but does provide excellent recreational opportunities, specifically fishing (Gulf Shores and Orange Beach Tourism, 2016d). Little Lagoon is home to recreational species such as speckled trout, redfish, and flounder fishing (Gulf Shores and Orange Beach Tourism, 2016d). The calm waters of Little Lagoon are also a resource for other recreational activities such as canoeing and kayaking. Furthermore, the extensive wetland system that surrounds the lagoon allows for abundant wildlife watching and birding. Although no recreation or tourism access points exist in the proposed parcel, various parks, trails, and piers surround the perimeter of the lagoon (LittleLagoon.net, 2009).

Mobile County

Tourism and recreational opportunities at all three proposed Mobile County alternatives would occur on or near Dauphin Island. In 2015, Mobile County had more than 3 million visitors, making it the third most visited county in the State of Alabama. Mobile County tourism industry is supported by the third highest travel-related employment in the state, employing almost 11,000 people and bringing in more than $405 million in earnings (Alabama Tourism Department, 2015). The alternative sites within Mobile County are restricted to Dauphin Island, a small, 6.2-square mile island approximately 4 miles west/northwest of Fort Morgan Peninsula (Dauphin Island Parks and Beach, 2016a). Numerous opportunities are available for visitors to enjoy the island's natural resources and recreational amenities, including playing at the beach, fishing, camping, walking, golfing, bike riding, and sightseeing.

The top attraction on Dauphin Island according to TripAdvisor is the Fort Gaines National Historic Site; its well-preserved ramparts have guarded the entrance to Mobile Bay for more than 150 years (Dauphin Island Parks and Beach, 2016b). From the fort, the original cannons, a blacksmith shop, kitchens, a museum, gift shop, and tunnels are visible. Guided tours are also provided by individuals in period uniform. The island has another landmark on the NRHP, Indian Shell Mound Park, a park believed to be the remnants of the massive amounts of oysters and other fish and shellfish consumed by early Native Americans (discussed above under Section 4.5.2, Cultural Resources).

Other attractions include the Mobile Bay ferry, which takes travelers from Fort Gaines to Fort Morgan in just 40 minutes (HMS Ferries, 2016), and the Dauphin Island Sea Lab, an estuarium providing educational opportunities pertaining to local key habitats and their species (Dauphin Island Sea Lab,

2016b). The Audubon Bird Sanctuary consists of 137 acres of maritime forest, marshes, and dunes and contains a 3-mile trail system for recreational use. Because of the extent of protected land, the area is a vital ecoregion for neotropical migratory birds that land on the island after their long flights across the Gulf from Central and South America. Of the 445 bird species currently documented in the State of Alabama, 420 have been observed on the island, making the sanctuary a prime location for bird watching (Dauphin Island Parks and Beach, 2016a).

The largest event turnout on Dauphin Island is the Alabama Deep Sea Fishing Rodeo. The rodeo occurs annually off of Dauphin Island and boasts the title of the largest fishing tournament in the world (Alabama Deep Sea Fishing Rodeo, 2016). This competitive fishing tournament attracts more than 75,000 spectators and 3,200 fishermen per year to Dauphin Island (Alabama Deep Sea Fishing Rodeo, 2016). The rodeo is a considerable source of tourism and income for the small island.

Table 4-30 describes the site-specific considerations regarding tourism and recreational use for the alternatives located in Mobile County.

Table 4-30: Site-specific Considerations for Tourism and Recreational Use in Mobile County

Mobile County Alternatives	Site-specific Considerations
Dauphin Island Eco-Tourism and Environmental Education Area	This alternative would acquire approximately 100 acres of privately held lands and water bottoms that are currently for sale. Because this land is currently privately owned, there are no existing tourism opportunities on the property. The annual Alabama Deep Sea Fishing Rodeo kicks off every year directly south of the Dauphin Island Eco-Tourism and Environmental Education Area, attracting lots of people to the site.
Mid-Island Parks and Public Beach Improvements (Parcels A, B, and C)	The nearly 1,200 linear feet of beachfront on Parcel A provides an opportunity for beachgoers. However, the unavailability of parking and restrooms makes prohibits the shoreline from being easily accessed. Parcel B does not currently offer any tourism amenities. Parcel C could offer informal access to the bay for fishing and kayak launching, but the lack of any existing facilities such as parking or a fishing pier dissuades tourists from partaking in these activities.
Mid-Island Parks and Public Beach Improvements (Parcels B and C)	See above for tourism activities regarding Parcels B and C.

4.4.6 Aesthetics and Visual Resources

Visual resources are the visible, physical features of a landscape that have an aesthetic value to viewers from viewpoints such as residences, recreational areas, rivers, and highways, among others. Physical features that make up the visible landscape include land, water, vegetation, and human-made features (i.e., roadways, buildings, and structures), all of which contribute to the overall landscape and visual character of an area. The landscape and visual character help create the overall feel of a site or area. In general terms, the landscape and visual character is like a mental snapshot of a place, and it embodies the defining and most memorable site features.

A view refers to a direct and unobstructed line-of-sight to an on- or off-site aesthetic resource, which may take the form of panoramic viewpoints from particular vantages. Existing views may be obstructed or blocked by modifications to the environment (e.g., grading, landscaping, and building construction).

Conversely, modifications to the existing environment may create or enhance view opportunities. All land has inherent visual values that warrant different levels of management. Aesthetic judgment, especially related to landscape views, is often considered subjective.

Public views are from vantage points that are publicly accessible, such as streets, freeways, parks, and vista points. These views are generally available to a greater number of people than private views. Private views are those that are only available from vantage points on private property. Private views across adjacent land uses are generally not protected unless specifically governed through an adopted general or specific plan, policy, or view preservation ordinance. Therefore, private views are not considered to be affected if an adjacent land use blocks such a view, especially if the project is within the zoning and design guidelines designated for the site.

Baldwin County

The southern coast of Baldwin County, where the alternatives are located, consists of white sand beaches and dunes that attract a variety of residents and tourists. Some high-rise condos and hotels exist along the shoreline but then transition into smaller, beachfront homes moving west along Fort Morgan Peninsula. The Gulf State Park Lodge and Associated Public Access Amenities Project and Fort Morgan Peninsula Public Access Improvement sites are low to moderately developed areas that boast natural beach views and an untrammeled visual character. Table 4-31 provides an individual evaluation of the visual resource at each proposed alternative site. The site-specific considerations for aesthetics and visual resources for the alternatives located in Baldwin County are described in Table 4-31.

Table 4-31: Site-specific Considerations for Aesthetics and Visual Resources in Baldwin County

Baldwin County Alternatives	Site-specific Considerations
Gulf State Park Lodge and Associated Public Access Amenities Project	The visual resources of the Gulf State Park Lodge and Associated Public Access Amenities Project site are characterized in the Final Phase III ERP/PEIS (Section 11.7.6.9.7). The site consisted of primarily of packed, white sand surrounded by dunes, beach, and the Gulf of Mexico, with building debris scattered on the site. The fishing pier is visible to the west of the site, which extends out into the Gulf of Mexico. Beyond the fishing pier are beach condos several stories high, located outside of the site boundary. To the east is a view of the beach and shoreline with the existing beach pavilion visible in the distance, and to the south is the Gulf of Mexico. As a general rule, the elements discussed in this RP/EIS that have been added since Phase III Early Restoration would be located within the footprint of disturbance analyzed in the Final Phase III ERP/PEIS; however, the pedestrian trail from the pier to the lodge, portions of the tram system, and possible public educational programs would be located outside of that footprint. As a result, additional details about the affected environment related to these elements are described below. Although specific sites have not yet been determined, tram stops outside of the lodge site would be located on existing developed areas within Gulf State Park. If any additional infrastructure (e.g., a shade shelter) is added at these sites, it would also be located on existing asphalt areas. The pedestrian trail would be located outside the area of disturbance evaluated in the Final Phase III ERP/PEIS and would be approximately 620 feet long and 8 feet wide. Any educational programs that occur outside the interpretive lobby of the lodge would likely occur on the beach. These additional areas consist of a similar aesthetic environment as the original project area because, for the most part, they are adjacent to the original project

Baldwin County Alternatives	Site-specific Considerations
	area or in already developed areas. As noted under the no action alternative (Section 2.2.3), construction activities related to the lodge and conference center have commenced. The visual nature of the site has changed as a result of the presence of construction equipment, fences, and partially completed structures.
Fort Morgan Pier Rehabilitation	The Fort Morgan Pier Rehabilitation alternative is located within the Fort Morgan State Historic Site. To the south of the pier the historic site is visible, and the Fort Morgan structure is visible to the southwest. Directly west of the pier is the bay shoreline, which consists of packed white beaches. Bon Secour Bay is north of the pier. To the east of the pier the Fort Morgan Peninsula bayside shoreline, which is built up with riprap, and the Alabama Coastal Connection Highway that leads to neighboring Dauphin Island are visible. The area around the pier is relatively undeveloped and undisturbed.
Fort Morgan Peninsula Public Access Improvements	The Fort Morgan Peninsula Public Access Improvement sites lie along the Gulf side of Fort Morgan Peninsula. At each site, the white sand Gulf beaches are visible to the south. To the west, north and east beach homes, transmission lines, and interior scrub are visible. No historic sites are within visible range of the access improvement sites.
Gulf Highlands Land Acquisition and Improvements	To the south of the Gulf Highlands Land Acquisition and Improvement site, 2,700 feet of Gulf coastline are visible. To the east and west of the site are beach condos, parking lots, swimming pools, and tennis courts (to the west). North of the site is State Highway 180, bayside homes, and Bon Secour Bay.
Laguna Cove Little Lagoon Natural Resource Protection	The alternative site is surrounded by mostly undeveloped land. To the south of the site sand dunes, beachfront homes, and the Gulf of Mexico are visible. Little Lagoon is visible, 10-mile-long brackish lagoon, to the north; Bon Secour National Wildlife Refuge is visible beyond the lagoon. To the east and west of the site State Highway 182 and the beach homes that exist along the road are visible.

Mobile County

Dauphin Island, where the three Mobile County alternatives are located, is a popular destination for its beautiful Gulf coastline, beaches, and small town aesthetic. According to the Town of Dauphin Island, the area has been dubbed the “Sunset Capital of Alabama” by locals and visitors (Town of Dauphin Island, 2016b). The views and quaint atmosphere of the island give it its visual character and attract thousands of visitors there each year. Table 4-32 details the site-specific considerations for aesthetics and visual resources for the alternatives located in Mobile County.

Table 4-32: Site-specific Considerations for Aesthetics and Visual Resources in Mobile County

Mobile County Alternatives	Site-specific Considerations
Dauphin Island Eco-Tourism and Environmental Education Area	The alternative site is on an undeveloped 100-acre plot that boasts 90 acres of wetlands. Bayou Aloe is west of the site and the Dauphin Island Airport is visible beyond that. To the east the Indian Bay Yacht Club and Marina is visible and beyond that lies Indian Bay. A small residential neighborhood is north of the site and a public docking area where the Fishing Rodeo takes place is to the south. Beyond the docks are bayside homes and restaurants.

Mobile County Alternatives	Site-specific Considerations
Mid-Island Parks and Public Beach Improvements (Parcels A, B, and C)	The Mid-Island Parks and Public Beach Improvements would occur on three undeveloped parcels of land that stretch across the width of Dauphin Island. Parcel A is along the beach with Gulf coastline views to the east, west, and south. Bienville Boulevard is north of Parcel A, and Parcel B is beyond that. Parcel B has a small residential area to the west, a vacant lot of the east consisting of interior scrub, and Cadillac Avenue and bayside homes to the north. Also to the north is Parcel C, which lies along the bay and faces marshy habitat. The parcel is bordered on the east, west, and south by residences and low-traffic neighborhood streets.
Mid-Island Parks and Public Beach Improvements (Parcels B and C)	See above for the visual resource evaluation of Parcels B and C.

4.4.7 Public Health and Safety, Including Flood and Shoreline Protection

Gulf coastal Alabama is composed of barrier islands and peninsulas that naturally accrete and entrain sand. Influences such as longshore sediment transport, eolian processes, storm events, seasonal variation, and human activity influence the rates of accretion and entrainment. Sand enters the sediment transport system of waves, winds, and currents. The sand is transported until a reduction of energy allows deposition. When sand is deposited on an area, accretion occurs. Alabama's beaches typically accrete sediment during the summer months and entrain sediment during the winter months. Eroded beach profiles occur in the winter or following storm events and represent beaches with lowered average elevations and decreased slopes along the surf and swash zones. These morphological changes allow periods of winter storm waves to erode sediment from the beach face and to transport sediment to the offshore bar areas. The sediment will move ashore in the spring and summer months when periods of low-energy waves approach the coastline. If the process is allowed to occur naturally, there should be little annual net loss or gain in overall sediment volume over a given area.

Public health and safety issues relate to the short-term construction of projects and long-term operations and maintenance. Additional discussion of the potential for direct or indirect impacts on public health and safety within the Gulf Coast region is found in the individual alternative descriptions and discussion of possible environmental consequences for each alternative.

Provision of public health and safety services can be complicated by large storm events such as tropical storms and hurricanes (and associated storm surges, winds, and battering waves) that have historically caused extensive damage to the shoreline and to infrastructure such as roadways, bridges, and buildings. The Gulf’s coastal communities are at increased risk for severe shoreline damage and storm surges. More than half of the nation’s population lives in coastal counties in densities five times greater than inland counties (NOAA, 2009). Coastal development has accelerated wetlands loss, as well as the loss of other coastline protections, including reefs, barrier islands, tidal marshes, and sand dunes along the Gulf Coast. These losses contribute to the damage and public health and safety threat that large storm events pose to the communities and individuals in the Gulf Coast region.

During these large storm events, public safety personnel and facilities may be cut off from individuals caught in the path of the storm, thereby limiting the ability of police, fire, and rescue personnel to reach affected populations. In addition, these affected populations may not be able to evacuate or access hospitals or emergency shelters if roadways or other infrastructure become impassable.

Flood control refers to all methods used to reduce or prevent the detrimental effects of flood waters, including the construction of floodways (human-made channels to divert floodwater), levees, lakes, dams, reservoirs, or gates to hold extra water during times of flooding. Shoreline protection consists of engineered structures, living shorelines, or other solutions meant to slow erosion by rising sea levels and wave action.

The USACE civil works programs and services include water resources development such as flood control, navigation, recreation, infrastructure, and environmental stewardship. These projects include structural projects and beach nourishment (USACE, 2003). In addition, USACE owns lands associated with these programs and services.

Baldwin County

Table 4-33 details the site-specific considerations regarding public health and safety issues, including flood and shoreline protection, for the alternatives located in Baldwin County.

Table 4-33: Site-specific Considerations for Public Health and Safety in Baldwin County

Baldwin County Alternatives	Site-specific Considerations
Gulf State Park Lodge and Associated Public Access Amenities Project	<u>Hazardous Waste Generation or Disposal, or Human Exposure and Impacts on Shoreline Erosion</u> Public Health and Safety, Including Flood and Shoreline Protection of the Gulf State Park Lodge and Associated Public Access Amenities Project site are characterized in the Final Phase III ERP/PEIS (Section 11.7.6.9.8). The site has no hazardous waste issues, but is located adjacent to the Gulf, an area susceptible to shoreline erosion and flooding. Shorelines maintain the integrity of natural coastal systems by providing a buffer to wave and current energy and are important transition habitats. As a general rule, the elements discussed in this RP/EIS that have been added since Phase III Early Restoration would be located within the footprint of disturbance analyzed in the Final Phase III ERP/PEIS; however, the pedestrian trail from the pier to the lodge, portions of the tram system, and possible public educational programs would be located outside of that footprint so additional details about the affected environment related to these elements are described below. Although specific sites have not yet been determined, tram stops outside of the lodge site would be located on existing asphalt areas within Gulf State Park and would not require new ground disturbance. If any additional infrastructure (e.g., a shade shelter) is added at these sites, it would also be located on existing asphalt areas. The pedestrian trail would be located outside the area of disturbance evaluated in the Final Phase III ERP/PEIS and would be approximately 620 feet long and 8 feet wide. Any educational programs that occur outside the interpretive lobby of the lodge would likely occur on the beach. These additional areas consist of the same geologic features as the original project area. As noted under the no action alternative (Section 2.2.3), construction activities related to the lodge and conference center have commenced. Ongoing construction activities and the establishment of the lodge and conference center has not changed the conditions related to public health and safety.

Baldwin County Alternatives	Site-specific Considerations
Fort Morgan Pier Rehabilitation	Hazardous Waste Generation or Disposal, or Human Exposure There are no brownfield, voluntary cleanup, or superfund sites located within the Fort Morgan Pier Rehabilitation site (ADEM, 2011; USEPA, 2016d). Impacts on Shoreline Erosion The project site is located on the bay side of the Gulf shoreline, bordering the Bon Secour Bay. This site is located within the Coastal Lowlands and is geologically defined by alluvial sandy deposits from the Holocene era. The base of the existing pier and most of the existing boat ramp are within this geological region. The highly permeable nature of the majority of the soils within the project site aids in preventing pollutants and sediment-enriched stormwater from reaching the Gulf of Mexico through runoff or via groundwater infiltration. Percolation through the permeable soils also filters pollutants, preventing them from reaching groundwater. As a result, soil resources aid in maintaining water quality, which has impacts on human health.
Fort Morgan Peninsula Public Access Improvements	Hazardous Waste Generation or Disposal, or Human Exposure There are no brownfield, voluntary cleanup, or superfund sites located within the Fort Morgan Peninsula Public Access Improvement sites (ADEM, 2011; USEPA, 2016d). Impacts on Shoreline Erosion The public access improvement sites are located on the Gulf side of Fort Morgan Peninsula and are also part of the Coastal Lowlands. The sites are characterized by sandy sediments from the Holocene era that are heavily tidally influenced because they border the Gulf of Mexico. The majority of the soils within the sites are somewhat poorly drained, but are not prone to flooding or ponding and range from hydric to non-hydric.
Gulf Highlands Land Acquisition and Improvements	Hazardous Waste Generation or Disposal, or Human Exposure There are no brownfield, voluntary cleanup, or superfund sites located within the Gulf Highlands Land Acquisition and Improvement site (ADEM, 2011; USEPA, 2016d). Impacts on Shoreline Erosion The Gulf Highland Land Acquisition and Improvements site is located west of Little Lagoon and east of Fort Morgan on the Gulf side of Fort Morgan Peninsula. The site extends inland about halfway to Bon Secour Bay and is underlain by the same alluvial deposits as other sites in southwestern Baldwin County. The coastal portion of the site begins as wet beach (8.2 acres), then transitions to frontal dunes (37.7 acres), tertiary dunes (18.7 acres), and interior scrub (45.5 acres) as it extends inland. The majority of the soils within the site are somewhat poorly drained, but are not prone to flooding or ponding and range from hydric to non-hydric.

Baldwin County Alternatives	Site-specific Considerations
Laguna Cove Little Lagoon Natural Resource Protection	Hazardous Waste Generation or Disposal, or Human Exposure There are no brownfield, voluntary cleanup, or superfund sites located within the Laguna Cove Little Lagoon Natural Resource Protection site (ADEM, 2011; USEPA, 2016d). Impacts on Shoreline Erosion Laguna Cove is located within Little Lagoon, a 10-mile lagoon that stretches from Fort Morgan Peninsula to the western border of Gulf State Park. The tract is situated north of State Highway 182 and extends into Little Lagoon. This area is located within the Coastal Lowlands and is geologically underlain by alluvial sand deposits from the Holocene era. These lagoons are believed to be formed through the breaching and filling of spits over time (Schwartz, 1971). The majority of the soils within the site flood or pond frequently and are typically vegetated with salt-tolerant, herbaceous vegetation. Although draining quality is low, vegetation helps aid in filtering pollutants, preventing them from reaching groundwater. As a result, soil resources aid in maintaining water quality, which can affect human health.

Mobile County

Table 4-34 details the site-specific considerations regarding public health and safety issues, including flood and shoreline protection, for the alternatives located in Mobile County.

Table 4-34: Site-specific Considerations for Public Health and Safety in Mobile County

Mobile County Alternatives	Site-specific Consideration
Dauphin Island Eco-Tourism and Environmental Education Area	Hazardous Waste Generation or Disposal, or Human Exposure There are no brownfield, voluntary cleanup, or superfund sites located within the Dauphin Island Eco-Tourism and Environmental Education Area (ADEM, 2011; USEPA, 2016d). Impacts on Shoreline Erosion The geology of the site comprises alluvial and Coastal Lowland deposits, which consist mainly of sand and silt. The main part of Dauphin Island blocks this site from the direct storm surges off the Gulf. The soils within the site are frequently flooded, but do not hold water well. Due to poor draining quality, these soils do not aid in filtering pollutants and therefore do not aid in maintaining water quality, which can affect human health.
Mid-Island Parks and Public Beach Improvements (Parcels A, B, and C)	Hazardous Waste Generation or Disposal, or Human Exposure There are no brownfield, voluntary cleanup, or superfund sites located within the Mid-Island Parks and Beach Improvement parcels (ADEM, 2011; USEPA, 2016d). Impacts on Shoreline Erosion The geology of all of the Dauphin Island parcels is the same—they all exist in the Coastal Lowlands of the multi-tidal barrier island. However, Parcel A is the most susceptible to erosion and destruction because it is located on the ocean side of the island and is threatened by increased storm intensity and frequency The parcel is bordered by foredunes before abutting Bienville Boulevard on its northern edge. Soils within the parcels range from well-drained soils that are highly permeable to frequently flooded, poorly drained soils. The highly permeable nature of some of the soils within the parcels aids in preventing pollutants and sediment-enriched stormwater from reaching the Gulf of Mexico through runoff or via groundwater infiltration. Percolation through the permeable soils also filters pollutants, preventing them from reaching groundwater. As a result, soil resources aid in maintaining water quality, which has impacts on human health. The soils within the parcels are frequently flooded, but do not hold water well, do not aid in filtering pollutants, and therefore do not aid in maintaining water quality.
Mid-Island Parks and Public Beach Improvements (Parcels B and C)	Hazardous Waste Generation or Disposal, or Human Exposure There are no brownfield, voluntary cleanup, or superfund sites located within the site (ADEM, 2011; USEPA, 2016d) Impacts on Shoreline Erosion The geology of Parcels B and C is the same as the geology on the Dauphin Island Eco-Tourism and Environmental Education Area parcel; they exist within the Coastal Lowlands of the multi-tidal barrier island. The soils within the site are frequently flooded, but do not hold water well. Because of its poor draining quality, these soils do not aid in filtering pollutants and do not aid in maintaining water quality, which has impacts on human health.

4.4.8 Fisheries and Aquaculture

Alternative sites in Baldwin and Mobile counties would not affect any fishery or aquaculture sites. For this reason, no information is provided on affected resources.

4.4.9 Marine Transportation

Alternative sites within Baldwin and Mobile counties would not affect any marine transportation. A ferry currently runs from the Fort Morgan State Historic Site to the Fort Gaines National Historic Site year-round with more trips made during the summer months. Increased tourism from the proposed alternatives would not burden ferry operations because the ferry follows a set schedule regardless of ferry capacity.

5.0 ENVIRONMENTAL CONSEQUENCES

This “Environmental Consequences” chapter analyzes the beneficial and adverse impacts that would result from implementation of any of the alternatives considered in this RP/EIS. The resource topics presented in this chapter correspond to the descriptions of existing conditions in Chapter 4, Affected Environment. This chapter is broken into two sections: Section 5.1 addresses alternatives that are only being considered in the RP/EIS for funding of E&D at this time (i.e., the Bayfront Park Project), while Section 5.2 provides a detailed analysis of the alternatives that would be funded in their entirety, which could include E&D, land acquisition (where applicable), and construction. Each of the eight action alternatives and the no action alternative is evaluated against each resource area described in Chapter 4, Affected Environment.

Section 1502.14(d) of the CEQ NEPA regulations requires the alternatives analysis in an EIS to "include the alternative of no action. “No action” in this case would mean the proposed activities would not take place, and the resulting environmental effects from taking no action are compared with the effects of the proposed activity or an alternative activity going forward.

Where a choice of “no action” by the agency would result in predictable actions by others, this consequence of the "no action" alternative should be included in the analysis. This analysis provides a benchmark, enabling decision makers to compare the magnitude of environmental effects of the action alternatives. The no action alternative is defined and compared with each of the action alternatives below.

5.1 ENVIRONMENTAL CONSEQUENCES OF RECREATIONAL USE ALTERNATIVES FOR DESIGN AND ENGINEERING COMPONENTS ONLY

The Bayfront Park Project alternative is proposed for E&D evaluation to support preliminary planning at this time. As such, it is not yet ready for an implementation-level evaluation and additional project-specific NEPA analysis. The details of this project are identified in Chapters 1, 2, and 3 of this RP/EIS. An evaluation of environmental consequences related to E&D activities is discussed in Section 6.4.14 of the Final PDARP/PEIS, summarized in this section, and incorporated by reference into this RP/EIS.

Once necessary project-specific details are developed based on this E&D, the AL TIG may propose the project for full implementation, at which time full NEPA analysis of the impacts from construction and implementation will be included in a future restoration plan and NEPA analysis. This preliminary phase of planning for any future project may include activities such as investigating landowner and land rights, identifying existing infrastructure (e.g., utilities), investigating cultural resources, delineating borrow sources, identifying construction access and pipeline corridors, acquiring survey and geotechnical data/geotechnical engineering, delineating earthen containment dikes, identifying construction marsh fill elevation, submitting permits, developing operations and maintenance plans, delineating wetlands, surveying for threatened and endangered species, and developing bidding documents. Such activities may also include researching historical conditions, modeling hydrologic response to the alternative, and creating maps and scale drawings of the site. This may also include minimally intrusive field activities such as drilling into the soil or sediment with a soil auger, vibracore, or hand probe to remove core samples for grain size or chemical analysis; determining existing and predicted groundwater levels and elevations; and performing geotechnical evaluation. E&D activities may also include archaeological studies at and around the site, which would involve digging test pits, and collecting and documenting historic features. Some data collection may also require permits (e.g., when collecting data related to threatened and endangered species).

Some preliminary phases of project planning would cause direct, short-term, minor impacts through associated fieldwork (e.g., including drilling into soil or sediment with an auger, drill rig, or other tools to remove surface, subsurface, or core samples). Because these areas are relatively small compared to the overall project area, impacts would be minor and localized to the project site. Temporary impacts on the biological and physical environment also could include short-term, temporary disturbance of habitats and species; minor emissions from vehicles; and minor disturbance to terrestrial, estuarine, and marine environments. Permits for E&D activities will be secured when necessary. In cases where the appropriate permit or other environmental review has been secured (e.g., for photographing, handling, or disturbing listed species) or determined to be unnecessary (e.g., certain minor, temporary disturbance of marine mammals that does not constitute harassment), minor impacts on certain protected and managed resources also could occur and would be considered minor.

Project-planning actions for the Bayfront Park project in this RP/EIS fall within the scope of the analysis in the Final PDARP/PEIS. The use of equipment for any needed studies such as bathymetric surveys, gathering elevation data, soil strength and compaction data would cause short-term, temporary impacts similar to those described above. Adherence to permit conditions and other requirements would minimize adverse impacts.

5.2 ENVIRONMENTAL CONSEQUENCES OF RECREATIONAL USE ALTERNATIVES THAT INCLUDE LAND ACQUISITION, DESIGN, ENGINEERING, AND CONSTRUCTION COMPONENTS

5.2.1 Introduction

The proposed alternatives would affect the Gulf Shores or Dauphin Island area during and after their proposed construction times. In compliance with NEPA requirements, this section evaluates the environmental consequences that would occur as a result of the implementation of each proposed alternative. Within this section, unless specified otherwise, impacts caused during construction are generally considered “short term,” and impacts lasting after the completion of the project are generally considered “long term.” The methodology for determining impacts and the definitions of thresholds for each resource topic are detailed in Section 6.3.2 of the Final PDARP/PEIS and provided below in Table 5-1. For each resource topic below, the analysis addresses impacts by addressing any background or methodology that is applicable to all sites. A site-specific analysis follows, which is broken down by the county in which an alternative is located. Alternatives located in Baldwin County are discussed first, followed by those in Mobile County. The analysis of the no action alternative precedes the analysis of the action alternatives.

Impacts of the proposed alternatives are also evaluated against the findings of the Final PDARP/PEIS. Section 6.4 of the Final PDARP/PEIS describes the potential long- and short-term, physical, biological, and socioeconomic impacts of restoration under the program alternatives. Restoration approaches are focused on a habitat type (e.g., wetlands, coastal, and nearshore habitats); improving water quality; groups of similar species (e.g., marine mammals, shore and nesting birds, sea turtles, pelagic highly migratory fishes, reef fishes, and SAV); and enhancing recreational opportunities. The Final PDARP/PEIS found beneficial and adverse, and minor, moderate, or major impacts as a result of Alternative A: Comprehensive Integrated Ecosystem Restoration, depending on the specific characteristics of the projects ultimately proposed in subsequent restoration plans, including the size, location, design, operation, and other aspects of future project development. However, there are some similarities in impacts across resources. For example, benefits to physical and biological resources are typically long term and result from habitat preservation that results from land acquisition. Adverse impacts are generally short term, such as disturbances associated with construction activities. Long-term, adverse

impacts include impacts on geology, substrates, and habitat as a result of conversion of habitat from one type to another that occurs as part of restoration activities, construction of infrastructure, and increased human presence in the area. The impacts of the proposed alternatives evaluated in this RP/EIS would be consistent with the Final PDARP/PEIS analysis.

As part of the Early Restoration Final Phase III ERP/PEIS, an environmental impact analysis was completed on the Gulf State Park Enhancement Project, which included the lodge and conference center. The non-lodge elements of that project are currently under development and/or construction and the lodge and conference center portions of that project are currently under construction using non-NRDA funds. While the Gulf State Park Lodge and Associated Public Access Amenities Project does not include a proposal to fund the conference center, the AL TIG is evaluating the conference center under NEPA as a connected action. This RP/EIS incorporates by reference the analysis undertaken in the Final Phase III ERP/PEIS (DWH Trustees, 2014) with respect to that project and supplements that analysis below to consider new circumstances, including the updates to the proposed project in this RP/EIS. Past and present environmental consequences are considered in this “Environmental Consequences” section either by incorporating by reference or supplementing with additional information rather than in the cumulative impacts section of this RP/EIS.

Table 5-1: Guidelines for NEPA Impact Determinations in this RP/EIS

Resource	Impact Duration	Minor Intensity	Moderate Intensity	Major Intensity
Geology and Substrates	Short-term: During construction period. Long-term: Over the life of the project or longer.	Disturbance to geologic features or soils could be detectable, but could be small and localized. There could be no changes to local geologic features or soil characteristics. Erosion and/or compaction could occur in localized areas.	Disturbance could occur over local and immediately adjacent areas. Impacts on geology or soils could be readily apparent and result in changes to the soil character or local geologic characteristics. Erosion and compaction impacts could occur over local and immediately adjacent areas.	Disturbance could occur over a widespread area. Impacts on geology or soils could be readily apparent and could result in changes to the character of the geology or soils over a widespread area. Erosion and compaction could occur over a widespread area. Disruptions to substrates or soils may be permanent.
Hydrology and Water Quality	Short-term: During construction period. Long-term: Over the life of the project or longer.	Hydrology: The effect on hydrology could be measurable, but it could be small and localized. The effect could only temporarily alter the area's hydrology, including surface and groundwater flows. Water quality: Impacts could result in a detectable change to water quality, but the change could be expected to be small and localized. Impacts could quickly become undetectable. State water quality standards as required by the CWA could not be exceeded. Floodplains: Impacts may result in a detectable change to natural and beneficial floodplain values, but the change could be expected to be small, and localized. There could be no appreciable increased risk of flood loss including impacts on human safety, health, and welfare.	Hydrology: The effect on hydrology could be measurable, but small and limited to local and adjacent areas. The effect could permanently alter the area's hydrology, including surface and groundwater flows. Water quality: Impacts on water quality could be observable over a relatively large area. Impacts could result in a change to water quality that could be readily detectable and limited to local and adjacent areas. Change in water quality could persist; however, it could likely not exceed state water quality standards as required by the CWA. Floodplains: Impacts could result in a change to natural and beneficial floodplain values and could be readily detectable but limited to local and adjacent areas. Location of operations in floodplains could increase risk of flood loss, including impacts on human safety, health, and welfare.	Hydrology: The effect on hydrology could be measurable and widespread. The effect could permanently alter hydrologic patterns including surface and groundwater flows. Water quality: Impacts could likely result in a change to water quality that could be readily detectable and widespread. Impacts could likely result in exceedance of state water quality standards and/or could impair designated uses of a waterbody. Floodplains: Impacts could result in a change to natural and beneficial floodplain values that could have substantial consequences over a widespread area. Location of operations could increase risk of flood loss, including impacts on human safety, health, and welfare.

Resource	Impact Duration	Minor Intensity	Moderate Intensity	Major Intensity
		Wetlands: The effect on wetlands could be measurable but small in terms of area and the nature of the impact. A small impact on the size, integrity, or connectivity could occur; however, wetland function could not be affected and natural restoration could occur if left alone.	Wetlands: The action could cause a measurable effect on wetlands indicators (size, integrity, or connectivity) or could result in a permanent loss of wetland acreage across local and adjacent areas. However, wetland functions could only be permanently altered in limited areas.	Wetlands: The action could cause a permanent loss of wetlands across a widespread area. The character of the wetlands could be changed so that the functions typically provided by the wetland could be permanently lost.
Air Quality	Short-term: During construction period. Long-term: Over the life of the project or longer.	The impact on air quality may be measurable but could be localized and temporary, such that the emissions do not exceed USEPA's *de minimis* criteria for a general conformity determination under the CAA (40 CFR § 93.153).	The impact on air quality could be measurable and limited to local and adjacent areas. Emissions of criteria pollutants could be at USEPA's *de minimis* criteria levels for general conformity determination.	The impact on air quality could be measurable over a widespread area. Emissions would be high, such that they could exceed USEPA's *de minimis* criteria for a general conformity determination.
Noise	Short-term: During construction period. Long-term: Over the life of the project.	Increased noise could attract attention, but its contribution to the soundscape would be localized and unlikely to affect current user activities.	Increased noise could attract attention and contribute to the soundscape, including in local areas and those adjacent to the action, but could not dominate. User activities could be affected.	Increased noise could attract attention and dominate the soundscape over widespread areas. Noise levels could eliminate or discourage user activities.
Habitats	Short-term: Lasting less than two growing seasons. Long-term: Lasting longer than two growing seasons.	Impacts on native vegetation may be detectable but could not alter natural conditions and could be limited to localized areas. Infrequent disturbance to individual plants could be expected but would not affect local or range-wide population stability. Infrequent or insignificant one-time disturbance to locally suitable habitat could occur, but sufficient habitat could remain functional at both the local and regional scales to maintain the viability of the species.	Impacts on native vegetation could be measureable but limited to local and adjacent areas. Occasional disturbance to individual plants could be expected. These disturbances could affect local populations negatively but could not be expected to affect regional population stability. Some impacts might occur in key habitats, but sufficient local habitat could retain function to maintain the viability of the species both locally and throughout its range.	Impacts on native vegetation could be measurable and widespread. Frequent disturbances of individual plants could be expected, with negative impacts on both local and regional population levels. These disturbances could negatively affect range-wide population stability. Some impacts might occur in key habitats, and habitat impacts could negatively affect the viability of the species both locally and throughout its range.

Resource	Impact Duration	Minor Intensity	Moderate Intensity	Major Intensity
		Opportunity for increased spread of non-native species could be detectable but temporary and localized and could not displace native species populations and distributions.	Opportunity for increased spread of non-native species could be detectable and limited to local and adjacent areas but could only result in temporary changes to native species population and distributions.	Actions could result in the widespread increase of non-native species and result in broad and permanent changes to native species populations and distributions.
Wildlife Species, Including Birds	Short-term: Lasting up to two breeding seasons, depending on length of breeding season. Long-term: Lasting more than two breeding seasons.	Impacts on native species, their habitats, or the natural processes sustaining them could be detectable, but localized, and could not measurably alter natural conditions. Infrequent responses to disturbance by some individuals could be expected but without interference to feeding, reproduction, resting, migrating, or other factors affecting population levels. Small changes to local population numbers, population structure, and other demographic factors could occur. Sufficient habitat could remain functional at both the local and range-wide scales to maintain the viability of the species. Opportunity for increased spread of non-native species could be detectable but temporary and localized, and these species could not displace native species populations and distributions.	Impacts on native species, their habitats, or the natural processes sustaining them could be measureable but limited to local and adjacent areas. Occasional responses to disturbance by some individuals could be expected, with some negative impacts on feeding, reproduction, resting, migrating, or other factors affecting local population levels. Some impacts might occur in key habitats. However, sufficient population numbers or habitat could retain function to maintain the viability of the species both locally and throughout its range. Opportunity for increased spread of non-native species could be detectable and limited to local and adjacent areas, but could only result in temporary changes to native species population and distributions.	Impacts on native species, their habitats, or the natural processes sustaining them could be detectable and widespread. Frequent responses to disturbance by some individuals could be expected, with negative impacts on feeding, reproduction, migrating, or other factors resulting in a decrease in both local and range-wide population levels and habitat type. Impacts could occur during critical periods of reproduction or in key habitats and could result in direct mortality or loss of habitat that might affect the viability of a species. Local population numbers, population structure, and other demographic factors might experience large changes or declines. Actions could result in the widespread increase of non-native species and result in broad and permanent changes to native species populations and distributions.

Resource	Impact Duration	Minor Intensity	Moderate Intensity	Major Intensity
Marine and Estuarine Fauna (Fish, Shellfish, Benthic Organisms)	Short-term: Lasting up to two spawning seasons, depending on length of season. Long-term: Lasting more than two spawning seasons.	Impacts could be detectable and localized but small. Disturbance of individual species could occur; however, there could be no change in the diversity or local populations of marine and estuarine species. Any disturbance could not interfere with key behaviors such as feeding and spawning. There could be no restriction of movements daily or seasonally. Opportunity for increased spread of non-native species could be detectable but temporary and localized and these species could not displace native species populations and distributions.	Impacts could be readily apparent and result in a change in marine and estuarine species populations in local and adjacent areas. Areas being disturbed may display a change in species diversity; however, overall populations could not be altered. Some key behaviors could be affected but not to the extent that species viability is affected. Some movements could be restricted seasonally. Opportunity for increased spread of non-native species could be detectable and limited to local and adjacent areas but could only result in temporary changes to native species population and distributions.	Impacts could be readily apparent and could substantially change marine and estuarine species populations over a wide-scale area, possibly river-basin-wide. Disturbances could result in a decrease in fish species diversity and populations. The viability of some species could be affected. Species movements could be seasonally constrained or eliminated. Actions could result in the widespread increase of non-native species and result in broad and permanent changes to native species populations and distributions.
Protected Species	Short-term: Lasting up to one breeding/growin g season. Long-term: Lasting more than one breeding/ growing season.	Impacts on protected species, their habitats, or the natural processes sustaining them could be detectable but would be small and localized and could not measurably alter natural conditions. Impacts could likely result in a “may affect, not likely to adversely affect” determination for at least one listed species.	Impacts on protected species, their habitats, or the natural processes sustaining them could be detectable, and some alteration in the numbers of protected species or occasional responses to disturbance by some individuals could be expected, with some negative impacts on feeding, reproduction, resting, migrating, or other factors affecting local and adjacent population levels. Impacts could occur in key habitats, but sufficient population numbers or habitat could remain functional to maintain the viability of the species both locally and throughout their range. Some disturbance to individuals or impacts on potential or designated critical habitat could occur. Impacts could likely result in a “may affect, likely to adversely affect” determination for at least one listed species. No adverse modification of critical habitat could be expected.	Impacts on protected species, their habitats, or the natural processes sustaining them could be detectable, widespread, and permanent. Substantial impacts on the population numbers of protected species, or interference with their survival, growth, or reproduction could be expected. There could be impacts on key habitat, resulting in substantial reductions in species numbers. Results in an “is likely to jeopardize proposed or listed species/adversely modify proposed or designated critical habitat (impairment)” determination for at least one listed species.

Resource	Impact Duration	Minor Intensity	Moderate Intensity	Major Intensity
Socioeconomics and Environmental Justice	Short-term: During construction period. Long-term: Over the life of the project or longer.	A few individuals, groups, businesses, properties, or institutions could be affected. Impacts could be small and localized. These impacts are not expected to substantively alter social and/or economic conditions. Actions could not disproportionately affect minority and low-income populations.	Many individuals, groups, businesses, properties, or institutions could be affected. Impacts could be readily apparent and detectable in local and adjacent areas and could have a noticeable effect on social and/or economic conditions. Actions could disproportionately affect minority and low-income populations. However, the impact could be temporary and localized.	A large number of individuals, groups, businesses, properties, or institutions could be affected. Impacts could be readily detectable and observed, extend over a widespread area, and have a substantial influence on social and/or economic conditions. Actions could disproportionately affect minority and low-income populations, and this impact could be permanent and widespread.
Cultural Resources	Short-term: During construction period. Long-term: Over the life of the project or longer.	The disturbance of a site(s), building, structure, or object could be confined to a small area with little, if any, loss of important cultural information potential.	Disturbance of a site(s), building, structure, or object not expected to result in a substantial loss of important cultural information.	Disturbance of a site(s), building, structure, or object could be substantial and may result in the loss of most or all its potential to yield important cultural information.
Infrastructure	Short-term: During construction period. Long-term: Over the life of the project or longer.	The action could affect public services or utilities, but the impact could be localized and within operational capacities. There could be negligible increases in local daily traffic volumes resulting in perceived inconvenience to drivers but no actual disruptions to traffic.	The action could affect public services or utilities in local and adjacent areas, and the impact could require the acquisition of additional service providers or capacity. Detectable increase in daily traffic volumes (with slightly reduced speed of travel), resulting in slowed traffic and delays, but no change in level of service (LOS). Short service interruptions (temporary closure for a few hours) to roadway and railroad traffic could occur.	The action could affect public services or utilities over a widespread area resulting in the loss of certain services or necessary utilities. Extensive increase in daily traffic volumes (with reduced speed of travel) resulting in an adverse change in LOS to worsened conditions. Extensive service disruptions (temporary closure of one day or more) to roadways or railroad traffic could occur.

Resource	Impact Duration	Minor Intensity	Moderate Intensity	Major Intensity
Land and Marine Management	Short-term: During construction period. Long-term: Over the life of the project or longer.	The action could require a variance or zoning change or an amendment to a land use, area comprehensive, or management plan but could not affect overall use and management beyond the local area.	The action could require a variance or zoning change or an amendment to a land use, area comprehensive, or management plan and could affect overall land use and management in local and adjacent areas.	The action could cause permanent changes to and conflict with land uses or management plans over a widespread area.
Tourism and Recreational Use	Short-term: During construction period. Long-term: Over the life of the project or longer.	There could be partial developed recreational site closures to protect public safety. The same site capacity and visitor experience could remain unchanged after construction. The impact could be detectable and/or could only affect some recreationists. Users could likely be aware of the action but changes in use could be slight. There could be partial closures to protect public safety. Impacts could be local. There could be a change in local recreational opportunities; however, it could affect relatively few visitors or could not affect any related recreational activities.	There could be complete site closures to protect public safety. However, the sites could be reopened after activities occur. There could be slightly reduced site capacity. The visitor experience could be slightly changed but still available. The impact could be readily apparent and/or could affect many recreationists locally and in adjacent areas. Users could be aware of the action. There could be complete closures to protect public safety. However, the areas could be reopened after activities occur. Some users could choose to pursue activities in other available local or regional areas.	All developed site capacity could be eliminated because developed facilities could be closed and removed. Visitors could be displaced to facilities over a widespread area, and visitor experiences could no longer be available in many locations. The impact could affect most recreationists over a widespread area. Users could be highly aware of the action. Users could choose to pursue activities in other available regional areas.
Aesthetics and Visual Resources	Short-term: During construction period. Long-term: Over the life of the project or longer.	There could be a change in the viewshed that was readily apparent but could not attract attention, dominate the view, or detract from current user activities or experiences.	There could be a change in the viewshed that was readily apparent and attracts attention. Changes could not dominate the viewscape, although they could detract from the current user activities or experiences.	Changes to the characteristic views could dominate and detract from current user activities or experiences.

Resource	Impact Duration	Minor Intensity	Moderate Intensity	Major Intensity
Public Health and Safety, Including Flood and Shoreline Protection	Short-term: During construction period. Long-term: Over the life of the project or longer.	Actions could not result in (1) soil, groundwater, and/or surface water contamination; (2) exposure of contaminated media to construction workers or transmission line operations personnel; and/or (3) mobilization and migration of contaminants currently in the soil, groundwater, or surface water at levels that could harm the workers or general public. Increased risk of potential hazards (e.g., increased likelihood of storm surge) to visitors, residents, and workers from decreased shoreline integrity could be temporary and localized.	Actions could result in (1) exposure, mobilization and/or migration of existing contaminated soil, groundwater, or surface water to an extent that requires mitigation; and/or (2) could introduce detectable levels of contaminants to soil, groundwater, and/or surface water in localized areas within the project boundaries such that mitigation/remediation is required to restore the affected area to the preconstruction conditions. Increased risk of potential hazards to visitors, residents, and workers from decreased shoreline integrity could be sufficient to cause a permanent change in use patterns and area avoidance in local and adjacent areas.	Actions could result in (1) soil, groundwater, and/or surface water contamination at levels exceeding federal, state, or local hazardous waste criteria, including those established by 40 CFR § 261; (2) mobilization of contaminants currently in the soil, groundwater, or surface water, resulting in exposure of humans or other sensitive receptors such as plants and wildlife to contaminant levels that could result in health effects; and (3) the presence of contaminated soil, groundwater, or surface water within the project area, exposing workers and/or the public to contaminated or hazardous materials at levels exceeding those permitted by the federal OSHA in 29 CFR § 1910. Increased risk of potential hazards to visitors, residents, and workers from decreased shoreline integrity could be substantial and could cause permanent changes in use patterns and area avoidance over a widespread area.

5.2.2 Physical Environment

Geology and Substrates

All of the alternatives evaluated include new construction, soil excavation, utility installation, and other environmental modifications that would disturb geology and substrates. These alterations may result in short- and long-term geologic and soil-related impacts at the alternative sites. These impacts could be both adverse and beneficial. Adverse impacts would involve dune alteration, bedrock drilling, sediment excavation, and erosion, while beneficial geologic and soil-related impacts would include dune enhancement and revegetation. Under the CWA, all states must control sedimentation and erosion through state laws (USEPA, 2002). Alabama authorizes sediment and erosion control through its soil and water conservation districts (Soil and Water Conservation Districts et al., 2007). There are 67 districts within Alabama, one for each county (Soil and Water Conservation Districts et al., 2007). All the districts operate under the guidelines outlined in the Alabama Handbook for Erosion Control, Sediment Control, and Stormwater Management on Construction Sites and Urban Areas to prevent and/or control construction-related erosion (Soil and Water Conservation Districts et al., 2007). The handbook ensures that erosion and sedimentation (E&S) are minimized by using BMPs. Typical examples of BMPs include:

- Using silt fences where appropriate to minimize erosion and deposition.
- Covering piles of removed soil with sod to keep it in place.
- Salvaging and reusing topsoil either in place or in other project areas.
- Revegetating the area so that the area of bare soil remaining after construction is eliminated.

The districts are responsible for ensuring that effective BMPs are installed on the property. Appropriate BMPs depend on the erosion risk of the land, which is influenced by rainfall energy, soil erodibility (grain size), topography, and surface cover (Pitt, 2002). Although the Gulf Coast has very flat topography, it has fine grained, highly erodible sands; limited surface cover along the beaches; and the highest amount of rainfall energy in the country (Pitt, 2002). The beaches along the Gulf Coast are constantly being eroded because of their susceptibility to erosion combined with oceanic processes. This erosion is then exacerbated by anthropogenic impacts. (USGS, 2008). Each proposed alternative would take the necessary steps to limit the amount of erosion that occurs. Following regulations from ADEM, every construction project that would result in 1-acre of land disturbance or exists on a parcel of 1 acre or more must comply with the Construction Best Management Practices Plan (CBMPP) (ADEM, 2016b). The CBMPP template would be completed with detailed descriptions of the BMPs that would be implemented to mitigate for erosion and runoff. The CBMPP also requires revegetation plans, a phased construction process, and minimization of disturbed areas (ADEM, 2009). Descriptions of BMPs and how to install them are available in the Alabama Handbook for Erosion Control, Sediment Control and Stormwater Management on Construction Sites and Urban Areas (Alabama Soil and Water Conservation Committee, 2003). The BMPs that would be implemented would vary across the proposed alternatives and would depend on the activity being proposed and the resulting level of impact from that activity. A Qualified Credentialed Inspector (QCI) would be required to conduct regular inspections of construction activities to make sure that the appropriate BMPs are in place and are working effectively throughout the construction process (ADEM, 2016b). Impacts on geology and substrates associated with the no action alternative are described in Table 5-2. Anticipated impacts from each proposed alternative in Baldwin and Mobile counties are discussed in Tables 5-3 and 5-4, respectively. For all projects that include land acquisition (Gulf Highlands Land Acquisition and Improvements, Little Lagoon Laguna Cove Natural Resources Protection, Dauphin Island Eco-Tourism and Environmental Education Area Dauphin Island, and Mid-Island Parks and Public Beach Improvements – all parcels), use limitations would be put

in place that could allow for future passive recreational use infrastructure on these sites. Should any additional passive public recreation infrastructure be built on these sites in the future (such as a land-based boardwalk, gazebo, benches, shade structures, and/or kayak launch) short- and long-term impacts on geology and substrates would be similar to those stated below for each project site.

Table 5-2: Impacts on Geology and Substrates from the No Action Alternative

No Action Alternative	Site-specific Impacts
No Action Alternative	Short-term: *Geology:* Access Improvement Projects on Currently Publicly Owned Lands The recreational amenities proposed for these alternative sites would not move forward under the no action alternative. The sites would continue to operate in their current capacity, and no additional short-term impacts would occur. Land Acquisition and Access Improvement Projects Acquisition and construction of amenities with NRDA funds would not occur under the no action alternative. If acquisition does not occur under NRDA or with other Gulf restoration funding mechanisms, it is likely that these sites would be developed, which would result in short-term, minor, adverse impacts on geology from construction activities. If acquisition occurs with other Gulf restoration funding mechanisms and recreational amenities are not constructed, no short-term impacts on geology are anticipated because these sites would remain in their current conditions. Projects Currently Under Construction Under the no action alternative, construction of the lodge and conference center will continue, including elements that will affect geology. These impacts are described in the Final Phase III ERP/PEIS (Section 11.7.6.1.1) and include implementing E&S BMPs that will mitigate impacts on dune formation during the construction process. Additionally, some of the public amenities associated with the lodge and conference center could be constructed. Therefore, the project would be expected to result in short-term, minor, adverse impacts on geology, as described below. *Substrates:* Access Improvement Projects on Currently Publicly Owned Lands The recreational amenities proposed for these sites would not move forward under the no action alternative. These sites would continue to operate in their current capacity, and no short-term impacts are expected. Land Acquisition and Access Improvement Projects Acquisition and construction of amenities with NRDA funds would not occur under the no action alternative. If acquisition does not occur under NRDA or with other Gulf restoration funding mechanisms, it is likely that these sites would be developed, resulting in short-term, minor, adverse impacts on substrates. Short-term, adverse impacts are likely to result from construction activities on these sites, but the impacts would likely be minor because BMPs similar to those described below for the Gulf State Park Lodge and Associated Public Access Amenities Project would be used. If acquisition occurs with other Gulf restoration funding mechanisms, no short-term impacts would occur because these sites would remain in their current conditions.

No Action Alternative	Site-specific Impacts
	Projects Currently Under Construction Under the no action alternative, construction of the lodge and conference center will continue, including elements that will affect substrate. These impacts are described in the Final Phase III ERP/PEIS (Section 1.7.6.1.1) and involve displacing soil on a large scale, which makes the area susceptible to erosion. Additionally, some of the public access amenities associated with the lodge could be constructed, as described above. Therefore, the project would be expected to result in short-term, minor, adverse impacts on substrates, as described below. Long-term: *Geology:* Access Improvement Projects on Currently Publicly Owned Lands Under the no action alternative, no long-term impacts on the geology of Mobile Bay or its shoreline are expected. Land Acquisition and Access Improvement Projects Under the no action alternative, no long-term impacts on geology are expected. Projects Currently Under Construction Under the no action alternative, construction of the lodge and conference center will continue, including elements that will affect geology. These impacts are described in the Final Phase III ERP/PEIS (Section 11.7.6.2) and involve disruption of natural dune formation from the presence of new structures. Therefore, the no action alternative is expected to result in long-term, minor, adverse impacts on geology, as described below. *Substrates:* Access Improvement Projects on Currently Publicly Owned Lands Under the no action alternative, no long-term impacts on substrate are expected. Land Acquisition and Access Improvement Projects Under the no action alternative, if properties were acquired for preservation, no long-term impacts on substrate are expected. If the properties were developed, impacts on substrates would be long term, minor, and adverse because permanent infrastructure (e.g., condominiums, parking lots) would be placed over the existing substrates. Projects Currently Under Construction Under the no action alternative, construction of the lodge and conference center will continue, including elements that will affect substrate. After construction and final grading is completed at the site, bare soils will be revegetated to prevent erosion. There will be no long-term, adverse impacts on soil resources during operation of the lodge and conference center because no long term, ground-disturbing activities will occur.

Table 5-3: Impacts on Geology and Substrates from the Baldwin County Alternatives

Baldwin County Alternatives	Site-specific Impacts
Gulf State Park Lodge and Associated Public Access Amenities Project	Short-term: *Geology:* The geological impacts of the Gulf State Park Lodge and Associated Public Access Amenities Project site are characterized in the Final Phase III ERP/PEIS (Section 11.7.6.1.1). The lodge is being built entirely within the footprint of the original lodge and will occupy a smaller footprint than the original facility. The footings of the original lodge remain within the proposed alternative footprint. The proposed alternative is on an approximately 22-acre area sited between existing dunes south of State Highway 182. Project design ensures that impacts on existing dunes are minimized. On the south side, the building location is approximately defined by a 200-foot setback from the coastal construction line. The design team's professional ecologists defined that setback as the location for a naturally occurring secondary dune system. Environmental permitting for this alternative requires E&S plans in accordance with ADEM National Pollutant Discharge Elimination System (NPDES) permits. These plans include necessary construction BMPs, outlined in the CBMPP. During the two-year construction period, BMPs to minimize erosion will include implementing silt fencing and wetting the area to minimize dust. BMPs will be regularly monitored by a QCI to ensure effectiveness. Appropriate BMPs will minimize soil loss; however, they also temporarily restrict sand movement, which may affect dune formation. Although dune formation may be temporarily impacted, the overall local geologic features would not be changed, and results will be short term, minor, and adverse. The majority of additional project elements (i.e., a tram stop at the lodge site, public educational programs, and a bicycle sharing program) would be located within the footprint of disturbance analyzed in the Final Phase III ERP/PEIS and have the same impacts. Additional tram stops along the rest of the route have not yet been determined, but would be located on existing asphalt areas and would not include new ground disturbance. Any additional infrastructure, such as shade shelters, would also be located on asphalt or otherwise disturbed areas. The pedestrian trail to the fishing pier would extend slightly beyond the footprint analyzed in the Final Phase III ERP/PEIS and would be 620 feet long and 8 feet wide. This walkway would not disrupt any existing dunes. *Substrates:* Construction of the proposed alternative takes place where the previous lodge once existed. The construction process requires disturbing approximately 13 acres of soil at the site. Any time soil is disturbed, the potential for erosion increases if the displaced soil is not properly secured using appropriate BMPs. Environmental permitting for this project requires E&S plans in accordance with ADEM NPDES permits. Appropriate BMPs to minimize erosion are outlined in the CBMPP. This includes treating exposed soils with grass or gravel if exposed for more than 12 days, installing perimeter controls, and resurfacing exposed soils. Because E&S BMPs would be used during all aspects of construction and rehabilitation and will be consistently monitored by a QCI, impacts will be small and localized, and soil characteristics at the sites will not change. Therefore, it is anticipated that impacts on soil will be primarily short term, minor, and adverse.

Baldwin County Alternatives	Site-specific Impacts
	Long-term: *Geology:* The alternative has been designed to be sensitive to the surrounding environment. The site has been designed to recognize the potential effects on dune replenishment, and the building will be set back 200 feet from the coastal construction line so as not to obstruct the naturally occurring secondary dune system. Additionally, elevated pathways from the lodge to the beach would be constructed over dunes so that visitors can access the beach without walking on the dunes and degrading them. Placing such structures in the path of moving sands and winds would have minimal effects on the accretion rates of dune systems; the proposed building designs would further minimize these impacts by raising the buildings on piles to allow sand and wind to travel beneath the buildings. This would enable natural dune replenishment. Thus, impacts would be long term and minor due to the construction methods used and the BMPs implemented. *Substrates:* After construction and final grading is completed at the site, bare soils would be revegetated to prevent erosion. There would be no long-term, adverse impacts on soil resources during operation of the alternative because no long-term, ground-disturbing activities would occur.
Fort Morgan Pier Rehabilitation	Short-term: *Geology:* The proposed rehabilitation of the pier would be sited along the bay side of the Fort Morgan Peninsula in Bon Secour Bay. Construction activities are expected to last up to one year. Under this alternative the existing pier would be dismantled and a new one would be constructed in its place. The rehabilitation would involve leaving the existing barge foundation and adding vinyl sheet pile to the west and north sides of the pier. This pile would be anchored 10 feet in the ground by sinking it into the existing substrate. Bedrock drilling is not expected to be necessary. Environmental permitting for this project would require E&S plans in accordance with ADEM NPDES permits. These plans would include necessary construction BMPs, which would be outlined in the CBMPP and be inspected regularly by a QCI. Impacts on geology are expected to be short term, minor, and adverse because of the small footprint of this alternative, reduction of disturbance using the existing footprint of the pier, and the implementation of appropriate BMPs. *Substrates:* Construction would take place along the shoreline and over open water. The shoreline substrate is predominately sand, which is a somewhat unconsolidated substrate. Effective BMPs would be implemented to minimize disturbance to the sandy substrate from construction vehicles and inhibit loosened sand from entering Bon Secour Bay. BMPs could include barging the in-water equipment so as not to disturb the bay floor and placing turbidity curtains around the in-water work perimeter. The bottom of the bay underlying the existing pier area would be raked to clear obstructions, which would temporarily disturb the bay floor sediments. Most of the pier rehabilitation construction would take place with the machines in the water, which would also temporarily disturb the substrate. With the implementation of appropriate BMPs and the short (one year) construction period of this project, impacts are expected to be short term, minor, and adverse.

Baldwin County Alternatives	Site-specific Impacts
	Long-term: *Geology:* The newly installed vinyl sheet pile would remain in place for the operational period of the pier and be located along the existing pier. It would not have any long-term impacts on the geology of Mobile Bay or the shoreline. *Substrates:* The substrate of the area would not sustain long-term impacts from the pier rehabilitation because operation of the improvements would not alter or disturb the substrate. The impacts from the short-term construction period would subside quickly after completion; therefore, there would be no long-term impacts on the substrate at the site.
Fort Morgan Peninsula Public Access Improvements	Short-term: *Geology:* Construction of access improvements at 11 locations on the Fort Morgan Peninsula would take approximately four to six months and affect approximately 0.13-0.88 acre at each site. These improvements would have minor effects on the geologic formations along the peninsula. E&S BMPs may have minor impacts on sand dune accretion by prohibiting natural sand movement during the time period they are installed; however, implementation and consistent monitoring of E&S BMPs would decrease soil loss, and the dune accretion impacts would be minimal, localized, and subject only to the construction time period at each access point site. Therefore, impacts are expected to be short term, minor, and adverse and would not extend beyond the construction period. *Substrates:* The areas slated for parking lots would be graded during the construction process. No soil excavation would occur. Grading would increase soil exposure through the removal of vegetation. E&S BMPs would be implemented on these disturbed plots, including silt fences, wetting, and erosion matting. A QCI would regularly inspect all BMPs The largest parking lot footprint would exist at Access Point 1, where approximately 0.2 acre would be graded to create a 60-car parking lot. Out of the 11 access points, two would include permanent bathroom facilities. Each bathroom would require an approximate 1,047 square foot area to be graded and between approximately 400 and 2,400 square feet of soil disturbance to lay down utility lines. Installation of the eight proposed portable restrooms would require less ground disturbance than the permanent facilities. Building the access point dune walkovers would require between approximately 575 and 2,816 square feet of soil disturbance depending on the access improvement. The longest dune walkover would occur at site 9. All walkovers would require pilings. The impacts on the 11 access improvement sites, totaling approximately 3.4 acres, during the construction period would be short term and minor and would be minimized by the use of the correct BMPs as described in the Alabama Handbook for Erosion Control, Sediment Control and Stormwater Management on Construction Sites and Urban Areas (Alabama Soil and Water Conservation Committee, 2003).

Baldwin County Alternatives	Site-specific Impacts
	Long-term: *Geology:* Establishing public access points and dune walkovers would preserve the geologic formations of the beach by decreasing the amount of foot traffic that would occur over the dunes. Given that these areas are already used as informal access points, creating walkways would make them more sustainable access areas and reduce the area of potential impact. The elevated walkways would allow the dune deposition to occur without inhibition below. Therefore, the construction of the proposed alternative would benefit geology in the long term and there would be no adverse, long-term geologic impacts. *Substrates:* Creation of parking lots at the access points would decrease the amount of soil degradation that would occur in the long term. Because these areas are already used as access points, parking is occurring informally and has disturbed the substrate. The creation of parking lots would concentrate the cars into one area and dissuade beachgoers from parking on unconsolidated beach and dunes, allowing previously disturbed areas to recover. The presence of dune walkovers would further preserve the beach substrate, as mentioned above. Long-term impacts on soil resources from the proposed alternative would be beneficial.
Gulf Highlands Land Acquisition and Improvements	Short-term: *Geology:* Construction of access improvements at Gulf Highlands is expected to take approximately four to six months. The site consists of approximately 113 acres with more than 2,700 feet of Gulf-fronting beach and includes frontal dunes (37.7 acres) and tertiary dunes (18.7 acres). Construction of the parking lot would occur in the interior scrub. Construction of the dune walkover would require pilings to be installed into the beach sands and dunes, resulting in a total disturbed area of approximately 0.32 acre. These installations would not affect sand dune accretion, and impacts on the dunes would be short term and minor during construction. Appropriate E&S BMPs would be implemented and consistently inspected by a QCI during construction, as outlined in the CBMPP. *Substrates:* On the site, a 0.34-acre parking lot would be established and would include a 0.87-acre driveway, which would disturb an area of approximately 1.3 acres to the St. Lucie-Leon-Muck complex underlying the interior scrub. This area would need to be graded and paved during construction with impervious material, such as asphalt, and would result in impacts on the substrate during construction from compaction. The installation of the elevated boardwalk would disturb approximately 0.32 acre. The total disturbed area at the site would be approximately 1.6 acres out of the entire 113-acre site. Because of the limited area of disturbance and the implementation and monitoring of appropriate BMPs during construction, impacts during construction would be short term and minor. Long-term: *Geology:* There would be no long-term, adverse impacts on geologic features from the construction of this proposed alternative. The creation of a parking lot and dune walkover would preserve the dunes from being degraded from unauthorized access that could occur in the absence of a designated access and parking area. The elevated walkway would allow natural dune formation to continue to occur below the constructed path; therefore, impacts on geology at the site would be long term, moderate, and beneficial.

Baldwin County Alternatives	Site-specific Impacts
	Substrates: The long-term impacts on soils from creating a 1.2-acre parking area and dune walkover would be minor. While the 1.2 acres of substrate would be taken out of natural productivity, the proposed alternative would be beneficial to the area in the long term by providing sustainable public access points to the beach, limiting the amount of informal access that would degrade the natural area with vehicle and foot traffic, and preserving large portions of the property from further development. The implementation of the proposed alternative would result in long-term, minor, adverse impacts on the substrate of the site.
Laguna Cove Little Lagoon Natural Resource Protection	Short-term: *Geology:* The construction of recreational improvements at the site would last up to six months. Piles would be sunk into the substrate of the lagoon during the installation of the boardwalk. This sinking would not affect the underlying geology of the bedrock. There would be no impacts on geologic resources during construction. *Substrates:* This alternative would establish two parking areas: one on the east side of the property to accommodate approximately 40 cars and one on the west side that would accommodate approximately 20 cars. The parking areas combined would disturb approximately 0.34 acre of land. Construction of the parking lots would require wetting and grading the substrate. Soil at the site would have to be excavated to lay down approximately 400 feet of utility lines to service the restroom and lights. The excavated soil would be used as fill on top of the installed lines to create an even surface. The excavation of soil would result in exposed soil piles along the length of the utility installation area. BMPs, such as erosion matting and silt fencing, would minimize erosion from these exposed soils. Revegetation would occur over the filled area following utility line installation. There would be an 8-foot-wide by 600-foot-long boardwalk installed off of the east parking lot that would extend out through the tidal marsh and into the lagoon where it would become a 15- by 250-foot pier with a terminal “T” on the end. This boardwalk would require pilings to be installed and would require associated soil excavation. Because the site is larger than 1 acre, ADEM-approved BMPs would be used to minimize erosion, runoff, and the amount of disturbed area for all construction measures. All appropriate BMPs would be outlined in the CBMPP, and a QCI would monitor BMPs for effectiveness. Therefore impacts on soils during construction would be short term, adverse, minor, and localized. Long-term: *Geology:* The entire site totals approximately 53 acres adjacent to Little Lagoon. The construction of two parking lots, restrooms, and a kayak launch would not adversely affect the underlying geology of the site. If any bedrock drilling were to occur to install the boardwalk, it would be shallow, minimal, and have short-term, minor impacts. Therefore, there would be no long-term impacts on geology. *Substrates:* The substrate of the site would be minimally affected over the operational period of the alternative. The parking lot areas would be covered in crushed aggregate, a pervious paver, which would allow water to drain through the lots into the underlying substrate. Construction would not occur on existing dunes, and elevated pathways would allow the underlying substrate to be minimally affected. Therefore, long-term impacts on substrates would be minor.

Table 5-4: Impacts on Geology and Substrates from the Mobile County Alternatives

Mobile County Alternatives	Site-specific Impacts
Dauphin Island Eco-Tourism and Environmental Education Area	Short-term: *Geology:* Planning and construction of the alternative is expected to take approximately two years. The installation of a boardwalk would necessitate pilings for the 10-foot by 530-foot area of the structure. The four, 10-foot by 100-foot finger piers off of the boardwalk would also require pilings to be installed into bedrock. The exact number of pilings for each component would be determined during alternative design. The disturbance from the installation of pilings would be minimal and short term. The drilling for piling installation would not go deep enough to adversely affect the underlying geologic formations. There would be no short-term geologic impacts from the construction of this alternative. *Substrates:* The two-year construction process for this site would involve grading approximately 0.46 acre of upland soil to install a pervious parking area. Approximately 0.14 acre of soil would be disturbed to install a 5,300 square foot fishing pier with four terminal, 1,000 square foot finger piers. The elevated boardwalk would disturb approximately 0.2 acre of soil by drilling for piling installation. Two gazebos would require grading of two, 450-square-foot areas, resulting in a total estimated disturbed area of approximately 974 square feet. Grading would also need to occur for the restroom facility, which would disturb approximately 1,047 square feet and approximately 0.08 acre to install utility lines. The alternative would also include a 2,335-foot-long, 8-foot-wide asphalt bicycle path along the road frontage, which would require grading and paving 0.43 acre of substrate. Appropriate E&S BMPs would be outlined in the CBMPP, implemented, and inspected regularly by a QCI during construction. BMPs would ensure that any adverse impacts are localized. The multiple alternative components would result in short-term, moderate impacts on the area substrate from disturbance during construction. Long-term: *Geology:* The presence of the various proposed alternative components, including approximately 0.46 acre of pervious parking area, a boardwalk, fishing pier, gazebo, and bicycle path would not change the underlying geology of the site. As a result, no long-term, geologic impacts related to the operational period of the site are expected. *Substrates:* The substrate underlying the various construction components would be altered for the operational life of the site. However, no components of the alternative would continue to affect these resources after construction. Despite the volume of disturbed area at this site, the overall goal of the alternative is to provide public access to wetland habitats adjacent to Aloe Bay, where no public access currently exists. The only way to provide public access, enhance visitor experience, and promote environmental education is to create a parking lot and pathways. These facilities would result in less total soil degradation in the future by providing designed access to these resources, rather than informal access. All of the construction would abide by ADEM guidelines. Compliance with these regulations and project design would ensure that all the long-term, adverse impacts on the area substrate would be minor.

Mobile County Alternatives	Site-specific Impacts
Mid-Island Parks and Public Beach Improvements (Parcels A, B, and C)	Short-term: *Geology:* Impacts would be the same as noted below for Parcels B and C. In addition, an approximately 975 linear feet dune walkover would be constructed on Parcel A to provide access to the shoreline, direct foot traffic, and protect resources in that area. Project design for the Parcel A dune walkover would ensure that dune erosion is minimized during construction. BMPs to minimize erosion, including silt fencing, erosion matting, and revegetation, may temporarily restrict sand movement during construction, which would affect dune formation. A QCI would regularly monitor BMPs during construction. Impacts from construction would be short term, minor, and localized. The implementation of BMPs would mitigate the adverse effects. *Substrates:* Impacts would be the same as noted below for Parcels B and C. For Parcel A, the disruption of approximately 0.25 acre of soil may result in some erosion from machinery and vegetation removal. However, appropriate E&S BMPs would be implemented and monitored during construction. With the implementation of these BMPs during construction, short-term, minor, adverse substrate-related impacts are expected to occur. Long-term: *Geology:* A dune walkover would be constructed on Parcel A to provide access to the shoreline, protect important resources, and prevent future development. The walkover would help funnel beachgoers through a controlled access point and simultaneously raise awareness of the importance of beach-related habitats and wildlife through planned educational and informational signage—all of which would result in long-term, beneficial impacts. *Substrates:* The dune walkover access on Parcel A would minimize erosion in the long term because it would funnel visitors over the dunes and decrease the amount of foot traffic on the dunes. This would allow visitors to enjoy the Gulf shoreline without degrading the environment, resulting in no long-term impacts on substrate.
Mid-Island Parks and Public Beach Improvements (Parcels B and C)	Short-term: *Geology*: Land acquisition and project development for the alternative would take approximately two years. This alternative would include acquire and manage two separate parcels of property that would collectively offer public parking, restroom/shower facilities and a dune walkover providing access to the beach. Alternative design would ensure that impacts on existing dunes are minimized. BMPs to minimize erosion may temporarily restrict sand movement during construction, which would affect dune formation. Impacts from construction would be short term, minor, adverse, and localized. The implementation and regular monitoring of BMPs would minimize adverse effects. *Substrates:* Construction of parking facilities on Parcels B and C would increase access and enhance visitor experience at Dauphin Island by providing public parking and beach access. The 125 regular vehicle and 12 vehicle-with-trailer parking facility would require a total estimated area of 1.13 acres of coastal beach/scrub dune substrate to be wetted and graded. Construction would limit erosion by implementing E&S BMPs such as silt fences and dust control measures. Construction would cause short-term, adverse impacts on the substrate. Implementation of BMPs during construction would minimize impacts and result in localized impacts that would not change the character of the soil. This would result in short-term, adverse, minor impacts during construction to soils.

Mobile County Alternatives	Site-specific Impacts
	A restroom/shower facility would be constructed to enhance recreational use. It would require grading approximately 1,466 square feet of soil and excavating and backfilling approximately 2,000 square feet of substrate to install utility lines to the restroom facility, resulting in a total disturbed area of approximately 0.08 acre. During the two-year construction period, E&S BMPs, as outlined in the CBMPP, would be implemented in accordance with ADEM regulations to minimize impacts. All impacts during the construction period would be short term, minor, and adverse. <u>Long-term</u>: *Geology:* This alternative is designed to protect existing beach and dune habitats while enhancing access to Gulf and Mississippi Sound waters. This acquisition of the property by the Town of Dauphin Island would prevent potential future development of beach and dune habitat. A strategically placed dune walkover would provide visitor access to the Gulf coastline while limiting impacts on fragile dune habitats. Thus, in the long term, there would be no adverse impacts on the dunes or their formation processes. Rather, the proposed alternative would channel the foot traffic that would occur over the dunes, preserving their natural formation, resulting in long-term, beneficial impacts. *Substrates:* The substrate beneath the proposed parking lot and restroom facility would be localized and would therefore result in minor impacts over the operational period of the proposed alternative. However, the underlying substrate in this area would not be continually affected by site use. Implementing the proposed alternative would preserve the substrate by providing public access points to the beach and bay and limiting the amount of unregulated foot traffic over the beach and dunes. This would result in minor, beneficial impacts on the substrate.

Hydrology and Water Quality

Regulations established pursuant to the CWA help to ensure protection of the nation's waters, including wetlands. For stormwater, CWA compliance requires that all construction projects of 1 acre, or on a projected development site of 1 acre, obtain a NPDES permit to regulate pollution runoff into state waters (ADEM, 2016b). USEPA requires incorporating the following components into an NPDES BMP plan (USEPA, 2012a):

- municipal oversight,
- construction site planning and management,
- erosion control,
- runoff control,
- sediment control, and
- proper materials management.

In Alabama the NPDES BMP plan is the CBMPP. The NPDES requirements for the State of Alabama are more stringent than the federal requirements, requiring more project information on the permit application, higher fees, and more post-construction monitoring than the federal permit requires (ADEM, 2016b). Under Section 404 of the CWA, anyone planning to discharge dredged and/or fill material into waters of the United States, including wetlands, must first obtain authorization from

USACE. A discharge may be authorized only when there is no practicable alternative with less adverse effect on the aquatic ecosystem, appropriate steps have been taken to minimize potential adverse effects to the aquatic ecosystem, and unavoidable impacts have been offset by appropriate compensatory mitigation. Authorization may be in the form of an individual permit or a General Permit. In practice, the vast majority of projects are authorized by General Permits, which require less paperwork than an individual permit application, because the activities authorized by these permits have been determined to result in no more than minimal adverse effects on the aquatic environment. Under Section 401 of the CWA, states and Indian tribes can review and approve, condition, or deny all federal permits or licenses that might result in a discharge to state or tribal waters. States and Indian tribes make their decisions primarily by ensuring that the proposed activity will comply with state water quality standards. In Alabama, this regulatory department is ADEM. In addition, under Section 10 of the RHA, the creation of any obstruction to the navigable capacity, including construction of structures and excavation, or in any manner altering the course, location, condition, or capacity of "navigable waters of the United States" that presently used, have been used in the past, or may be susceptible for use to transport interstate or foreign commerce must be authorized by USACE (33 U.S.C. 403, 33 CFR. Section 329.4.). Finally, in accordance with ADEM regulations, a QCI is required to conduct regular inspections of construction activities to make sure that the appropriate BMPs are in place to mitigate for erosion and ultimately protect waterways from runoff (ADEM, 2016b). All appropriate construction BMPs are outlined in the CBMPP.

The implementation of these existing authorities and other practices, which are designed to protect water quality, would help minimize negative impacts on waterways. The level and type of potential impacts at each of the proposed alternative sites would vary; however, every site is located near water or wetlands. The impacts on hydrology and water quality associated with the no action alternative are described in Table 5-5. Site-specific hydrologic, water quality, and wetland impacts are evaluated in Tables 5-6 and 5-7. For all projects that include land acquisition (Gulf Highlands Land Acquisition and Improvements, Little Lagoon Laguna Cove Natural Resources Protection, Dauphin Island Eco-Tourism and Environmental Education Area, and Mid-Island Parks and Public Beach Improvements – all parcels), use limitations would be put in place that could allow for future passive recreational use infrastructure on these sites. Should any additional passive public recreation infrastructure be built on these sites in the future (such as a land-based boardwalk, gazebo, benches, shade structures, and/or kayak launch) short- and long-term impacts on hydrology and water quality would be similar to those stated below for each project site.

Table 5-5: Impacts on Hydrology and Water Quality from the No Action Alternative

No Action Alternative	Site-specific Impacts
No Action Alternative	Short-term: *Hydrology:* Access Improvement Projects on Currently Publicly Owned Lands The recreational amenities proposed for the alternative sites would not move forward under the no action alternative. These sites would continue to operate in their current capacity, and no additional short-term impacts would occur. Land Acquisition and Access Improvement Projects Acquisition and construction of amenities with NRDA funds would not occur under the no action alternative. If acquisition does not occur under NRDA or with other Gulf restoration funding mechanisms, it is likely that these sites would be

No Action Alternative	Site-specific Impacts
	developed, resulting in short term, minor impacts on hydrology from construction activities that would involve grading, excavating, and other disturbance activities. If acquisition occurs with other Gulf restoration funding mechanisms and recreational amenities are not constructed, there would be no short-term impacts on hydrology because these sites would remain in their current conditions. <u>Projects Currently Under Construction</u> Under the no action alternative, construction of the lodge and conference center will continue, including elements that will affect hydrology. These impacts are described in the Final Phase III ERP/PEIS (Section 11.7.6.2) and include increased runoff during the construction process, which will be mitigated by appropriate BMPs to minimize pollution discharge into neighboring waterbodies. Impacts will be short term and minor. *Water Quality:* <u>Access Improvement Projects on Currently Publicly Owned Lands</u> The recreational amenities proposed for the alternative sites would not move forward under the no action alternative. These sites would continue to operate in their current capacity, and no short-term impacts on water quality are expected. <u>Land Acquisition and Access Improvement Projects</u> Acquisition and construction of amenities with NRDA funds would not occur under the no action alternative. If acquisition does not occur under NRDA or with other Gulf restoration funding mechanisms, it is likely that these sites would be developed, resulting in short-term, minor, adverse impacts on water quality. Short-term impacts are likely to result from construction activities on these sites, but the impacts would likely be minor since ADEM NPDES approved BMPs would be used. If acquisition occurs with other Gulf restoration funding mechanisms, there would be no short-term impacts because these sites would remain in their current conditions. <u>Projects Currently Under Construction</u> Under the no action alternative, construction of the lodge and conference center will continue, including elements that will affect water quality. These impacts are described in the Final Phase III ERP/PEIS (Section 11.7.6.2) and involve increased runoff during storm events that may result in increased deposition from exposed soils into nearby waterbodies. Therefore, the project is expected to result in short-term, minor, adverse impacts on water quality, as described below. *Floodplain:* <u>Access Improvement Projects on Currently Publicly Owned Lands</u> The recreational amenities proposed for these alternative sites would not move forward under the no action alternative, and the sites would continue to operate in their current capacity. There would no short-term impacts on the floodplain under the no action alternative. <u>Land Acquisition and Access Improvement Projects</u> Acquisition and construction of amenities with NRDA funds would not occur under the no action alternative. If acquisition does not occur under NRDA or with other Gulf restoration funding mechanisms, it is likely that these sites would be

No Action Alternative	Site-specific Impacts
	developed, resulting in short-term, minor, adverse impacts on the floodplain. Short-term impacts are likely to result from construction activities on these sites, but the impacts would likely be minor since appropriate BMPs would be used and Nationwide Permits would be obtained. If acquisition occurs with other Gulf restoration funding mechanisms, there would be no short-term impacts because these sites would remain in their current conditions. <u>Projects Currently Under Construction</u> Under the no action alternative, construction of the elements of the lodge and conference center will continue as described in the Final Phase III ERP/PEIS. No short-term impacts on floodplains are anticipated as a result of this construction. *Wetlands:* <u>Access Improvement Projects on Currently Publicly Owned Lands</u> The recreational amenities proposed for these alternative sites would not move forward under the no action alternative. These sites would continue to operate in their current capacity, and no short-term impacts on wetlands are expected. <u>Land Acquisition and Access Improvement Projects</u> Acquisition and construction of amenities with NRDA funds would not occur under the no action alternative. If acquisition does not occur under NRDA or with other Gulf restoration funding mechanisms, it is likely that these sites would be developed, resulting in short-term, minor, adverse impacts on wetlands. Short-term impacts are likely to result from construction activities on these sites, but the impacts would likely be minor because appropriate BMPs would be implemented, and USACE authorization would be obtained. If acquisition occurs with other Gulf restoration funding mechanisms, no short-term impacts are expected because these sites would remain in their current conditions. <u>Projects Currently Under Construction</u> Under the no action alternative, construction of the lodge and conference center will continue, and impacts on wetlands will still occur. These impacts are described in the Final Phase III ERP/PEIS (Section 11.7.6.2) and involve filling 0.18 acre of wetlands during construction. These wetlands will be mitigated through the creation of high functioning wetlands that cover more area; therefore, the project is expected to result in short-term, minor impacts on wetlands, as described below. <u>Long-term</u>: *Hydrology:* <u>Access Improvement Projects on Currently Publicly Owned Lands</u> Under the no action alternative, access improvements on currently publicly owned lands would not be implemented, and no long-term impacts on the hydrology of Mobile Bay or its shoreline are expected. <u>Land Acquisition and Access Improvement Projects</u> Under the no action alternative, no long-term impacts on hydrology would be expected if the properties were preserved. If the properties were acquired for development, there would be long-term, adverse impacts on hydrology because pervious surfaces would increase, and runoff in the area would drastically increase, with the intensity of the impact increasing with increased development.

No Action Alternative	Site-specific Impacts
	Projects Currently Under Construction Under the no action alternative, construction of the lodge and conference center will continue, and its design will be sensitive to the hydrologic processes of the surrounding area as described in the Final Phase III ERP/PEIS (Section 11.7.6.2). Long-term BMPs, such as pervious surfaces and an interdunal swale, will be installed to alleviate stormwater runoff, decrease erosion, and increase infiltration. Elevated pathways will be installed to limit the amount of pervious surfaces in the area. *Water Quality:* Access Improvement Projects on Currently Publicly Owned Lands Under the no action alternative, access improvements on currently publicly owned lands would not be constructed, and no long-term impacts on water quality are expected in the absence of development. Land Acquisition and Access Improvement Projects Under the no action alternative, if properties were acquired for preservation, no long-term impacts on water quality are expected; however, in the long term, these sites would continue to provide a benefit to water quality because they would continue to infiltrate water through natural habitats and provide natural sheetflow to nearby surface waters. If the properties were developed, there would be long-term, adverse impacts on water quality because permanent infrastructure (e.g., condominiums, parking lots) would be built and pervious surfaces would be increased. This would increase runoff and pollutants entering neighboring waterbodies. The intensity of the impacts would increase with increased development. Projects Currently Under Construction Under the no action alternative, construction of the lodge and conference center will continue, and long-term impacts on water quality will occur as described in the Final Phase III ERP/PEIS (Section 11.7.6.2). No long-term impacts on water quality are expected over the operational period of the project. Appropriate permanent erosion control measures will be employed, and current waste disposal practices will continue. *Floodplain:* Access Improvement Projects on Currently Publicly Owned Lands Under the no action alternative, access improvements would not be implemented on currently publicly owned lands, and no long-term impacts on the floodplain are expected. Land Acquisition and Access Improvement Projects Under the no action alternative, if properties were acquired for preservation, no long-term impacts on the floodplain are expected. If the properties were developed, there would be long-term, minimal impacts on the floodplain if buildings were built in accordance with the CZMA and placed landward of the Coastal Construction Line.

No Action Alternative	Site-specific Impacts
	Projects Currently Under Construction Under the no action alternative, construction of the lodge and conference will continue. No long-term impacts on the floodplain are anticipated as a result of this construction as described in the Final Phase III ERP/PEIS (Section 11.7.6.2). *Wetlands:* Access Improvement Projects on Currently Publicly Owned Lands Under the no action alternative, access improvements on currently publicly owned lands would not be implemented, and no long-term impacts on wetlands are expected. Land Acquisition and Access Improvement Projects Under the no action alternative, if properties were acquired for preservation, long-term benefits would be attributed to wetlands on these sites because they would be protected from development and other dredge and fill activities. If the properties were developed, there would be long-term, adverse impacts on wetlands if present on these sites because permanent infrastructure (e.g., condominiums, parking lots) would be built and pervious surfaces would be drastically increased. This may result in the loss of wetlands and increased deposition to wetlands through increased runoff and pollution. The intensity of impacts would be directly related to the amount of wetlands disturbed or removed due to development. Projects Currently Under Construction Under the no action alternative, construction of the lodge and conference center will continue and will affect wetlands as described in the Final Phase III ERP/PEIS (Section 11.7.6.2). Overall, the proposed impacts on wetlands, which will include replacing 0.18 acre of low quality wetlands with 0.0.24 acre of higher functioning wetlands, will lead to an increase in the total area of wetlands and an increase in the functions and values provided by wetlands. Consequently, the proposed impacts will be long term and beneficial.

Table 5-6: Impacts on Hydrology and Water Quality from Baldwin County Alternatives

Baldwin County Alternatives	Site-specific Impacts
Gulf State Park Lodge and Associated Public Access Amenities Project	Short-term: *Hydrology:* Hydrologic impacts from the construction of the lodge and conference center are characterized in the Final Phase III Final ERP/PEIS (Section 11.7.6.2). The hydrology of the site will be moderately affected during the construction period. Grading surfaces for walkways and building construction may increase stormwater runoff because of soil compaction and a decreased ability to drain precipitation. ADEM NPDES permits have been obtained for the increased stormwater runoff during the construction process, and all development complies with permit requirements. BMPs are outlined in the CBMPP that is inspected regularly by a QCI. Overall impacts during construction would be short-term and minor and would conclude once the construction period ends. The majority of the additional project elements (i.e., a tram stop at the lodge site, public educational programs, and a bicycle sharing program) would be located within the footprint of disturbance

Baldwin County Alternatives	Site-specific Impacts
	analyzed in the Final Phase III ERP/PEIS. Additional tram stops along the rest of the route have not yet been determined, but would be located on existing asphalt areas and would not include new ground disturbance or change hydrology. The pedestrian trail would be located outside the area of disturbance evaluated in the Final Phase III ERP/PEIS, and would be approximately 620 feet long and 8 feet wide. This path would be pervious and therefore would minimize the potential for increased runoff. Additional elements will also be subject to the ADEM NPDES permit and would follow the same BMPs required under the Final Phase III ERP/PEIS (Section 11.7.6.2). The implementation of BMPs would mitigate the adverse effects of construction. *Water Quality:* Impacts on water quality from the construction of the lodge and conference center are characterized in the Final Phase III ERP/PEIS (Section 11.7.6.2). Soil excavation and grading that is occurring to build the lodge and conference center, including public access areas, parking, and walkways, may result in displaced and exposed soils. E&S BMPs, such as silt fencing, covering bare soils to prevent erosion, reclaiming topsoil, and revegetating have been and will be employed to keep soil from entering the Gulf of Mexico during the construction period. Additionally, pollution discharge permits, discussed above, have been acquired to protect water quality. Prohibitions on the use of certain fill materials, such as red clay, and the highly permeable nature of the majority of the soils within Gulf State Park will prevent pollutants and sediment-enriched stormwater from reaching the Gulf of Mexico through runoff or via groundwater infiltration. Percolation through the permeable soils would also filter pollutants, preventing them from reaching groundwater. The proposed project elements contain design elements to maintain water quality and prevent excess soil from entering the waters, and failure of the measures implemented under BMPs is minimized by regular QCI inspection. The majority of the additional project elements (i.e., a tram stop at the lodge site public educational programs, and a bicycle sharing program) would be located within the footprint of disturbance analyzed in the Final Phase III ERP/PEIS. Additional tram stops along the rest of the route are not yet determined, but would be located on existing asphalt areas and would not include new ground disturbance or change in water quality. The pedestrian trail would be located outside the area of disturbance evaluated in the Final Phase III ERP/PEIS, and would be approximately 620 feet long and 8 feet wide. This path would be pervious and therefore would minimize the potential for increased runoff and potential impacts on water quality. Additional elements would also be subject to the ADEM NPDES permit and follow the same BMPs required under the Final Phase III ERP/PEIS (Section 11.7.6.2) and outlined in the CBMPP. Impacts on the Gulf of Mexico from the construction of the Gulf State Park Lodge and Associated Public Access Amenities Project could be adverse but localized, short term, and minor. Any impacts would quickly become undetectable in the context of the larger waterbody. The likelihood of BMP failure would be minimized by regular QCI inspection. Thus, the short-term impacts on water quality are expected to be minor and adverse. *Floodplains:* Impacts on the floodplain from the construction of the lodge and conference center are characterized in the Final Phase III ERP/PEIS (Section 11.7.6.2). Construction of all of the proposed project elements would not create a

Baldwin County Alternatives	Site-specific Impacts
	rise in BFE, nor will construction activities raise the floodplain level. Construction of the proposed project elements are in compliance with all required permits and will not result in changes to the coastal zone; therefore, impacts on the floodplain or the coastal zone are not anticipated. On August 14, 2013, ADEM issued a non-regulated use permit for the construction of the reestablished lodge, indicating that it would be consistent with coastal zone management regulations. The majority of additional project elements (i.e., a tram stop at the lodge site, public educational programs, and a bicycle sharing program) would be located within the footprint of disturbance analyzed in the Final Phase III ERP/PEIS. Additional tram stops along the rest of the route have not yet been determined, but would be located on existing asphalt areas and would not alter the floodplain. The pedestrian trail is adjacent to the lodge site and would not affect floodplains. *Wetlands:* Impacts on wetlands from the construction of the lodge and conference center are characterized in the Final Phase III ERP/PEIS (Section 11.7.6.2). The current construction on the lodge involves filling 0.18 acre of palustrine emergent wetlands, which was authorized by USACE and a Water Quality Certification from ADEM to satisfy Sections 404 and 401, respectively, of the CWA. To mitigate for the wetlands that are being filled, USACE required on-site creation of 0.24 acre of wetlands. This on-site wetland creation has yet to begin. Although a 0.18 acre low quality wetland was removed to accommodate lodge construction, it will be replaced with a larger, higher functioning wetland; thus wetland area, functions, and values would increase as a result of construction of the lodge and conference center. The majority of additional project elements (i.e., pedestrian walkway from the pier to the lodge, a tram stop at the lodge site, public educational programs, and a bicycle sharing program) would not directly or indirectly affect wetlands in the short term because no wetlands would be directly disturbed, and any indirect impacts, such as runoff, would be minimized through the construction practices noted for the lodge and conference center. <u>Long-term</u>: *Hydrology*: Impacts on hydrology from the construction of the lodge and conference center are characterized in the Final Phase III ERP/PEIS (Section 11.7.6.2). Ongoing construction is being guided by stormwater management plans to properly treat increased runoff so that excess pollutants do not enter surface waters. The area of impervious surfaces will increase once lodge and conference center construction is complete, thus there could be a slight increase in runoff into the beach area. All runoff increases are addressed though BMPs required by the ADEM NPDES permit. Runoff will be minimized by the use of pervious pavement for all new facilities. Minimal parking will be needed because transportation needs would be addressed from adjacent existing lots, use of the proposed tram, or ride sharing/bicycle share programs. Stormwater management BMPs will capture runoff and any pollutants it may contain before it can run off the site towards the Gulf. There will be nominal impacts on surface water from the operation of the Gulf State Park Lodge and Associated Public Access Amenities Project, resulting in long-term, minor, adverse impacts. The majority of the additional project elements (i.e., a tram stop at the lodge site, public educational programs, and a bicycle sharing program) are included in the development footprint analyzed in the Final Phase III ERP/PEIS and would not contribute impacts beyond those described in the Final Phase III ERP/PEIS (Section

Baldwin County Alternatives	Site-specific Impacts
	11.7.6.2). Additional tram stops along the rest of the route have not yet been determined, but would be located on existing asphalt areas and would not include new ground disturbance. Establishment of a pedestrian trail from the pier to the lodge would be constructed with pervious surfaces in accordance with the ADEM permit and would have minimal additional impacts. *Water Quality*: Impacts on water quality from the construction of the lodge and conference center are characterized in the Final Phase III ERP/PEIS (Section 11.7.6.2). A NPDES permit has been obtained for construction to mitigate stormwater and pollution runoff. The BMPs required by NPDES ensure that measures are taken to maintain the quality of water discharged from a construction site so that adjacent waters such as wetlands and other waterbodies do not receive excessive pollution that would change their water quality status. Complying with the NPDES permit will ensure state water quality standards are not exceeded. Therefore, impacts on surface water and water quality from construction may be adverse but short term and minor. The majority of additional project elements (i.e., a tram stop at the lodge site, public educational programs, and a bicycle sharing program) are included in the development footprint analyzed in the Final Phase III ERP/PEIS and would not contribute impacts beyond those described in the Final Phase III ERP/PEIS (Section 11.7.6.2). No additional impervious surfaces would be added for additional tram stops throughout the park and would not contribute to additional water quality impacts. Establishment of a pedestrian trail from the pier to the lodge would be constructed with pervious surfaces and would also be constructed in accordance with the ADEM permit, and would have minimal additional impacts on water quality. *Floodplains:* Impacts on floodplains from the construction of the lodge and conference center are characterized in the Final Phase III ERP/PEIS (Section 11.7.6.2). Because all of the structures will be built on piles to allow flood waters to flow unobstructed beneath them, there will be no obstructions or encroachments on the current floodplain. Therefore, the proposed project will not result in an increase in flood levels within the park or the adjacent community during a 100-year flood discharge. There will be no appreciable change to the floodplain, and no increased risk to human safety and welfare will result, therefore no adverse impacts on the floodplain will occur. The majority of additional project elements (i.e., a pedestrian trail from the pier to the lodge, a tram stop at the lodge site, public educational programs, and a bicycle sharing program) would also result in no appreciable change to the floodplain and no increased risk to human safety and welfare; therefore, no adverse impacts on the floodplain are expected from these additional elements. *Wetlands:* Impacts on wetlands from the construction of the lodge and conference center are characterized in the Final Phase III ERP/PEIS (Section 11.7.6.2). Overall, the proposed impacts on wetlands, which include replacing 0.18 acre of low quality wetlands with 0.24 acre of higher quality wetlands, will lead to an increase in the total area of wetlands and therefore an increase in the functions and values provided by wetlands. A wetland mitigation plan was prepared and approved by USACE. The mitigation plan was made a specific condition of the permit issued for the lodge and conference center. The mitigation plan is site specific and requires five years of monitoring and reporting to USACE. The proposed constructed

Baldwin County Alternatives	Site-specific Impacts
	wetlands will be monitored to ensure they meet vegetation development thresholds prescribed in the mitigation plan. Therefore, operation of the reestablished lodge and conference center includes maintenance components so that the thresholds are satisfied, which ultimately increases the function of the wetlands over time resulting in long-term, beneficial impacts. The majority of additional project elements (i.e., a pedestrian trail from the pier to the lodge, a tram stop at the lodge site, public educational programs, and a bicycle sharing program) would not disturb wetlands and would not have any long-term impacts on wetlands.
Fort Morgan Pier Rehabilitation	Short-term: *Hydrology:* The Fort Morgan Pier Rehabilitation would take place predominately in the water of Bon Secour Bay. Therefore, the construction would not include upland ground disturbance that would increase runoff and/or groundwater recharge, and the overall hydrologic processes of the area would not be affected. There would be no short-term, impacts on hydrology. *Water Quality:* During the one year of construction impacts on water quality would be short term and minor. The in-water construction equipment, including equipment used to install sheet piling and pouring a concrete walkway along the pier, would be mounted on barges so as not to disturb the substrate or increase turbidity in the water during the construction period. Raking the sea floor and installing vinyl sheet pile along the west and north sides of the existing pier would further disturb sediments and increase turbidity during this period. Because Bon Secour Bay is listed on the 2016 303(d) list for pathogens, BMPs would be implemented to minimize and localize the impacts on water quality from construction. BMPs such as turbidity curtains and seasonal construction times would be considered, and BMPs to minimize fuel spill potential from in-water and on-shore machinery would be implemented. Impacts on water quality would be short-term, minor, and adverse. Backfilling to support sheet piling would require a Section 404 permit, which would be obtained prior to construction. Compliance with all permit conditions would further reduce the likelihood of adverse impacts on water quality. *Floodplains:* Because the rehabilitation of the pier would replace/improve the existing structure within the existing footprint, there would be no impacts on the BFE or floodplain area during construction. *Wetlands:* The pier would be rehabilitated in in Bon Secour Bay. This waterbody is listed as impaired; therefore, NPDES would require effective E&S controls be submitted through the completion of the CBMPP (ADEM, 2016d). USACE would also need to authorize the alternative because work would occur in waters of the United States. While the proposed alternative would have short-term impacts on water quality, post-construction suspended sediments would settle, and water quality would return to its levels prior to construction. With the appropriate precautions, impacts on wetlands would be short term and minor. Long-term: *Hydrology:* The rehabilitation of the pier would not have any long-term impacts on hydrology. A pier already exists on the site, and the continued operation of this structure in its existing footprint would not change any hydrologic features.

Baldwin County Alternatives	Site-specific Impacts
	Water Quality: The rehabilitated pier would be constructed within the footprint of the existing pier. Thus, there would be no long-term changes to the area and no long-term impacts on water quality as a result of this proposed alternative. *Floodplains:* The operation of the pier would not affect the floodplain in the area; no long-term impacts are expected. *Wetlands:* Because the project is slated to occur within the footprint of the existing structure, no wetlands would be modified as a result of its implementation. There would be no long-term impacts on wetlands from the operation of this alternative.
Fort Morgan Peninsula Public Access Improvements	Short-term: *Hydrology:* No surface water exists on any of the access improvement sites. The construction process may slightly increase surface runoff at the sites by grading the areas and increasing the amount of compacted surfaces. BMPs would be outlined in the CBMPP and employed to address the exposure of soils, such as the revegetation of sites after construction. A QCI would regularly inspect BMPs. Pervious pavers would allow precipitation and floodwaters to seep through the parking area and soil, ultimately recharging the underlying aquifer. Given that the surrounding substrate is sand with a high drainage capacity, and the appropriate BMPs would be implemented, the impacts from runoff during construction would be adverse but short-term, localized, and minor. *Water Quality:* The only waterbody near the proposed access improvement sites is the Gulf of Mexico. Because of the vastness of this waterbody and the limited amount of sediment-laden runoff that would result from construction in conjunction with the limited project area and implementation of BMPs, there would be no short-term impacts on water quality from the construction of the access points. *Floodplains:* Construction would not require any filling of the floodplain area; therefore, it would not create any change in the BFE or floodplain level. Construction of the proposed alternative would comply with all required permits and would not result in changes to the coastal zone or any negative impacts on the floodplain. No short-term impacts on floodplains are expected. *Wetlands:* No designated wetlands exist within any of the access point sites; therefore, no short-term impacts on wetlands are expected. Long-term: *Hydrology:* The creation of multiple parking lots for access improvements (totaling approximately 1.2 acres of parking lots) would slightly increase the amount of stormwater runoff at the various sites. However, the parking lots would use pervious materials, and the excessive drainage capacity of the surrounding substrate of the coastal beach substrate would allow the increased surface runoff to move quickly through the sand to the underlying aquifer. The long-term impacts on the hydrology of the various sites would be minor and localized.

Baldwin County Alternatives	Site-specific Impacts
	Water Quality: All recently exposed sediments would be revegetated or paved after construction. There would be a minimal increase in sediment runoff in the long term because parking lots would use pervious materials, and the increase in impervious surfaces would be minimal. Therefore, impacts of the alternative on water quality in the neighboring Gulf of Mexico would be long term, minor, and adverse. *Floodplains:* All of the structures being built would be elevated above the BFE. Thus, the construction of the 11 proposed access points would have no long-term impacts on the floodplain of the area. *Wetlands:* There are no designated wetlands within any of the proposed access improvement sites; therefore, there would be no long-term impacts on wetlands.
Gulf Highlands Land Acquisition and Improvements	Short-term: *Hydrology:* Grading for the parking lot and site access during the construction process would compact the soil and temporarily reduce drainage capacity. Appropriate BMPs (e.g., runoff ditches and stormwater retention ponds) would be implemented during construction to mitigate for increased runoff during construction. Pervious pavers would allow precipitation and floodwaters to seep through the parking area and soil, ultimately recharging the underlying aquifer. Given that much of the surrounding substrate is sandy and excessively drained and that appropriate BMPs would be implemented, the impacts from runoff during construction would be adverse but short term, localized, and minor. *Water Quality:* The proposed alternative calls for 1.2 acres of paved area. The construction process would result in increased soil exposure from grading and the presence of heavy machinery. This would increase the sediment loads present in the runoff that would flow into nearby small bodies of surface water and then to the Gulf. However, the surrounding small ponds would be protected from construction stormwater runoff thorough the implementation of E&S and stormwater BMPs, including stormwater drainage ditches, silt fences, and sandbags. All BMPs would be outlined in the CBMPP and regularly inspected by a QCI. Runoff would be minimized during construction from these BMPs, resulting in short-term, minor, adverse impacts on the surrounding surface water quality. *Floodplains:* The proposed alternative site includes more than 2,700 feet of Gulf shoreline. However, the dune walkover structure would be placed on pilings, allowing floodwaters to flow uninhibited underneath and would not affect flood levels. Because the parking lot construction would not involve filling, there would be no obstruction to or rise in the floodplain area. Therefore, the proposed alternative would have no short term, impacts on the floodplain. *Wetlands:* The Gulf Highlands site contains 1.9 acres of wetland habitat out of the 113-acre site. Impacts on wetlands could occur, depending on the siting or design of the parking area and driveway. Construction of the dune walkover would not occur in any wetland areas. Impacts on wetlands would be avoided and minimized to the maximum extent practicable. Any unavoidable impacts would be offset by appropriate compensatory mitigation, as required in a USACE permit.

Baldwin County Alternatives	Site-specific Impacts
	Long-term: *Hydrology:* The proposed alternative would involve creating a 1.2-acre parking lot and driveway. The parking lot would be covered with pervious material to minimize runoff. Given that the graded area would occupy only 1.2 acres of the 113-acre site, the total impacts on the hydrology would be minimal with the installation of appropriate long-term BMPs, such as runoff ditches and vegetation buffers. Long-term impacts on hydrology would be minor and adverse. *Water Quality:* Implementation of long-term stormwater BMPs surrounding the new parking lot, including stormwater ditches and vegetation buffers, would reduce the potential for runoff during the operation of the alternative and would result in minimal impacts on the water quality of nearby surface waterbodies. There would be long-term, minor, adverse impacts on water quality. *Floodplains:* Because the parking lot would be pervious material and the structures would not obstruct the path of floodwaters, there would be no long-term change to the BFE or 100-year floodplain as a result of the proposed alternative and long-term, negligible, adverse impacts. *Wetlands:* Impacts on area wetlands would be avoided and minimized to the maximum extent practicable. Unavoidable impacts would be offset by appropriate mitigation, resulting in long-term, no more than minor, adverse impacts on wetlands.
Laguna Cove Little Lagoon Natural Resource Protection	Short-term: *Hydrology:* The alternative site abuts Little Lagoon. NPDES permits would be acquired and appropriate BMPs would be outlined in the CBMPP before the alternative would begin in order to minimize potential impacts on hydrology. BMPs would be implemented and regularly inspected by a QCI during the construction period to keep sediment and pollutants from entering Little Lagoon. The construction of a boardwalk and pier would not affect the hydrology of the area. The creation of two parking areas with pervious materials would limit the amount of runoff that would occur. Pervious pavers would allow precipitation and floodwaters to seep through the parking area and soil, ultimately recharging the underlying aquifer. The installation of two bathrooms would require the grading and compacting of an estimated total area of 0.06 acres. The associated utility lines would require the excavating and backfilling of an estimated 0.1 acre area. ADEM NPDES permits would be obtained that would outline the appropriate BMP measures to implement for stormwater runoff from the construction of these facilities. These will most likely include silt fences and wittles. Impacts on the hydrology of the project area during construction would be short-term and minor. *Water Quality:* Water quality would be slightly affected during the construction process due to activities in the wetlands and the lagoon to install the boardwalk, pier and kayak launch. Construction activities could stir up sediment and temporarily increase turbidity levels, but would not likely exceed state levels. BMPs would be outlined in the CBMPP and implemented to ensure that no excess sediment or pollutants are being deposited into the lagoon, such as turbidity curtains and silt fences. With the implementation of these BMPs, impacts on water quality during construction would be short-term and minor.

Baldwin County Alternatives	Site-specific Impacts
	Floodplains: Construction for this proposed alternative would not require any filling, therefore it would not create any change in the BFE or floodplain level. Construction of the proposed project would be in compliance with all required permits and would not result in changes to the coastal zone. The structures would be built above the BFE, no changes to the BFE or the 100-year floodplain would occur and there would be no short-term, adverse impacts. *Wetlands:* Within the project area there are approximately 39 acres of wetlands. As mentioned above in *Hydrology*, during the construction process some wetland disturbance would be expected due to the installation of boardwalk and pier pilings as well as during the construction of the kayak launch. Impacts would include increased turbidity from piling installation as well as compressed vegetation from construction equipment. Impacts on project area wetlands would be avoided and minimized to the maximum extent practicable. Boardwalks are sited to avoid construction in areas with SAV. Furthermore, vegetation underneath the structure may experience impacts during construction because there could be blockage of light to the vegetation from boardwalks; however, boardwalk regulations would be implemented that require the structures to be as tall as they are wide, which would limit the blockage of light to the plants and allow them to continue to function. Impacts on vegetation from construction of this element of the proposed project would be adverse but short-term and minor because boardwalks would be put over areas of emergent, herbaceous vegetation and timber matting would be used. No wetlands would be filled nor would any considerable amount of wetlands be lost during the construction process besides where the pilings would be installed, resulting in minimal impacts on wetlands during the construction processes. Potential impacts on wetlands and other waters would be avoided and minimized to the maximum extent practicable. Any required USACE and ADEM NPDES permits would be obtained prior to construction. <u>Long-term</u>: *Hydrology:* The limited amount of impervious surfaces that would occur as a result of the implementation of this project would result in minimal impacts on the hydrology of the site. Due to its small and pervious footprint, the proposed alternative is not expected to increase the amount of runoff the lagoon receives. There would be no long-term, adverse impact to hydrology. *Water Quality:* While the proposed alternative may slightly affect water quality during the construction process, disturbed sediments would settle quickly and water quality would return to normal following the construction process. There would be two bathroom facilities installed, resulting in an approximate total disturbed area of 2,513 square feet. All other surfaces would be pervious and there would not be a large increase in runoff to the lagoon. Appropriate long-term runoff BMPs would be installed around the bathroom facilities and parking lots, including runoff ditches and vegetation buffers, to minimize the amount of runoff and pollutants that may otherwise enter the lagoon. With these appropriate measures in place, long-term impacts on water quality would be minor. *Floodplains:* Because all of the in-water structures would be set on pilings and the parking lots would be pervious, they would not interfere with the natural flooding regime of the lagoon. There would be no appreciable change to the floodplain, and

Baldwin County Alternatives	Site-specific Impacts
	no increased risk to human safety and welfare would result. No long-term adverse impacts on floodplains would occur. *Wetlands:* There may be a small strip of wetlands affected by the presence of the boardwalk which would block light during certain times of the day that had once reached the underlying vegetation. However, due to the height of the boardwalks over the herbaceous vegetation, it is expected that the light would be able to reach these areas and adjacent natural areas would naturally revegetate any areas disturbed by construction. These impacts would be detectable but localized, natural conditions would not measurably be altered, and natural processes in the area would be sustained. There would be minor, long-term, adverse impacts on wetlands. All potential impacts on wetlands and other waters would be avoided and minimized to the maximum extent practicable, in coordination with USACE.

Table 5-7: Impacts on Hydrology and Water Quality from Mobile County Alternatives

Mobile County Alternatives	Site-specific Impacts
Dauphin Island Eco-Tourism and Environmental Education Area	Short-term: *Hydrology:* The alternative site encompasses a 100-acre area of about 81 acres of marshland, 9 acres of water bottom, and 10 acres of uplands. The water bottom area is connected to the Aloe Bay through a small inlet in the southwest corner of the site. The use of appropriate E&S BMPs would minimize the level of impact incurred to the hydrology during the construction process. These would include installing sand bags and silt fences around the parking lot and restroom construction areas to control sediment and limit deposition into the neighboring waterbody. With the effort of effective and consistently monitored BMPs, the short-term impacts on the hydrology of the site would be adverse but short term and minor. *Water Quality:* The water quality of the project site may be slightly impacted during construction from increased activity in the area resulting in increased runoff into the wetland area. The installation of the boardwalk would result in increased suspended sediments in the water bottom and wetland areas that would enhance the turbidity of the water. These suspended sediments would settle quickly after construction ceases. E&S BMPs would be outlined in the CBMPP and implemented during the construction process to limit the amount of sediment entering the water. BMPs would be consistently monitored throughout construction. They would include silt fences and sandbags (as mentioned above) as well as wetting and erosion matting. With the effective BMPs in place, impacts on water quality during the construction process would be adverse but short-term and minor. *Floodplains:* The construction activities of the proposed alternative does not require any filling, therefore it would not create any change in the BFE or floodplain level. Construction of the proposed project elements would be in compliance with all required permits and would not result in short-term, adverse impacts. *Wetlands:* During the construction process some wetland disturbance would be expected due to the installation of boardwalk and pier pilings as well as during the construction of the kayak launch. Impacts would include increased turbidity from

Mobile County Alternatives	Site-specific Impacts
	piling installation as well as compressed vegetation from construction equipment. Impacts on project area wetlands would be avoided and minimized to the maximum extent practicable. All grading and paving processes will occur within the upland area of the site. Appropriate BMPs would be outlined in a CBMPP and implemented to ensure that runoff from construction processes would not impact wetlands. BMPs would be consistently monitored during construction by a QCI. Nationwide and ADEM NPDES permits would be obtained prior to construction and all construction processes would be in compliance with permit requirements. Nationwide and ADEM NPDES permits would be obtained prior to construction. With the appropriate BMPs in place, short-term, adverse impacts on wetlands would be minor. <u>Long-term</u>: *Hydrology:* The 2,335 linear foot impervious bicycle path would increase runoff into the center pond area. The decrease in vegetative cover and increase in compacted surfaces would decrease the absorption ability of the site, which could increase runoff and lead to slightly less recharge available for the underlying aquifer. However, this bicycle path would only occupy 0.43 acre of the 100 acre project site. The graded bicycle path stretch would be in compliance with ADEM NPDES requirements and a CBMPP would be completed outlining the necessary BMPs for runoff. The proposed parking lot would be made from pervious material, such as crushed aggregate, that would minimize the amount of runoff from the parking lot. The implementation of long-term stormwater BMPs, such as drainage ditches and vegetation buffers would decrease the amount of runoff incurred. Thus, the use of pervious pavers and stormwater BMPs will minimize long-term effects to hydrology and result in minor, adverse long-term impacts. *Water Quality:* The water quality of the site is not listed as impaired and would not be negatively impacted in the long term. The preservation of this area of land from future development would allow the water quality to remain within state regulated standards for the foreseeable future. Water quality would not be negatively affected by the implementation of this project and any long-term adverse impacts would be negligible. *Floodplains:* The proposed project would not have any adverse long-term impact on the floodplains of the area. The elevated nature walk and pier would allow the flooding regime to remain undisturbed underneath the constructed paths. *Wetlands:* Most project infrastructure would be built in upland areas. The construction of elevated walkways over wetlands would require USACE authorization and would have to be as tall as they are wide to allow enough light to reach the underlying vegetation. Impacts on wetlands would be avoided and minimized to the maximum extent practicable. Any impacts would be offset by appropriate compensatory mitigation. Furthermore, the transformation of this site into a nature preserve would preserve sensitive habitat along the Aloe Bay and prevent it from being developed in the future.
Mid-Island Parks and Public Beach Improvements (Parcels A, B, and C)	<u>Short-term</u>: *Hydrology:* The range of potential short-term impacts for Parcels B and C would be the same as described below under Mid-Island Parks and Public Beach Improvements (Parcels B and C). The addition of Parcel A would involve

Mobile County Alternatives	Site-specific Impacts
	constructing a dune walkover. The construction of this walkover would not require any grading or compacting of the soil and would not encounter any standing bodies of water. Therefore, the addition of this parcel is not expected to impact the hydrology of the site during construction. *Water Quality:* The range of potential short-term impacts for Parcels B and C would be the same as described below under Mid-Island Parks and Public Beach Improvements (Parcels B and C). The addition of Parcel A would not include the addition of any bodies of water on or surrounding the construction site and therefore there would be no impacts on water quality from the addition of this parcel. *Floodplains:* The range of potential short-term impacts for Parcels B and C would be the same as described below under Mid-Island Parks and Public Beach Improvements (Parcels B and C). The addition of Parcel A to the alternative would not alter the floodplain. Therefore there are no foreseeable impacts on the floodplain as a result of the construction of this alternative. *Wetlands:* The range of potential short-term impacts with the inclusion of Parcel A would be the same as described below under Mid-Island Parks and Public Beach Improvements (Parcels B and C). The construction of Parcel A would not encounter any designated wetlands. Therefore, there would be no foreseeable impacts on wetlands resulting from the construction of this alternative. <u>Long-term</u>: *Hydrology:* The range of potential long-term impacts for Parcels B and C would be the same as described below under Mid-Island Parks and Public Beach Improvements (Parcels B and C). The inclusion of Parcel A would not alter the long-term impacts on hydrology because the alternative would not include installing any impervious surfaces. The only infrastructure that would be built would be a dune walkover that would be set on pilings. *Water Quality:* The range of potential long-term impacts for Parcels B and C would be the same as described below under Mid-Island Parks and Public Beach Improvements (Parcels B and C). The addition of Parcel A to the proposed alternative would not include any additional standing bodies of water and would not increase runoff into any neighboring bodies of water. Therefore, no long-term, adverse impacts on water quality are expected from the addition of Parcel A to the alternative. *Floodplains:* The range of potential long-term impacts for Parcels B and C would be the same as described below under Mid-Island Parks and Public Beach Improvements (Parcels B and C). The construction on Parcel A would not include any fill or alteration of the BFE. Therefore, no long-term impacts are expected from the addition of Parcel A to the alternative. *Wetlands:* The range of potential long-term impacts with the inclusion of Parcel A would be the same as described below under Mid-Island Parks and Public Beach Improvements (Parcels B and C). No wetlands would be affected by the addition of Parcel A to the proposed alternative.

Mobile County Alternatives	Site-specific Impacts
Mid-Island Parks and Public Beach Improvements (Parcels B and C)	Short-term: *Hydrology:* There is no identifiable surface water on parcel B or C. The hydrology of the site would be minimally affected by the construction of restrooms, showers, and a 137 vehicle parking lot on Parcel B, and a 100 vehicle lot on Parcel C. Grading of these surfaces would compact the soil and decrease its ability to absorb water. This would increase runoff during the construction period, however this increase in runoff will be managed through the implementation of appropriate BMPs, including sandbags and drainage ditches. With the correct BMP implementation, impacts on hydrology from construction would be short-term, localized and minor. *Water Quality:* The sub-bay of Graveline Bay, which borders Parcel C on the north side, may experience a slight increase in turbidity during the construction process. However, due to its large size, the increase would not be noticeable and impacts would be short-term and minor. This waterbody is not listed as impaired. There are no waterbodies located within the boundaries of the project site. *Floodplains:* The construction process does not involve any fill or alteration of the BFE and therefore the floodplain would not be affected during construction. *Wetlands:* There are no designated wetlands located on either parcel. The construction of the parking lot on Parcel C would cause minor, increased turbidity to the wetlands. These impacts would be adverse but short-term, minor and negligible and would consist of temporary increased turbidity from construction activities. Appropriate BMPs would be used during construction to ensure minimal amount of deposition to the wetlands would occur. Long-term: *Hydrology:* The construction of the two parking lots and restroom facilities may slightly impact long-term runoff and groundwater recharge for the Parcel B and C areas from an increase in impacted soil and in impervious surfaces. Runoff would be mitigated for with the creation of roadside drainage ditches, vegetative buffers, and the use of pervious pavers for the parking lots. The presence of excessively drained sands surrounding the site, combined with the appropriate BMPs, would result in minor and localized long-term impacts on hydrology. *Water Quality:* Due to the lack of surface water on the project parcels and the size of the surrounding waters, adverse impacts on water quality from this proposed alternative would be negligible in the long term. *Floodplains:* Because there would be no flood-obstructing structures built and no fill deposited, there would be no adverse long-term impacts on the floodplain from this proposed alternative. *Wetlands:* There are no designated wetlands on any of the parcels. The implementation of the appropriate runoff BMPs on Parcel C will ensure that impacts on the wetlands of the sub-bay of Graveline Bay would be minimal over the operational period of the site. Thus, long-term impacts on wetlands would be minor.

Air Quality and Greenhouse Gas Emissions

Due to the similarities in alternative elements, construction activities, and environments across the various proposed alternatives, the air quality and greenhouse gas (GHG) evaluation was considered by county rather than by site. Construction of the proposed alternatives would require earth-moving activities and involve diesel-powered construction equipment. Exhaust from non-road construction equipment would result in emissions of air pollutants during various phases of the construction period. Construction activities associated with the proposed alternatives are expected to be typical of other similar construction projects and would include mobilization of equipment, site preparation, delivery of construction materials using heavy-duty trucks, pile driving, placing foundations, pouring concrete and installing building components, and providing utility connections.

Construction activities such as excavation, grading, soil handling, and vehicles traveling on dirt road surfaces have the potential to create fugitive dust emissions. Fugitive dust can also be generated by and from wind erosion of stockpiled materials. If necessary, to control dust emissions, contractors would be required to implement fugitive dust control measures, such as watering exposed areas, installing dust covers on trucks, and using tracking mats to reduce dust emissions from truck tires. Dust generated by construction on sandy soils consists of mostly relatively large particles that would settle within a short distance from the construction activities.

During the various phases of construction, on-site equipment may include a hydraulic crane, front-end loaders, backhoes, concrete mixing and pumping trucks, generators and compressors, and welding machines, but equipment would vary based on the size and scale of each alternative. Because construction activities are expected to be temporary and the use and number of construction equipment would be limited, operation of the construction equipment would be unlikely to result in high emissions at each of the proposed sites. Impacts from construction at each site in general would be short term, minor, and adverse.

Post-construction, the creation of new eco-tourism attractions may increase traffic to the Gulf Shores and Fort Morgan area, which may result in a long-term, minor increase (a minor, adverse impact) in emission levels along the coast.

For all projects that include land acquisition (Gulf Highlands Land Acquisition and Improvements, Little Lagoon Laguna Cove Natural Resources Protection, Dauphin Island Eco-Tourism and Environmental Education Area, and Mid-Island Parks and Public Beach Improvements – all parcels), use limitations would be put in place that could allow for future passive recreational use infrastructure on these sites. Should any additional passive public recreation infrastructure be built on these sites in the future (such as a land-based boardwalk, gazebo, benches, shade structures, and/or kayak launch) short- and long-term impacts on air quality and GHG emissions would be similar to those stated below for each project site.

No Action Alternative

Under the no action alternative, the following long- and short-term impacts are expected:

- Access Improvement Projects on Currently Publicly Owned Lands: Under the no action alternative, access improvements on currently publicly owned lands would not be implemented and there would be no long- or short-term impacts on air quality.
- Land Acquisition and Access Improvement Projects: Under the no action alternative, if properties were acquired for preservation, no long- or short-term impacts on air quality are expected because there would be no construction activities or resulting facility operation. If the properties were developed, impacts on air quality would be long term and adverse because

development of infrastructure (e.g., condominiums, parking lots) would result in emissions during construction and operation of this infrastructure. The increase in emissions would be directly related to the intensity and type of development.

- Projects Currently Under Construction. Under the no action alternative, construction of the lodge and conference center will continue, and impacts on air quality will occur as described in the Final Phase III ERP/PEIS (Section 11.7.6.3). Construction of the proposed project is expected to have short-term, minor, adverse impacts on air quality. Impacts on air quality will be localized and temporary, such that the emissions will not exceed the USEPA's *de minimis* criteria for a general conformity determination (either for each construction project separately or in combination should construction schedules overlap); therefore, impacts will be short term, minor and adverse. The lodge and conference center will be built to include sustainable design features and will seek LEED Gold certification. As such, they will incorporate resource conservation measures and technology to reduce energy use, including roof and paved surfaces that reflect light and heat, shading devices, recycling programs, and efficient HVAC systems. Operation of the lodge and conference center will have long-term impacts on air quality that may be measurable, but will be localized and will not exceed the USEPA's *de minimis* criteria for a general conformity determination. Some of the additional amenities may also be constructed but because of their small scale and size, they are not expected to contribute to air quality impacts.

Baldwin County

The proposed alternatives in Baldwin County include the Gulf State Park Lodge and Associated Public Access Amenities Project, Fort Morgan Pier Rehabilitation, Fort Morgan Peninsula Public Access Improvements, Laguna Cove Little Lagoon Natural Resource Protection, and Gulf Highlands Land Acquisition and Improvements. Projected completion times for these projects range from six months to a year (Fort Morgan Pier Rehabilitation, Fort Morgan Peninsula Public Access Improvements, and Laguna Cove Little Lagoon Natural Resource Protection) to two years (Gulf State Park Lodge and Associated Public Access Amenities Project, Gulf Highlands Land Acquisition and Improvements). Air quality and GHG emission impacts would occur during construction and over the operational period of the alternatives; however, all impacts are expected to be minor, as discussed further below.

<u>Construction Impacts</u>

Air Quality

Construction of the proposed alternatives along the Gulf Coast is expected to cause short-term, minor, adverse impacts on air quality. The prominent impact on air quality would be from fugitive dust emissions. The total disturbed area between all of the alternatives would equal approximately 19.15 acres[38]; dust emissions would correlate directly with the amount of disturbed area (USEPA, 2015c). Using the USEPA standard construction conversion factor for fugitive dust emissions from heavy

[38] This number enumerates the disturbed area from all Baldwin County alternatives. The Gulf State Park Lodge and Associated Public Access Amenities Project disturbed area includes the lodge and conference center and equals 13.35 acres. The remaining alternatives have a total estimated disturbed area of 5.8 acres.

construction (where E=1.2 metric tons/month/acre) [39,40] (USEPA, 2010c), the maximum estimated amount of dust that would be generated by the construction operations would be approximately 161 tons per year, if all construction were to occur at the same time. This would exceed the *de minimis*[41] criteria for PM_{10}[42] of 70 to 100 metric tons per year. Individual alternatives would not exceed the *de minimis* criteria. Additionally, appropriate BMPs (e.g., ground wetting and wind shielding) would be implemented to limit the amount of fugitive dust emissions generated. If multiple alternatives occur, efforts would be made to schedule them to avoid construction overlap, to the extent possible, which would further minimize potential impacts. With the appropriate precautions in place, impacts would be short term, minor and adverse.

Greenhouse Gas Emissions

For all proposed alternatives, incremental, direct GHG emissions would be associated with energy consumption and the construction of proposed buildings and/or recreational infrastructure. Some alternatives may also result in emission from building operation. Indirect GHG emissions would be emitted by automobiles traveling to and from the alternative sites during construction. Due to the relatively small scale of the proposed alternatives, a detailed construction phase assessment of the GHG emissions was not conducted for alternatives that were not evaluated already in the Final Phase III ERP/PEIS.

The Final Phase III ERP/PEIS provides a qualitative GHG emissions analysis for the Gulf State Park Enhancement Project, which included five project elements (reestablishing the lodge and conference center, constructing an interpretive center, constructing an environmental education center, trail construction, and dune enhancement). This project, including the five components that were evaluated, represents a larger and longer construction effort than would be undertaken under any of the alternatives proposed in this RP/EIS. For that reason, the GHG analysis of the Gulf State Park Enhancement Project from the Final Phase III ERP/PEIS was used as a metric of comparison for GHG emissions of all of the proposed alternatives within the county because it has a larger estimated disturbed area and longer construction period than the combined alternatives proposed in Baldwin County under this RP/EIS. The analysis considered site preparation (approximately 65 acres), grading, paving, building construction (approximately 40 acres), and architectural coatings (painting). Construction equipment used in the evaluation included water trucks, scrapers and graders, dozers, loaders and backhoes, excavators, paving equipment, cranes and forklifts, air compressors and generators, and welders. The equipment list considered for the evaluation of the Gulf State Park Enhancement Project exceeds that for the proposed alternatives in this RP/EIS. As such, it is expected that GHG emissions for the construction all of the alternatives in this RP/EIS combined would be less than the 2,568.3 metric tons of carbon dioxide equivalent (CO_2e) that was calculated for the Gulf State Enhancement Project in the Final Phase III ERP/PEIS (DWH Trustees, 2014).

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[39] 'E' in this instance stands for "emissions."

[40] It should be noted that this emission factor is best for construction operations that have medium activity level, moderate silt conditions, and a semiarid climate. Because the Gulf Coast has a wet climate and increased wind activity, fugitive dust emissions may be higher. A site assessment will need to be done before an exact calculation can be confirmed.

[41] 40 CFR 93 § 153 defines "*de minimis* levels." They are the minimum threshold for pollutant levels. Below which, compliance to USEPA regulations is not required. There are various levels for different criteria pollutants in various areas. The information is summarized here: https://www.epa.gov/general-conformity/de-minimis-emission-levels.

[42] Refers to PM_{10}.

An additional recreational use project (the INFINITY Science Center in Mississippi) was analyzed for its construction GHG emissions during Phase III of Early Restoration (DWH Trustees, 2014). This project totaled approximately 13.7 acres. It consisted of a native landscape/nursey area, science center access enhancement and parking area, a walking trail, and a boardwalk and outdoor education center. The analysis considered excavation, filling, concrete pouring and mixing, grading, paving, and smoothing. The equipment used included a loader, dump trucks, concrete trucks, pick-up trucks, trackhoe, moto-grader, paver, rollers, gators, buggies, and generators. Estimated GHG emissions from this project were 653.33 metric tons of CO_2 emissions over the construction period of the project, reducing down to approximately 199.2 metric tons of CO_2 emissions per year following construction.

These two construction analyses provide a wide range of emissions that potential recreational use projects under this RP/EIS could produce.

Unavoidable short-term, minor impacts from construction at all of the proposed alternative sites would be offset through mitigation measures. For example, emission reduction measures to mitigate for short-term air quality impacts would include:

- Use of ultra-low sulfur diesel fuel in off-road construction equipment with engine horsepower rating of 60 horsepower and above.
- Limiting unnecessary idling times on diesel-powered engines to 3 minutes.
- Locating diesel-powered exhausts away from fresh air intakes.
- Controlling dust related to construction site activities through a Soil Erosion Sediment Control Plan that includes spraying of a suppressing agent on dust piles (non-hazardous, biodegradable).
- Covering trucks hauling loose materials.

<u>Operation Impacts</u>

Air Quality

For all proposed recreational use alternatives, establishing new recreational use areas and improving access to existing areas would be expected to increase traffic to the sites. The alternative expected to generate the most traffic is the Gulf State Park Lodge and Associated Public Access Amenities Project. A traffic study conducted for an earlier phase of this project found that the reestablished lodge would generate a maximum of 810 inbound and outbound automobile trips during the A.M. and P.M. peak hours, assuming that the lodge is fully occupied and the conference center attracts a total of 1,500 attendees on a peak day. Emissions of carbon monoxide are highest in congested conditions with extensive idling. The relatively free-flowing traffic conditions projected for the proposed alternative would be unlikely to generate carbon monoxide concentrations that exceed NAAQS. Reestablishing the lodge would require delivery of goods and supplies for everyday operation of the new facilities. Most of these deliveries would involve smaller gasoline-powered or diesel-powered panel trucks and vans. Few heavy-duty diesel trips are expected for operation of the proposed alternative; therefore, particulate matter concentrations (which are highest for heavy-duty diesel vehicles) would not be a concern. The tram associated with the alternative would generate carbon monoxide emissions, but would also reduce the number of vehicles driving in and around Gulf State Park; therefore, the tram's effect on emissions is expected to be beneficial. Mobile source emissions associated with operation of all elements of the proposed alternative are expected to cause long-term, minor, adverse impacts on air quality. These impacts would be localized and are not expected to exceed the USEPA's *de minimis* criteria for a general conformity determination. All other alternatives being considered in the RP/EIS in Baldwin County would be of a smaller scale than the Gulf State Park Lodge and Associated Public Access Amenities Project and

all would be expected to have long-term, negligible to minor, adverse impacts from the increase in vehicle traffic to the sites.

Operation of all proposed alternative elements would not increase fugitive dust over the long term, and no impacts on atmospheric concentrations of dust are anticipated.

Impacts from stationary source emissions during operation would be long term, minor, and adverse. These impacts would be localized and are not expected to exceed the USEPA's *de minimis* criteria for a general conformity determination. Building infrastructure with the potential to produce emissions would be minimal or would not occur for the Fort Morgan Pier Rehabilitation, Fort Morgan Peninsula Public Access Improvements, Laguna Cove Little Lagoon Natural Resource Protection, and Gulf Highlands Land Acquisition and Improvements alternatives. Under the Gulf State Park Lodge and Associated Public Access Amenities Project, the reestablished lodge would consume fossil fuels for heating and hot water over the period of its operation. Electricity requirements would be met by local suppliers and would not be generated in Gulf State Park. The lodge would be built to include sustainable design features and is on track to obtain LEED Gold certification; as such, it would incorporate resource conservation measures and technology to reduce energy use, including roof and paved surfaces that reflect light and heat, shading devices, recycling programs, and efficient HVAC systems. Operation of the proposed project would have long-term impacts on air quality that may be measurable from energy consumption, but they would be localized and would not exceed the USEPA's *de minimis* criteria for a general conformity determination. Long-term impacts from all alternatives considered under this RP/EIS would not exceed minor and adverse.

Greenhouse Gas Emissions

The facilities constructed at the Fort Morgan Pier Rehabilitation, Fort Morgan Peninsula Public Access Improvements, Laguna Cove Little Lagoon Natural Resource Protection, and Gulf Highlands Land Acquisition and Improvements alternatives consist of 500 square foot bathrooms and would have a few lights installed to illuminate them, as well as lights around the parking areas. Lighting would be the only source of energy used during the operational periods for these projects. Dune walkovers, boardwalks, and piers would not contribute to source emissions.

Due to sustainable design features incorporated into the Gulf State Park Lodge and Associated Public Access Amenities Project, the GHG emissions are anticipated to be smaller than those generated by similar buildings and facilities that are not certified with such a program. Results of an evaluation regarding GHG emissions from a similar facility of similar size identified GHG emissions of approximately 1,283 metric tons of CO_2e emissions on an annual basis during the operation period (Green and Ford, 2010). The evaluation considered electricity use, natural gas, mobile combustion, and refrigeration/air conditioning units. Because a similar facility generated approximately 1,283 metric tons of CO_2e emissions on an annual basis, it can be expected that the Gulf State Park Lodge and Associated Public Access Amenities Project would generate less depending upon the energy use reduction achieved and the energy source. All other Baldwin County proposed alternatives GHG emission would produce far less than the reference evaluation of 1,238 metric tons of CO_2e annually during their operational period due to their small footprints and limited use of emission generating features. The reestablishment of the lodge would generate a maximum of 810 inbound and outbound automobile trips in the afternoon and morning peak hours during full occupancy. If we assume that the average automobile produces 4.9 tons

of CO_2 per year[43] (USEPA, 2008), then we would expect an estimated addition of 3,969 metric tons of CO_2 per year[44] in indirect GHG emissions attributed to visitation to the site. The tram element of the project is expected to reduce automobile trips and, thus, reduce GHG emissions.

The total amount of parking spaces created by all of the remaining Baldwin County alternatives would be 290 spaces. If we use the above conversion factor (average automobile produces 4.9 tons of CO_2 per year) then we can expect an estimated addition of 1,421 metric tons of CO_2 per year due to use of the Baldwin County alternatives.

Mobile County

Proposed alternatives within Mobile County include Dauphin Island Eco-Tourism and Environmental Education Area, Mid-Island Parks and Public Beach Improvements (Parcels B and C), and Mid-Island Parks and Public Beach Improvements (Parcels A, B, and C). The projects have disturbed area footprints of 1.57 acres, 1.2 acres, and 1.46 acres, respectively. It is assumed that only one Mid-Island Parks and Public Beach Improvements alternative, at a maximum, would be implemented. Projected construction times for these alternatives range from one to two years.

Construction Impacts

Air Quality

Impacts on air quality are expected to be short-term and minor and would result from emissions from construction equipment and fugitive dust emissions. The total estimated disturbed area, at maximum, would be 3.03 acres between the two proposed alternatives (i.e., Dauphin Island Eco-Tourism and Environmental Education Area and one of the Mid-Island Parks and Public Beach Improvements). This would be directly proportional to the amount of dust emissions that would result from construction operations (USEPA, 2015c). If USEPA standard construction conversion factor is used for fugitive dust emissions from construction (where E=1.2 metric tons/month/acre) (USEPA, 2010c), then the maximum amount of dust that would be generated by the construction operations on Dauphin Island would be approximately 44 tons per year, which is lower than the *de minimis* criteria of 70 to 100 metric tons per year. Furthermore, operations on finer particle substrate would create more emissions than operations on substrate of larger size and substrate with higher moisture capacity. Thus, more dust emissions would be expected to occur at the Mid-Island Parks and Public Beach Improvements site, which is located along the beach, than at the Dauphin Island Eco-Tourism and Environmental Education Area, which is composed of mostly wetlands. The presence of wetland substrate could decrease the total amount of fugitive dust emitted during the construction period. Appropriate BMPs would be implemented to mitigate for any adverse negative impacts from fugitive dust emissions, specifically wetting of the soil surface on the beach parcels, resulting in negligible to minor short-term adverse impacts.

Greenhouse Gas Emissions

Given the small size of the combined projects Dauphin Island projects (which equates to approximately half the size of the Gulf State Park Enhancement Project described above under Baldwin County as a reference project), these projects were compared to the two reference projects described under the

[43] This value is based on an average car mileage of 12,000 miles per year with an average fuel economy of 24.1 miles per gallon (USEPA, 2008).

[44] This measurement is in units of CO_2 and not CO_2 equivalent. CO_2 makes up 99% of car emissions (USEPA, 2014c). CO_2 equivalents are provided by the International Panel on Climate Change in 20-, 100-, and 500-year values and do not include carbon monoxide, which is the second component to car emissions behind CO_2 (USEPA, 2014c).

GHG analysis for Baldwin County. Using this comparison, it can be estimated that the construction emissions for the small Dauphin Island projects would be well below the reference project of the smaller project (INFINITY Science Center) with a total of 653.33 metric tons of CO_2 emissions during the construction phase. This is due to the fact that cumulatively the Dauphin Island projects are much smaller than the reference project, with a total disturbed area equaling approximately 3 acres whereas the INFINITY Science Center disturbed 13.7 acres.

Operation Impacts

Air Quality

The long-term air quality impacts on Dauphin Island, as a result of the implementation of the proposed alternatives, would be minor and adverse. The cleared areas would be paved and therefore would not increase the amount of atmospheric particulate matter at the alternative sites as a result of operation.

Not all criteria pollutants are measured at the Mobile County air quality monitoring station. Those that are measured include Ozone (1-hour and 8-hour), SO_2, and $PM_{2.5}$ (98th percentile and weighted mean). Between the years of 2010 and 2015, there were two exceedances of the ozone 8-hour air quality standard (USEPA, 2010d, 2011d, 2012d, 2013c, 2014d, 2015d). The last time CO concentrations were measured was 2003, and the maximum CO concentrations were for the 2003 1-hour and 8-hour standards were 1.5 ppm and 1.2 ppm, respectively (USEPA, 2003), well below the 35 ppm (1-hour) and 9 ppm (8 hour) EPA standards. Because the project area would remain relatively uncongested, and CO concentrations are well below the applicable standards, a detailed CO hot-spot analysis is not warranted. The activities that would occur as a result of the presence of these facilities would not cause criteria air pollutants to exceed NAAQS.

Greenhouse Gas Emissions

The establishment of the Dauphin Island Eco-Tourism and Environmental Education Area and the Mid-Island Parks and Public Beach Improvements would incorporate a maximum total of 339 new parking spaces. Assuming that the average vehicle produces approximately 4.9 tons of CO_2 per year (USEPA, 2008), then, given the number of parking spaces created from the proposed alternatives, an estimated annual increase of 1,661 metric tons of CO_2 per year to the Gulf Coast area could occur.

The energy usage that would result from the implementation of the Dauphin Island Eco-Tourism and Environmental Education Area and the Dauphin Island Access: Mid-Island Parks and Public Beach Improvements would be minimal and would require only between 10 and 20 lights, which would not cause a large increase in energy use. Steps would be taken to minimize to the maximum extent possible the amount of energy used, such as installing automatic, LED light bulbs in the restrooms that turn off when there is no one near the facilities. Because of the small scale of these projects and use of energy saving measures when applicable, GHG emissions resulting from the project would be small.

Climate Change

Consideration of coastal vulnerability from climate change factors is important in planning. The International Panel on Climate Change defines vulnerability as “the degree to which a system is susceptible to, and unable to cope with, adverse effects of climate change, including climate variability and extremes” (IPCC, 2014). Factors affecting coastal vulnerability include the physical characteristics of a particular setting and climate and non-climate drivers (Burkett and Davidson, 2012). Consideration of factors such as sea level rise, changes to shorelines, and altered hydrology at the project design stage allow for the anticipation of a range of environmental changes and the development of projects that would be more resilient over time based on current understanding of these factors. Changes in these factors, however, may affect the longevity of some projects post-construction.

In September 2016, CEQ issued finalized guidelines on considering the effects GHG emissions and climate change in the analysis of proposed actions under NEPA. The guidelines also suggest ways that federal agencies should consider effects of climate change in developing projects that are resilient in nature and able to adapt to changes in the existing environmental conditions over time. CEQ (2016) provides the following general definition of climate change adaptation as "adjustments to natural or human systems in response to actual or expected climate changes." The guidance also suggests that the analysis of climate change impacts should consider aspects of the human environment that are impacted simultaneously by climate change and the proposed actions (e.g., a project that draws water from an aquifer that supports future drinking water or other water uses that is already vulnerable to depletion from climate change impacts).

Because all of the proposed alternatives are located along the coast, climate change adaptations are particularly important. NOAA and USFWS have established BMPs that include guidance documents, lessons learned, and project design criteria for many restoration actions. Project proponents are expected to consider these, and any additional relevant BMPs, in the development of subsequent restoration projects and associated regulatory compliance.

Impacts that have compounded effects between the proposed alternatives and climate change include the following: utilizing water from the underlying aquifer over the operational period of the project, impacting wetland and other coastal habitats, and adequately protecting the new structures and rehabilitated areas from severe storm surges. Most of the alternatives would not exacerbate any climate change impacts on local resources over their operational periods. Most of the alternatives involve constructing infrastructure for recreational use that would not have continuing impacts on natural resources. The Gulf State Park Lodge and Associated Public Access Amenities Project is the alternative that would have the most amount of impacts that could be exacerbated by climate change. These impacts are discussed below, while each alternative is evaluated for its GHG emissions in Section 5.2.2.3 of this RP/EIS.

The Gulf Coast area relies almost entirely on groundwater as its fresh water source. This resource is threatened by salt water intrusion from sea level rise as well as decreased recharge from increased drought and higher temperatures as a result of climate change (USGCRP, 2014). The Gulf State Park and Associated Public Access Amenities Project would install utility lines to pull water from this aquifer to use for the operation of the structure. To mitigate for impacts on the underlying water source, the Gulf State Park Lodge and Associated Public Access Amenities Project would monitor groundwater levels and install sustainable water features in the facility, such as water saving faucets and toilets. In the event that the aquifer becomes threatened, the Gulf State Park Lodge and Associated Public Access Amenities Project would take efforts to curb water use until the aquifer is replenished to a safe level.

Wetlands are increasingly threatened by climate change from sea level rise, increased storm intensity, higher temperatures, and prolonged drought. Threatening these habitats also puts a strain on the species that depend on them. The disruption of habitats as a result of project implementation would further decimate these already sensitive resources. The Gulf State Park Lodge and Associated Public Access Amenities Project is the only proposed alternative that involves filling a wetland. All other alternatives would not compromise wetland habitat integrity. The Gulf State Park Lodge and Associated Public Access Amenities Project would mitigate for lost wetlands by creating a wetland on the site that would be three times larger than the wetland that was filled (See Section 5.2.3.2 for more information on this).

Climate change projections show storms increasing in intensity for the southeast region of the United States. With new coastal structures being built, it is important that these structures are designed for resiliency from strong storm surges. If alternatives are not equipped with adequate resiliency measures

the area could be subject to increased flooding, runoff, and damage from storm debris. Resiliency measures for the proposed alternatives would include the following: placing structures on pilings to allow for natural dune formation below (the presence of dunes increases protection from coastal storms) and to allow for flood water to flow uninhibited below the structures; no net loss to wetlands or salt marsh habitats resulting from any of the alternatives to enhance inland protection from surges and increase infiltration; and implementing pervious surfaces where feasible to increase infiltration and decrease flashiness. More resiliency measures, if needed, are described in USACE's Coastal Risk Reduction and Resilience (USACE, 2013).

The alternatives presented in this RP/EIS aim to enhance visitor experience and recreational use of the area. Designing each alternative so that it is resilient to impacts of climate change furthers the safety of the visitors as well as the longevity of the alternatives. Thus, it is in the best interest of the alternative design to consider and adapt to impacts that will be exacerbated by climate change.

Noise

Due to the similarities in the alternative elements, construction activities and environments across the various proposed alternatives, noise impacts were evaluated by the region as a whole rather than by each site. Vehicular traffic, typical landscaping activities, maintenance of commercial buildings, limited seasonal recreational activities, and wildlife areas all influence noise levels along the Gulf Coast for all the proposed alternative elements. Under certain conditions, sound levels generated by high waves and high wind would be the dominant sounds near the Gulf shore. There is also occasional watercraft traffic on the adjacent lake and the Gulf of Mexico.

For all projects that include land acquisition (Gulf Highlands Land Acquisition and Improvements, Little Lagoon Laguna Cove Natural Resources Protection, Dauphin Island Eco-Tourism and Environmental Education Area, and Mid-Island Parks and Public Beach Improvements – all parcels), use limitations would be put in place that could allow for future passive recreational use infrastructure on these sites. Should any additional passive public recreation infrastructure be built on these sites in the future (such as a land-based boardwalk, gazebo, benches, shade structures, and/or kayak launch) short- and long-term impacts on noise would be similar to those stated below for each project site.

No Action Alternative

Under the no action alternative, the following long- and short-term impacts would be expected:

- Access Improvement Projects on Currently Publicly Owned Lands: Under the no action alternative, access improvements on currently publicly owned lands would not be implemented, and there would be no long- or short-term impacts on noise.
- Land Acquisition and Access Improvement Projects: Under the no action alternative, if properties were acquired for preservation, no long- or short-term impacts on noise are expected because no construction activities or resulting operation and maintenance of recreational amenities would occur. If the properties were developed, there would be short- and long-term, adverse impacts on noise because development of infrastructure (e.g., condominiums, parking lots) would result in noise from construction as well as operation of this infrastructure. The increase in noise would be directly related to the intensity and type of development.
- Projects Currently Under Construction. Under the no action alternative, construction of the lodge and conference center will continue and result in impacts on noise as described in the Final Phase III ERP/PEIS (Section 11.7.6.4). Short-term, localized, and minor impacts are occurring during construction. Operation of the proposed project will result in long-term, minor

impacts. The lodge and conference center will increase noise that could attract attention, but its contribution to the soundscape will be localized and minor and is not expected to affect current user activities. Some of the additional amenities may also be constructed but because of their small scale and size, they are not expected to contribute noise impacts in the short or long term.

Action Alternatives

Short-term Impacts

Construction activities generate variable noise levels depending on the type, number, and operating schedules of equipment that can affect residents, tourists, and wildlife. Construction activities are usually executed in stages, each having its own combination of equipment and noise characteristics and magnitudes. Construction activities for the proposed alternatives would include mobilizing equipment, preparing the sites, pile driving, placing foundations, pouring concrete and installing building components, and providing utility connections. The loudest noise sources expected from construction of the varying facilities would be from driving foundation piles using a pile driver, earth-moving activities using front-end loaders, and concrete pouring using concrete mixing and pumping trucks. Other noise-generating construction activities could include using cranes to erect steel superstructure components and to install exterior building components (e.g., chillers, wall curtains, walls, and windows). Limiting construction to daylight hours and using material haul routes designed to avoid sensitive noise receptors would help minimize impacts on human communities and wildlife. Impacts could also be minimized in both counties by completing certain projects with hand tools and small tools powered by battery or small gasoline motors where appropriate. Projects in close proximity to residential areas (including Fort Morgan Peninsula Public Access Improvements, Gulf Highlands Land Acquisition and Improvements, Dauphin Island Eco-Tourism and Environmental Education Area, Mid-Island Parks and Public Beach Improvements, and Laguna Cove Little Lagoon Natural Resource Protection) may experience more impacts related to noise than projects located away from residences. As such, it is important that construction occurs only during daylight hours and the use of large, loud machinery is limited to ensure that impacts from noise during construction would be no more than short term, minor, and adverse. Noise impacts to specific species at each site are discussed in Sections 5.2.4.2, 5.2.4.3, and 5.2.4.4.

Long-term Impacts

For all proposed alternatives, the operation of the recreational use projects would create noise from increased human presence at the sites. Many of these sites are already in use, and the increase in noise from additional vehicle and human traffic would be minimal. Some project sites, such as the Gulf State Park Lodge and Associated Public Access Amenities Project and Dauphin Island Eco-Tourism and Environmental Education Area, would have more noticeable increases in noise levels, but the noise would be consistent with an area that provides beach access and recreational use amenities. Overall, impacts on noise at all sites from operations would be long term, negligible to minor, and adverse.

5.2.3 Biological Environment

The biodiversity of the adjacent ocean contributes to the biologically diverse ecosystem of the Gulf Coast. The ecosystem services produced by this marine environment help the Gulf Coast to be ecologically resilient in the face of natural disasters and anthropogenic harm (Gulf Coast Ecosystem Restoration Council, 2013). These beneficial effects emphasize the importance of keeping coastal habitats and offshore waters healthy in order to contribute to the resilience of Gulf Coast communities.

The Gulf Coast has endured extensive damage to key coastal habitats, including wetlands, prairies, forests, seagrass beds, oyster reefs, natural beaches and dunes, barrier islands, coral reefs, and offshore habitats. Similarly, the Gulf of Mexico experiences numerous water quality problems, including hypoxia;

altered sediment inputs; and the presence of excess nutrients, pathogens, mercury, and other pollutants. Living coastal and marine systems are showing signs of stress, such as depleted species populations and degraded habitats. Storm risk, land loss, depletion of natural resources, compromised water quality, and sea-level rise imperil coastal communities' natural defenses and ability to respond to natural and human-made disruptions. These problems endanger not only the natural systems, but also the economic vitality and cultural legacy of the Gulf Coast region.

Proposed alternatives intended to provide recreational and educational opportunities also have the potential to affect habitats for native and non-native species. These impacts are discussed below.

Habitats

The Gulf Coast boasts diverse habitats, including wetlands, estuaries, beaches, reefs, and barrier islands. The integrity of these habitats are critical to the economy of the Gulf Coast and the rest of the country. This area supplies productive fisheries, outdoor recreation, and eco-tourism opportunities. (Gulf Coast Ecosystem Restoration Council, 2013). Impacts on habitats associated with the no action alternative are described in Table 5-8, while impacts on habitats from the proposed alternatives in Baldwin and Mobile counties alternatives are described in Tables 5-9 and 5-10, respectively. For all projects that include land acquisition (Gulf Highlands Land Acquisition and Improvements, Little Lagoon Laguna Cove Natural Resources Protection, Dauphin Island Eco-Tourism and Environmental Education Area, and Mid-Island Parks and Public Beach Improvements – all parcels), use limitations would be put in place that could allow for future passive recreational use infrastructure on these sites. Should any additional passive public recreation infrastructure be built on these sites in the future (such as a land-based boardwalk, gazebo, benches, shade structures, and/or kayak launch) short- and long-term impacts on habitats would be similar to those stated below for each project site.

Table 5-8: Impacts on Habitats from the No Action Alternative

No Action Alternative	Site-specific Impacts
No Action Alternative	<u>Short-term</u>: <u>Access Improvement Projects on Currently Publicly Owned Lands</u> The recreational amenities proposed for these alternatives would not move forward under the no action alternative. These sites would continue to operate in their current capacity, and no additional impacts would occur. <u>Land Acquisition and Access Improvement Projects</u> Acquisition and construction of amenities with NRDA funds would not occur under the no action alternative. If acquisition does not occur under NRDA or with other Gulf restoration funding mechanisms, it is likely that these sites would be developed, resulting in short-term, minor to moderate, adverse impacts on habitat from construction activities (displacement and disturbance during construction). If acquisition occurs with other Gulf restoration funding mechanisms and recreational amenities are not constructed, there would be no short-term impacts on habitat because these sites would remain in their current conditions. <u>Projects Currently Under Construction</u> Under the no action alternative, construction of the lodge and conference center will continue and impacts on habitat will still occur. These impacts are described in the Final Phase III ERP/PEIS (Section 11.7.6.6). BMPs (e.g., replanting vegetation), which are outlined in the CBMPP and regularly inspected by a QCI, have been

No Action Alternative	Site-specific Impacts
	implemented to mitigate some of the impacts associated with construction. Additionally, some of the public access amenities associated with the lodge could be constructed, as described below. Therefore, the project is expected to result in short-term, minor impacts on habitat during construction. Long-term: Access Improvement Projects on Currently Publicly Owned Lands Under the no action alternative, access improvements on currently publicly owned lands would not be built, and no long-term impacts on habitat in the coastal areas of Baldwin or Mobile counties are expected. Land Acquisition and Access Improvement Projects Acquisition and construction of amenities with NRDA funds would not occur under the no action alternative. If acquisition does not occur under NRDA or with other Gulf restoration funding mechanisms, it is likely that these sites would be developed, resulting in long-term, adverse impacts on habitat as the result of development and loss of habitat. If acquisition occurs with other Gulf restoration funding mechanisms, these sites would remain in their current conditions or have limited access infrastructure similar to the alternatives proposed in this RP/EIS. In this case, long-term impacts would be minor and adverse from loss of habitat; however, overall impacts would be beneficial as a result of the preservation of large areas of habitat. Any development of the site for preservation and recreational use restoration purposes would have impacts similar to those described for the Gulf Highlands Land Acquisition and Improvements, Laguna Cove Little Lagoon Natural Resource Protection, Mid-Island Parks and Public Beach Improvements, and Dauphin Island Eco-Tourism and Environmental Education Area alternatives, below. Projects Currently Under Construction Under the no action alternative, construction of the lodge and conference center will continue. The lodge and conference center is being designed to be sensitive to the natural dune formation surrounding the project area as described in the Final Phase III ERP/PEIS (Section 11.7.6.6). Elevated pathways will be installed to limit foot traffic over the dunes and allow accretion to occur underneath. The lodge is set back 200 feet from the coastal construction shoreline to allow for natural, secondary dune formation to occur. Habitat at this site will be enhanced compared to its previous condition, and any long-term, adverse impacts would be negligible.

Table 5-9: Impacts on Habitats from Baldwin County Alternatives

Baldwin County Alternatives	Site-specific Impacts
Gulf State Park Lodge and Associated Public Access Amenities Project	The project area consists of approximately 22 acres, of which approximately 13 acres are currently disturbed by construction. Short-term: Short-term, adverse impacts on habitats that are known to occur or may potentially occur at the Gulf State Park Lodge and Associated Public Access Amenities Project site are characterized in the Final Phase III ERP/PEIS (Section 11.7.6.6). At the lodge and conference center site, construction activities will have temporary impacts on dunes from soil compaction, which may impair growth of native dune vegetation, but the dunes would naturally rehabilitate over time. Wetland habitats currently on the site would be disturbed (see Section 5.2.3.2)

Baldwin County Alternatives	Site-specific Impacts
	making this habitat permanently unavailable for use by species in the area. Other impacts on wetlands would include soil turbidity that could hinder native vegetation growth. Overall, the two-year projected construction period would cause short-term, minor, adverse impacts by limiting access to dune habitats; however, other surrounding habitats would be available, and these affected habitats would return to productive use after construction. Because the alternative would be contained within an existing footprint, these impacts would be minor; they would only occur where construction vehicles and materials are located. Therefore, impacts on habitats during construction of the lodge and conference center would be short-term, minor, and adverse. Construction equipment, personal protective equipment, delivery services, foot traffic, and vehicles could serve as pathways for introduction and spread of non-native and invasive species in the area. ADCNR would establish methods for controlling existing populations of undesirable species and develop a program to prevent the introduction of undesirable plants during construction. If landscaping is planted, only native species with limited use of non-native, non-invasive species in small ornamental landscaping areas would be used. The majority of additional project elements (i.e., a tram stop at the lodge site, public educational programs, and a bicycle sharing program) would be located within the footprint of disturbance analyzed in the Final Phase III ERP/PEIS. Additional tram stops along the rest of the route are not yet determined, but would be located on existing asphalt areas, would not include new ground disturbance, and would not affect habitats. The pedestrian trail would be located outside the area of disturbance evaluated in the Final Phase III ERP/PEIS and would be approximately 620 feet long and 8 feet wide. This additional area for the trail is adjacent to the lodge and conference center, supports the same habitats as the original project area, and would be expected to experience the same short-term impacts. Long-term: Long-term impacts on habitats that are known to occur or may potentially occur at the site are characterized in the Final Phase III ERP/PEIS (Section 11.7.6.6). No long-term impacts on wetland habitat are expected. Additionally, native dune vegetation would be planted at the site to enhance the habitat. While some adverse impacts would occur from removal of existing habitat to place a facility, habitat types currently present in the vicinity of the development footprint (dunes/wetlands) would not be affected and would be available for use after construction. Overall, the proposed lodge and conference center would have long-term and beneficial impacts on wetland and dune habitats and associated native vegetation from the expansion and enhancement of wetland habitat. Any adverse long-term impacts would be negligible. The majority of the additional project elements (i.e., a tram stop at the lodge site, public educational programs, and a bicycle sharing program) would be located within the footprint of disturbance analyzed in the Final Phase III ERP/PEIS. Additional tram stops are not yet determined, but would be located on existing asphalt areas, would not include new ground disturbance, and would not affect habitats. The pedestrian trail would be located outside the area of disturbance evaluated in the Final Phase III ERP/PEIS, and would be approximately 620 feet long and 8 feet wide. This additional area is adjacent to the lodge and conference center, supports the same habitats as the original project area, and would be expected to experience the same long-term impacts.

Baldwin County Alternatives	Site-specific Impacts
Fort Morgan Pier Rehabilitation	Short-term: The site consists of beach, dune, and nearshore habitat. The pier rehabilitation would leave the existing barge foundation and add vinyl sheet pile to the west and north sides of the pier. Terrestrial and marine habitats would be temporarily disturbed by noise and the presence of construction equipment and crews. In-water construction activities would consist of placing anchored vinyl sheet pile to support the existing pier structure. The work would be completed from barges and could result in temporary disturbances to marine habitats. During the approximately six-month construction period, pier rehabilitation would disturb bottom sediments (see Water Quality) in nearshore environments, which would affect habitat for a variety of species. Sand compaction caused by heavy machinery could also affect native vegetation. Impacts would be minor because of the pier's small footprint, use of BMPs, and the rehabilitation of disturbed areas after construction. BMPs would be outlined in the CBMPP and inspected regularly by a QCI. Any potential impacts would be expected to naturally rehabilitate over time. Short-term impacts would be minor and adverse. Placement of in-water construction equipment would also temporally make the habitat unavailable for some species, but these species would be anticipated to use other habitat in the area during the construction period. Impacts on beach habitat would be limited to the six-month construction period where habitats may be disturbed and species temporarily displaced when construction equipment and human presences would increase disturbance in the area. Available terrestrial and marine habitat would not change as a result of construction, and any displaced individuals would likely return to the area upon completion of construction. Once construction is complete, any disturbed areas would be rehabilitated and would be expected to function as they did prior to construction, resulting in short-term, minor, adverse impacts. Construction equipment, personal protective equipment, delivery services, foot traffic, and vehicles could serve as pathways for introduction and spread of non-native and invasive species in the area. ADCNR would establish methods for controlling existing populations of undesirable species and a program to prevent the introduction of undesirable plants during construction. If landscaping is planted, only native species with limited use of non-native, non-invasive species in small ornamental landscaping areas would be used. Long-term: This alternative would occur within existing disturbed footprints and would replace existing facilities with similar facilities that do not change how current habitat is utilized, both on land and in water. Therefore any potential long-term, adverse impacts would be expected to be negligible.

Baldwin County Alternatives	Site-specific Impacts
Fort Morgan Peninsula Public Access Improvements	Short-term: Total land developed for the proposed parking spaces across 11 sites would be approximately 1 acre and 1,405 linear feet of boardwalk. These sites mainly consist of narrow (i.e., 50 to 100 feet wide) county-owned sites that provide limited habitat, many of which are currently disturbed. Construction of the proposed access sites, parking lots, showers, and restrooms would cause temporary disturbances and impacts, including compaction of sediments in beach and dune habitat from heavy machinery, which could affect dune vegetation and result in avoidance of this habitat during construction. BMPs would be implemented to reduce these impacts, including staging construction activities in already disturbed areas. BMPs would be outlined in the CBMPP and inspected regularly by a QCI. Potential impacts on habitats would be minor because many of the sites are mostly disturbed and do not currently provide high quality habitat. Site conditions, combined with the implementation of BMPS at all construction sites would result in short-term, minor, adverse impacts on vegetation. Construction equipment, personal protective equipment, delivery services, foot traffic, and vehicles could serve as pathways for the introduction and spread of non-native and invasive species in the area. ADCNR would establish methods for controlling existing populations of undesirable species and develop a program to prevent the introduction of undesirable plants during construction. If landscaping is planted, only native species with limited use of non-native, non-invasive species in small ornamental landscaping areas would be used. Long-term: Installation of parking structures, showers, and restrooms would permanently remove coastal beach habitat for future use on a portion of the 11 sites. Establishing dune walkovers would permanently shade existing coastal beach habitat and could affect regeneration of native dune vegetation and result in long-term, moderate, adverse impacts on this habitat type. However, the dune walkovers would concentrate foot traffic into one area and allow the already disturbed habitat in the area to naturally rehabilitate over time. The public is currently accessing these sites informally, resulting in a large area of disturbance. Overall, impacts on habitats in these areas would be long term, minor, and adverse from removal of habitat, with long-term benefits from concentrating public access.
Gulf Highlands Land Acquisition and Improvements	Short-term: Construction of proposed parking lot and dune walkover would compact dune sediments and increase soil exposure from the presence of heavy machinery and grading of the interior scrub habitat. All sediments that become exposed during construction would be revegetated. Wetland habitats (see Section 5.2.3.2, Hydrology and Water Quality) in the area would be avoided to the extent possible. If impacted, BMPS to reduce habitat disturbance in wetland habitat would be implemented. These BMPs would be outlined in the CBMPP and regularly inspected by a QCI. During construction, access to dune, beach, and wetland habitats on the site may be disrupted, but species in the area would be expected to relocate to other sites during this time. Development of this site would be minimized to preserve the maximum habitat possible and limit vegetation disturbance. All short-term impacts on vegetation are expected to be minor and adverse. Construction equipment, personal protective equipment, delivery services, foot traffic, and vehicles could serve as pathways for introduction and spread of non-native and invasive species in the area. ADCNR would establish methods for

Baldwin County Alternatives	Site-specific Impacts
	controlling of existing populations of undesirable species and develop a program to prevent the introduction of undesirable plants during construction. If landscaping is planted, only native species with limited use of non-native, non-invasive species in small ornamental landscaping areas would be used. Long-term: Establishing a 15,000-square-foot parking lot and 38,000-square-foot driveway would permanently remove dune habitat. Impacts on area wetlands would be avoided and minimized to the maximum extent practicable. Unavoidable impacts would be offset by appropriate mitigation. Constructed boardwalks would be as tall as they are wide, per USACE requirements, to limit the blockage of light to the plants and allow them to continue to function. Overall, these impacts would be minor and adverse because of the small project footprint. Additionally, dune walkovers would help funnel beachgoers through a controlled access point, which would protect the remainder of the site while simultaneously raising awareness of the importance of beach-related habitats and wildlife. Acquiring the Gulf Highlands parcel and preventing the development of condominiums and other amenities currently planned for the site would provide beneficial impacts on the dune habitat because it is the last remaining parcel on the Alabama coastline with a continuous mosaic of primary, secondary, tertiary, and interior scrub dune and associated vegetative structure and currently faces development pressure. While some long-term, minor, adverse impacts could occur from permanent removal of habitat as a result of development, the preservation of this large and important site would result in overall long-term, beneficial impacts.
Laguna Cove and Little Lagoon Natural Resource Protection	Short-term: The site is currently planned for a subdivision of 69 lots for upscale single-family residences, associated roads and amenity features, and a 69-slip marina complex. Acquisition of this property would put the majority of this land into conservation and prevent the planned development, which would preserve habitat. Construction of the proposed recreational access improvements would take approximately six months and would include two parking lots, accessible boardwalks over wetlands, a bathhouse, and a pier. Construction of boardwalks over wetlands would temporarily disturb the lands by compacting soils and disturbing sediments (see Section 5.2.3.2, Hydrology and Water Quality), which could affect growth of native vegetation and would make the habitat temporally unavailable or disturbed during the construction period. Construction of the pier and kayak launch would also affect maritime forests and dune habitats through the possible removal of vegetation, making this habitat unavailable during construction. Impacts from land acquisition and protection would be beneficial because the land would not be subject to further development. Impacts from construction would be short term, minor, and adverse because BMPs would be employed to minimize impacts. These BMPs would be outlined in the CBMPP and would be regularly inspected by a QCI. All habitats would be expected to return to normal functioning following construction. Construction equipment, personal protective equipment, delivery services, foot traffic, and vehicles could serve as pathways for introduction and spread of non-native and invasive species in the area. ADCNR would establish methods for controlling existing populations of undesirable species and develop a program to prevent the introduction of undesirable plants during construction. If landscaping is planted, only native species with limited use of non-native, non-invasive species in small ornamental landscaping areas would be used.

Baldwin County Alternatives	Site-specific Impacts
	Long-term: The construction of facilities such as parking lots, the bathhouse, and accessible boardwalks would permanently remove habitat. However, the majority of the site would remain undeveloped, preserving current habitat. It is expected that any species displaced as a result of the minimal site development, either on land or in water, would relocate to the remaining habitat nearby and would not have long-term impacts from displacements. Acquiring the land would greatly benefit habitats because the residence/marina complex would not be developed, allowing the majority of the site to remain undisturbed, resulting in overall long-term, beneficial impacts.

Table 5-10: Impacts on Habitats from Mobile County Alternatives

Mobile County Alternatives	Site-specific Impacts
Dauphin Island Eco-Tourism and Environmental Education Area	Short-term: The acquisition of approximately 100 acres of privately held land and water bottom that are currently for sale would be developed to conserve habitat and provide educational opportunities for visitors, resulting in beneficial short-term impacts on habitat by preventing immediate large-scale development. During the approximately one to two-year construction period, impacts would include sediment compaction and disturbance to marshes and wetlands (see Section 5.2.2.2, Hydrology and Water Quality), which could impair vegetative growth and adversely affect habitat. The construction of the parking lot, restroom, and impervious bicycle path could increase sedimentation into the marshes and embayment. BMPs would be implemented to minimize the amount of sediments deposition into the wetlands and water bottom areas and minimize impacts on habitat during construction. BMPs, including silt fencing, swales, runoff ditches, and sandbags, would be outlined in a CBMPP and regularly inspected by a QCI. The application of appropriate BMPs would minimize the impacts on the wetland habitat at the proposed alternative site. It is anticipated that all construction would occur on upland areas and no wetlands would be filled, resulting in no direct impacts on wetland habitats during construction. Overall, short- and long-term impacts from the acquisition would be beneficial, and impacts on habitats from disturbance during construction would be short term, minor, and adverse. Construction equipment, personal protective equipment, delivery services, foot traffic, and vehicles could serve as pathways for introduction and spread of non-native and invasive species in the area. ADCNR would establish methods for controlling existing populations of undesirable species and develop a program to prevent the introduction of undesirable plants during construction. If landscaping is planted, only native species with limited use of non-native, non-invasive species in small ornamental landscaping areas would be used. Long-term: The acquisition of approximately 100 acres of privately held land and water bottom that are currently for sale would be developed to conserve habitat and provide educational opportunities for visitors, resulting in beneficial long-term impacts on habitat. It is assumed that proposed project amenities would not be constructed on sensitive wetland habitat. Construction of the parking facility (approximately 0.46 acre), gazebo (approximately 450 square feet), restrooms (approximately 500 square feet), and bicycle path (2,355 linear feet at 8 feet

Mobile County Alternatives	Site-specific Impacts
	wide) would permanently remove upland habitat. Once project construction is complete, undeveloped areas would be available as habitat. Constructed boardwalks and piers would be as tall as they are wide, per USACE requirements, to limit the blockage of light to the plants and minimizing impacts on habitats underneath them. Wetland areas may experience minimal habitat impacts from an increase in impervious surfaces that could increase runoff. However, BMPs such as the use of pervious surfaces where possible would minimize those impacts. It is expected that the existing wetland habitat would remain available and high functioning after development. Overall, long-term impacts would be minor adverse due to the small project footprint which would be concentrated on upland areas and avoid wetland habitats. Additionally, there would be long-term beneficial impacts from the acquisition of this land as the land would be set aside for preservation, preventing large scale development while also providing educational opportunities for visitors regarding sensitive habitats. Construction of boardwalks over wetlands would likely require a CWA Section 404 permit from USACE. Compliance with all permit conditions would further minimize adverse impacts on wetlands. Surveying would be completed to quantify the amount of any affected wetlands.
Mid-Island Parks and Public Beach Improvements (Parcels A, B, and C)	Short-term: During the approximately four to six month construction period for public parking, restrooms, and dune walkovers, both beach and dune habitat would be temporarily affected and may be unavailable for use by species in the area. Machinery would compact soils in beach and dune habitats, possibly impairing vegetative growth. However, BMPs, including avoiding construction staging in undisturbed areas and rehabilitating areas disturbed by construction, would be employed to limit habitat disturbance. These BMPs would be outlined in the CBMPP and would be regularly inspected by a QCI. BMPs would minimize impacts and ensure that habitat would be fully available and functioning after construction and that impacts during construction would be temporary and localized. All habitat areas would be expected to naturally rehabilitate after construction. As a result, impacts on habitats from construction would be short term, minor, and adverse. Construction equipment, personal protective equipment, delivery services, foot traffic, and vehicles could serve as pathways for introduction and spread of non-native and invasive species in the area. ADCNR would establish methods for controlling existing populations of undesirable species and develop a program to prevent the introduction of undesirable plants during construction. If landscaping is planted, only native species with limited use of non-native, non-invasive species in small ornamental landscaping areas would be used. Long-term: The construction of public parking, restroom/shower facilities, and a dune walkover would permanently remove existing beach and dune habitat. Design and construction of these facilities would place the structures in areas where the least amount of disturbance would occur and where impacts on functional habitat around these facilities would be minimized. While some habitat may be lost, the facilities would be established in a way that would allow the remaining habitat to continue to function, resulting in long-term, minor, adverse impacts. Additionally, dune walkovers would help funnel beachgoers through a controlled access point while simultaneously raising awareness of the importance

Mobile County Alternatives	Site-specific Impacts
	of beach-related habitats and wildlife and minimizing disturbances associated with foot traffic. The parcels are currently zoned for resort commercial, multi-family, and commercial use, which would allow them to be heavily developed. This alternative is intended to prevent potential development of pristine beach and dune habitat. Amenities proposed under this alternative would be designed to reduce potential impacts on habitats, take advantage of already disturbed areas, and maximize the functioning of surrounding habitats. To prevent impacts on dune and beach habitat, a controlled access point would be located at the far west boundary of the property. Stewardship targets and a management strategy would be developed to include site identification and protection, managed access development, and seasonal oversight of public use based on site needs, conservation results, site constraints, and other factors. The construction of beach amenities would require permits with a CMBPP and all BMPs from these permits would be followed to minimize potential disturbances. BMPs would be outlined in the CBMPP and would be regularly inspected by a QCI. Because much of the site would be preserved from future development and amenities would be designed to be context sensitive, impacts from the operation of this alternative are expected to be minor and adverse in the long term, with beneficial impacts from providing controlled access.
Mid-Island Parks and Public Beach Improvements (Parcels B and C)	Short-term: Short-term impacts would be the same as those described above for Mid-Island Parks and Public Beach Improvements (Parcels A, B, and C), except for a single strategically placed 975-linear-foot dune walkover that would not be implemented within Parcels B and C. This would minimize beach and dune disturbance, such as soil compaction, on one of the last remaining undeveloped land parcels (Parcel A). Overall short-term impacts would be minor and adverse. Long-term: Long-term, adverse and beneficial impacts would remain the same as those described for Mid-Island Parks and Public Beach Improvements (Parcels A, B, and C), except that the single strategically placed 975-linear-foot dune walkover would not be implemented, preventing the extra disturbances, such as permanent shade, to beach and dune habitat and vegetation. Long-term impacts would be minor and adverse, with beneficial impacts from providing controlled access.

Wildlife Species (Including Birds)

The Gulf Coast of Alabama is a valuable and diverse ecosystem, consisting of the offshore waters and adjacent land, water, and watersheds that are home to a variety of wildlife species. The Gulf Coast has endured extensive damage to key coastal habitats, such as wetlands, prairies, forests, natural beaches and dunes, impacting species populations through increased stresses such as hurricanes, land loss from development, climate change and rising sea level, and depletion of natural resources. Wildlife species play a significant role in the local economy through wildlife tours and trails, bird watching, and other wildlife-related and recreational activities.

Proposed projects intended to provide recreational and educational opportunities also have the potential to have impacts on native and migratory species. Impacts on wildlife species associated with the no action alternative are described in Table 5-11, while impacts associated with implementation of

the alternatives in Baldwin and Mobile counties are discussed in Tables 5-12 and 5-13, respectively. For all projects that include land acquisition (Gulf Highlands Land Acquisition and Improvements, Little Lagoon Laguna Cove Natural Resources Protection, Dauphin Island Eco-Tourism and Environmental Education Area, and Mid-Island Parks and Public Beach Improvements – all parcels), use limitations would be put in place that could allow for future passive recreational use infrastructure on these sites. Should any additional passive public recreation infrastructure be built on these sites in the future (such as a land-based boardwalk, gazebo, benches, shade structures, and/or kayak launch) short- and long-term impacts on wildlife species (including birds) would be similar to those stated below for each project site.

Table 5-11: Impacts on Wildlife Species from the No Action Alternative

No Action Alternative	Site-specific Impacts
No Action Alternative	Short-term: Access Improvement Projects on Currently Publicly Owned Lands The access improvements proposed for these alternatives would not move forward under the no action alternative. These sites would continue to operate in their current capacity, and no additional impacts are expected. Land Acquisition and Access Improvement Projects Acquisition and construction of amenities with NRDA funds would not occur under the no action alternative. If acquisition does not occur under NRDA or with other Gulf restoration funding mechanisms and recreational amenities are not constructed, it is likely that these sites would be developed, resulting in short-term, minor impacts on wildlife species from construction activities as a result of disturbance and displacement during construction. If acquisition occurs with other Gulf restoration funding mechanisms and no improvements are implemented, no short-term impacts on wildlife species are expected because these sites would remain in their current conditions. Projects Currently Under Construction Under the no action alternative, construction of the lodge and conference center will continue and will include elements that affect wildlife species. These impacts are described in the Final Phase III ERP/PEIS (Section 11.7.6.7) and have been minimized by implementing BMPs, such as buffers to bird nests and minimally invasive construction methods that would potentially harm these species. These BMPs are outlined in the CBMPP and inspected regularly by a QCI. Additionally, some of the public access amenities associated with the lodge and conference center could be constructed, as described below. Therefore, the project is expected to result in short-term, minor impacts on wildlife species during construction. Long-term: Access Improvement Projects on Currently Publicly Owned Lands Under the no action alternative, access improvements on currently publicly owned lands would not be implemented, and no long-term impacts on wildlife species in the coastal areas of Baldwin or Mobile counties are expected.

No Action Alternative	Site-specific Impacts
	Land Acquisition and Access Improvement Projects Acquisition and construction of amenities with NRDA funds would not occur under the no action alternative. If acquisition does not occur under NRDA or with other Gulf restoration funding mechanisms, it is likely that these sites would be developed, resulting in long-term, adverse impacts on wildlife as the result of development and permanent loss of habitat, displacement from the site, and habitat fragmentation. If acquisition occurs with other Gulf restoration funding mechanisms, these sites would remain in their current conditions or have limited access infrastructure similar to the alternatives proposed in this RP/EIS, which would result in long-term, minor, adverse impacts from loss of habitat, but overall beneficial impacts from the preservation of large areas of habitat and areas for wildlife. Any development of the site for preservation and restoration purposes would have impacts similar to those described for the Gulf Highlands Land Acquisition and Improvements, Laguna Cove Little Lagoon Natural Resource Protection, Dauphin Island Eco-Tourism and Environmental Education Area, and Mid-Island Parks and Public Beach Improvements alternatives, described below. Projects Currently Under Construction Under the no action alternative, construction of the lodge and conference center will continue to be designed to be sensitive to the natural dune formation that supports a variety of species surrounding the project area. Long-term impacts from the development of the lodge and conference center are described in the Final Phase III ERP/PEIS (Section 11.7.6.7) and below under the Gulf State Park Lodge and Associated Public Access Amenities Project. Under the no action alternative, additional amenities proposed under the Gulf State Park Lodge and Associated Public Access Amenities Project could be constructed and would have the same impacts noted below.

Table 5-12: Impacts on Wildlife Species from Baldwin County Alternatives

Baldwin County Alternatives	Site-specific Impacts
Gulf State Park Lodge and Associated Public Access Amenities Project	Short-term: Short-term, adverse impacts on wildlife species and their habitats that are known to occur or may potentially occur at the Gulf State Park Lodge and Associated Public Access Amenities Project site, are characterized in the Final Phase III ERP/PEIS (Section 11.7.6.7). The project area consists of approximately 22 acres, of which approximately 13 acres are currently disturbed by construction. In general, proposed construction activities may result in temporary, minor, adverse impacts on wildlife species inhabiting the proposed site and nearby vicinity. Wildlife residing in the periphery of the proposed construction site may be temporarily displaced because of noise and construction activities; however, these species would likely relocate to other undeveloped habitat areas of Gulf State Park. The majority of the additional project elements (i.e., a tram stop at the lodge site, public educational programs, and a bicycle sharing program) would be located within the footprint of disturbance analyzed in the Final Phase III ERP/PEIS. Additional tram stops are not yet determined, but would be located on existing asphalt areas and would not include new ground disturbance; thus, construction of additional infrastructure such as shade shelters would not disturb areas where

Baldwin County Alternatives	Site-specific Impacts
	wildlife currently resides. The pedestrian trail would be located outside the area of disturbance evaluated in the Final Phase III ERP/PEIS, and would be approximately 620 feet long and 8 feet wide. This additional area is adjacent to the lodge and conference center site and supports the same species as the original project area and would experience the same short-term, adverse impacts. Long-term: Long-term, adverse impacts on wildlife species and their habitats that are known to occur or may potentially occur at the Gulf State Park Lodge and Associated Public Access Amenities Project site, are characterized in the Final Phase III ERP/PEIS (Section 11.7.6.7). The proposed site for the reestablishment of the lodge and conference center primarily contains packed sand with little to no vegetation attractive to wildlife, aside from one scrub dune that would be preserved as part of the proposed site plan. It is possible that mammals such as squirrels, foxes, and coyotes, and birds and reptiles could pass through the area, but because of the limited overall habitat availability on the site, it is not likely that any species would be present for long periods of time. Any invertebrates or juvenile species that are present may be permanently lost due to mortality during construction, but impacts on the population level are not expected because a large amount of undeveloped habitat would remain. Additionally, because this site was formerly developed for use as a lodge, historical natural habitat is limited. The existing scrub dune would be preserved, which would maintain habitat on the site. Therefore, impacts on wildlife from construction at the lodge and conference center site would be adverse but short term and minor; although some minor impacts at the individual level could occur but would not affect the overall population of a species. The majority of the additional project elements (i.e., a tram stop at the lodge site, public educational programs, and a bicycle sharing program) would be located within the footprint of disturbance analyzed in the Final Phase III ERP/PEIS and would have the same long-term impacts noted above. Additional tram stops are not yet determined, but would be located on existing asphalt areas, would not include new ground disturbance, and would not disturb areas where wildlife is currently occurring. The pedestrian trail would be located outside the area of disturbance evaluated in the Final Phase III ERP/PEIS and would be approximately 620 feet long and 8 feet wide. This additional area is adjacent to the lodge and conference center site and supports the same species as the original project area and would experience the same long-term, adverse impacts.
Fort Morgan Pier Rehabilitation	Rehabilitation of the existing pier would occur in coastal beach habitat known for shorebirds and neotropical migratory birds. Other species that may be present within the area include black bears, coyotes, squirrels, and red foxes. Short-term: In general, proposed construction activities may result in temporary, minor, adverse impacts on wildlife species inhabiting the site and nearby vicinity, including temporary disturbance to wildlife during construction from noise and temporary displacement. However, because much of this work would occur in the water, impacts on terrestrial species would be limited. Construction staging activities would occur on already disturbed land, further limiting impacts on terrestrial species.

Baldwin County Alternatives	Site-specific Impacts
	Impacts on other species, such as migratory birds, from noise and displacement would be short term and minor because the construction period would be short (approximately six months) and would occur in a limited area, and species would be expected to return to the site once construction is complete. Impacts would further be limited by BMPs such as avoiding construction in the vicinity of any nesting sites when possible and conducting construction outside of nesting season. These BMPs would be outlined in the CBMPP and regularly inspected by a QCI. Some individual amphibians, reptiles, or fish may be lost due to direct mortality during in-water construction activities for the placement of anchored vinyl sheet pile to support the existing pier structure; however, these impacts would be limited in nature. Once construction is finished, it is expected that these healthy, sustainable populations of species in the area would return to the site and continue to inhabit the area. Overall impacts on wildlife during construction would be short term, minor, and adverse. Long-term: Once the rehabilitation of the pier is complete, human presence is expected to increase at the proposed site; however, this site was, until recently, used as a pier, and activity is expected to be similar to those historic levels. This action would not be a new or cause unprecedented activity in that location, and new or additional displacement of wildlife from utilization of the site is not expected to occur. Any adverse impacts would be expected to be long term and minor.
Fort Morgan Peninsula Public Access Improvements	The 11 proposed parking and dune walkover sites include habitat known to contain shorebirds and neotropical migratory birds, beach mice, black bears, coyotes, squirrels, and red foxes; however, these habitats are degraded because of surrounding development and consistent use for ingress and egress to the beach. Short-term: In general, proposed construction activities may result in temporary, minor, adverse impacts on wildlife species inhabiting the proposed sites and in the nearby vicinity, including temporary disturbance to wildlife during construction from noise and temporary displacement. During construction, some less mobile species, including invertebrates (e.g., ground-dwelling insects) or juveniles (e.g., reptiles) within the proposed sites would likely experience impacts due to direct mortality, but post construction, these species would reestablish in the area. In general, construction would not interfere with the overall movement of wildlife species around the site because the area of disturbance would be limited and these sites are already adjacent to roadways and residential development. Many of these sites are already disturbed, limiting the species that likely use these areas. Impacts on other species, such as migratory birds, from noise and displacement would be short term and minor because the construction period would be short (approximately six months) and would occur in a limited area. Impacts on some individual migratory birds would be short term, minor, and adverse during construction, primarily from noise disturbance. Land clearing and grading would be planned to begin outside of nesting season, and once the areas are cleared and activities are underway, birds are not expected to nest in areas of active construction. If land clearing must begin during nesting/hatching/or fledging, surveys for nesting birds would be conducted prior to the implementation of any land clearing or construction action. If nesting birds are located, activities would

Baldwin County Alternatives	Site-specific Impacts
	not begin around the nests until the birds have fledged. A buffer distance to avoid the nests would be determined in coordination with USFWS. Because no in-water work would occur, impacts on aquatic species are not expected. Impacts on all other species would be short term, minor, and adverse. Long-term: Once access improvements are constructed at the 11 sites on the Fort Morgan Peninsula, operation of the parking areas, boardwalks, and restrooms would result in increased human presence on the proposed sites; however, these access improvements would be implemented for the purpose of allowing recreational access in a controlled manner to sites that are already being used and where disturbance over a wide area is occurring. While species may avoid areas where improvements are located, providing designated access would allow the rest of the site to reestablish vegetation in currently disturbed areas, improving the habitat for the species in the area. Therefore, while some long-term, minor, adverse impacts could occur from species avoiding areas, overall, impacts would be long term and beneficial from reducing the amount of disturbance in these areas.
Gulf Highlands Land Acquisition and Improvements	The habitats of Gulf Highlands serve as important nesting, foraging, and sheltering environments for hundreds of migratory and non-migratory bird species as described in Chapter 4, Affected Environment. Short-term: In general, proposed construction activities may result in temporary, minor, adverse impacts on wildlife species inhabiting the proposed site and nearby vicinity, similar to those described under the Gulf State Park Lodge and Associated Public Access Amenities Project, including temporary disturbance to wildlife during construction from noise and temporary displacement (including less mobile species such as invertebrates, mammals, and migratory birds). During construction, some less mobile species, including invertebrates (e.g., ground-dwelling insects) or juveniles (e.g., reptiles or invertebrates) within the proposed site would likely experience impacts due to direct mortality, but after construction, these species would reestablish in the area. In general, construction would not interfere with the overall movement of wildlife species around the site because of the limited area of disturbance. Impacts on other species, such as migratory birds, from noise and displacement would be short term and minor because the construction period would be short (approximately six months) and would occur in a limited area, and species would be expected to return to the site once construction is complete. There would be adverse, but short-term and minor impacts, to some individual migratory birds during construction, primarily from noise disturbance. The DWH Trustees have coordinated with USFWS during previous phases of this project to avoid take of migratory birds. Land clearing and grading would be planned to begin outside of nesting season, and once areas are cleared and activities are underway, birds are not expected to nest in areas of active construction. If land clearing must begin during nesting/hatching/or fledging, surveys for nesting birds would be conducted prior to the implementation of any land clearing or construction action. If nesting birds are located, activities would not begin around the nests until the birds have fledged. A buffer distance to avoid the nests would be determined in coordination with USFWS. Because no in-water work would occur, no impacts on aquatic species are expected.

Baldwin County Alternatives	Site-specific Impacts
	Long-term: As described in Chapter 4, Gulf Highlands provides valuable habitat to numerous species, including shorebirds and sea turtles (see Threatened and Endangered Species for a discussion on sea turtles). Establishing access improvements, including parking and a boardwalk would increase human presence in the area, and increase access to the beach where bird nesting occurs. Increased human presence could result in impacts on many of the bird species found at the site. While providing for human use of the site could result in long-term, adverse impacts, acquisition of the site would take it out of private ownership and prevent it from being developed in a high density use manner, which is currently planned for the site. Gulf Highlands also has one of four known natural (non-rooftop nesting) least tern beach nesting sites along Baldwin County's coastline. Only one of these sites is in public ownership (Gulf State Park-Alabama Point East – Perdido Key). Acquisition of this land would protect another known nesting site. The other two sites are subject to development, and USFWS is currently reviewing development plans for one of those sites. Snowy plovers also use this stretch of beach as an area for brood rearing of hatchlings. The parcel contains one of the few beachfront wet swale areas where USFWS personnel have observed snowy plover hatchlings feeding. Long-term benefits would occur from removing the development potential of this land and preserving it as open space with limited access improvements. Boardwalks, beach chairs, beach recreational services, and unmanaged human use of the area could affect snowy plovers. Acquisition and management of this parcel by ADCNR would reduce this threat to shorebird utilization and allow for better shorebird management. Land acquisition would also have long-term benefits for other species such as neotropical migratory bird species that use the beaches of coastal Alabama as a critical stopover as they arrive from their 600-mile trip from the Yucatan Peninsula, Isthmus of Tehuantepec, and other points in northern Central America. Benefits at this site would be greater than at other sites because of the development pressure this site current faces. Some of the species of high conservation concern that use a trans-Gulf migration route and could benefit are: golden-winged warbler, wood thrush, prairie warbler, bay-breasted warbler, cerulean warbler, prothonotary warbler, worm-eating warbler, Kentucky warbler, blue-winged warbler and Swainson's warbler. Other species that could benefit include chuck-will's-widow, blue-headed vireo, Philadelphia vireo, Tennessee warbler, Nashville Warbler, chestnut-sided Warbler, magnolia warbler, black-throated green warbler, Blackburnian warbler, Louisiana waterthrush and hooded warbler (Rosenberg et al., 2016). Due to the limited development at the site, these access improvements are not expected to affect other species that may occur at the site, including black bears, coyotes, squirrels, and deer.

Baldwin County Alternatives	Site-specific Impacts
Laguna Cove Little Lagoon Natural Resource Protection	This alternative would acquire two parcels totaling 53 acres of wetland and maritime forest habitats known for providing habitat for migratory and native shorebirds in the region, as well as terrestrial animals such as black bear, white-tailed deer, coyotes, squirrels, bats, and beavers. Short-term: Proposed construction activities may result in temporary, minor, adverse impacts on wildlife species inhabiting the proposed site and nearby vicinity, including temporary disturbance to wildlife during construction from noise and temporary displacement (including less mobile species such as invertebrates, mammals, and migratory birds). During construction, some less mobile species including invertebrates (e.g., ground-dwelling insects) or juveniles (e.g., reptiles, fish or invertebrates) within the proposed sites would likely experience impacts due to direct mortality, but after construction, these species would reestablish in the area. Terrestrial animals such as white-tailed deer, black bear, and coyotes require relatively large tracts of land for foraging and reproduction. While the proposed construction activities may involve setting up fencing for safety or as a visual barrier around the construction areas, the fencing would not result in fragmented habitat because the area of disturbance would be limited; therefore, construction activities would not interfere with the overall movement of wildlife species. Impacts from noise and displacement on other species, such as migratory birds would be short term and minor because the construction period would be short (approximately six months), in a limited area, and species would be expected to return to the site once construction is complete. There would be short-term, minor, adverse impacts on some individual migratory birds during construction, primarily from noise disturbance. Land clearing and grading would be planned to begin outside of nesting season, and once the area is cleared and activities are underway, birds are not expected to nest in areas of active construction. If land clearing must begin during nesting/hatching/or fledging, surveys for nesting birds would be conducted prior to the implementation of any land clearing or construction action. If nesting birds are located, activities would not begin around the nests until the birds have fledged. A buffer distance to avoid the nests would be determined in coordination with USFWS. Some individual amphibians, reptiles, or fish may be lost due to direct mortality during water construction activities for the pier and boardwalk; however, these impacts would be limited in nature, and after construction is complete these species would return to the site and continue to inhabit the area. Long-term: Once access improvements are constructed at the site, operation of the parking area, boardwalk, and restrooms would result in increased human presence on the proposed site; however, these access improvements would allow recreational access to the site in a controlled manner. While species may avoid areas where improvements are located, the rest of the site would be put in conservation from development and would provide habitat in an area that would otherwise be available for development. The site would also include educational/informational signage to inform the public about the wildlife in the area and its importance to the ecosystem. Therefore, while some minor impacts could occur from species avoiding areas, overall, impacts would be long term and beneficial from placing the majority of the site into conservation and preserving species and their habitat in this area.

Table 5-13: Impacts on Wildlife Species from Mobile County Alternatives

Mobile County Alternatives	Site-specific Impacts
Dauphin Island Eco-Tourism and Environmental Education Area	The 100 acres of marshes and wetland is home to a variety of shorebirds and neotropical migrants. Squirrels, coyotes, and nutria, may also be present in the area. Short-term: In general, proposed construction activities may result in temporary, minor, adverse impacts on wildlife species inhabiting the proposed site and nearby vicinity, including temporary disturbance to wildlife during construction from noise and temporary displacement (including less mobile species such as invertebrates, mammals, and migratory birds). During construction, some less mobile species including invertebrates (such as ground-dwelling insects) or juveniles (reptiles, fish or invertebrates, for example) within the proposed site would likely experience impacts due to direct mortality, but these species would be reestablished in the area. Terrestrial species such as coyotes require relatively large tracts of land for foraging and reproduction. While the proposed construction activities may involve setting up fencing for safety or as a visual barrier around the construction areas, the fencing would not result in fragmented habitat and therefore, construction activities would not interfere with the overall movement of wildlife species. In general, construction would not interfere with the overall movement of wildlife species around the site because the limited area of disturbance and because the site does not contain large areas of terrestrial habitat. Impacts on other species, such as migratory birds, from noise and displacement would be short term and minor during the construction period (up to two years), in a limited area, and species would be expected to return to the site once construction is complete. There would be adverse, but short-term and minor impacts, on some individual migratory birds during construction, primarily from noise disturbance. Land clearing and grading would be planned to begin outside of nesting season, and once cleared and activities are underway, birds are not expected to nest in areas of active construction. If land clearing must begin during nesting/hatching/or fledging, surveys for nesting birds would be conducted prior to the implementation of any land clearing or construction action. If nesting birds are located, activities would not begin around the nests until the birds have fledged. A buffer distance to avoid the nests would be determined in coordination with USFWS. Some individual amphibians, reptiles, or fish may be lost due to direct mortality during construction for in-water construction activities such as development of the pier and boardwalk, however, these impacts would be limited in nature and after construction is complete these species would return to the site and continue to inhabit the area. Long-term: Once the eco-tourism area is constructed, operation of the parking area, boardwalk, bicycle trail, gazebo and restrooms would result in increased human presence on the proposed project site; however, these access improvements would be implemented for the purpose of allowing recreational access to the site in a controlled manner. While species may avoid areas where improvements are located, other habitat exists in the area. The site would also include educational/informational signage to inform the public about the wildlife in the area and its importance to the ecosystem. Therefore, while some minor impacts could occur from species avoiding areas, overall, impacts would be long term and beneficial from placing the majority of the site into conservation and preserving species and their habitat in this area.

Mobile County Alternatives	Site-specific Impacts
Mid-Island Parks and Public Beach Improvements (Parcels A, B, and C)	The 10 acres of beach and dune habitat on a primary barrier island provides critical nesting, loafing, stopover, and foraging habitats for a variety of coastal birds, shorebirds, neotropical migrants, and other species. Other terrestrial species that may be present within the project site include squirrels, coyotes, and nutria. Short-term: In general, proposed construction activities may result in temporary, minor, adverse impacts on wildlife species inhabiting the proposed site and nearby vicinity, including temporary disturbance to wildlife during construction from noise and temporary displacement (including less mobile species such as invertebrates, mammals, and migratory birds). During construction, some less mobile species including invertebrates (such as ground-dwelling insects) or juveniles (e.g., reptiles or invertebrates) within the proposed sites would likely experience impacts due to direct mortality, but these species would be reestablished in the area. Terrestrial species such as coyotes require relatively large tracts of land for foraging and reproduction. While the proposed construction activities may involve setting up fencing for safety or as a visual barrier around the construction areas, the fencing would not result in fragmented habitat and therefore, construction activities would not interfere with the overall movement of wildlife species. In general, construction would not interfere with the overall movement of wildlife species around the site because of the limited area of disturbance. Impacts on other species, such as migratory birds, from noise and displacement would be short term and minor because the construction period would be short (approximately six months) and would occur in a limited area, and species would be expected to return to the site once construction is complete, resulting in short-term minor impacts. There would be adverse, but short-term and minor impacts, to some individual migratory birds during construction, primarily from noise disturbance. The DWH Trustees have coordinated with USFWS during previous phases of this project to avoid take of migratory birds. Land clearing and grading would be planned to begin outside of nesting season, and once cleared and activities are underway, birds are not expected to nest in areas of active construction. If land clearing must begin during nesting/hatching/or fledging, surveys for nesting birds would be conducted prior to the implementation of any land clearing or construction action. If nesting birds are located, activities would not begin around the nests until the birds have fledged. A buffer distance to avoid the nests would be determined in coordination with USFWS. Similar to Gulf Highlands, Parcel A is located along the beachfront and all construction activities would be coordinated and conducted to minimize impacts on nesting and migrating birds at the site. Because no in-water work would occur, impacts on aquatic species are not expected. Long-term: Once access improvements are constructed at Mid-Island Parks, operation of the parking area, beach recreational services, boardwalk and restrooms would result in increased human presence on the proposed project site; however, these access improvements would be implemented for the purpose of allowing recreational access to the Alabama coast in a controlled manner. While species may avoid areas where improvements are located, the rest of the site would be put in conservation from development and would provide habitat in an area that would otherwise be available for development. The site would also include educational/informational signage to inform the public about the wildlife in

Mobile County Alternatives	Site-specific Impacts
	the area and its importance to the ecosystem. Therefore, while some minor, adverse impacts could occur from species avoiding areas, overall, impacts would be long term and beneficial from placing the majority of the site into conservation and preserving species and their habitat in this area. In addition, the development and management strategy for this project would include bird monitoring.
Mid-Island Parks and Public Beach Improvements (Parcels B and C)	The 2 to 3 acres of wetlands, dunes, and beaches provide critical nesting, loafing, stopover, and foraging habitats for a variety of coastal birds, shorebirds, neotropical migrants, and other species. Other terrestrial species that may or may not be present within the alternative site include squirrels, coyotes, and nutria. Short-term: The impacts of this alternative would be the similar to Dauphin Island Access: Mid-Island Parks (A, B, and C); however, it would be less adverse because no construction would occur on the beach where Parcel A is located. Short-term impacts would be minor and adverse. Long-term: The impacts of this alternative would be the same as those described for Dauphin Island Access: Mid-Island Parks (A, B, and C). While this alternative would not include the acquisition of Parcel A and associated development, the level of human presence and proposed management actions would be similar. Therefore, while some minor, adverse impacts could occur from species avoiding areas, overall, impacts would be long term and beneficial from placing the majority of the site into conservation and preserving species and their habitat in this area.

Marine and Estuarine Fauna (Fish, Shellfish, Benthic Organisms)

The Gulf Coast of Alabama is a valuable and diverse ecosystem, consisting of the offshore waters and adjacent land, water, and watersheds that are home to a variety of marine and estuarine fauna. The Gulf Coast has endured extensive damage to key coastal habitats, such as wetlands, prairies, forests, natural beaches and dunes, impacting species populations through increased stresses such as hurricanes, land loss from development, climate change and rising sea level, and depletion of natural resources. Marine and estuarine fauna play a significant role in the local economy through recreational and commercial fishing.

Proposed projects intended to provide recreational and educational opportunities also have the potential to have impacts on marine and estuarine fauna. Impacts on wildlife associated with the no action alternative are described in Table 5-14. Impacts on habitat associated with implementation of the alternatives in Baldwin and Mobile counties are discussed in Tables 5-15 and 5-16, respectively. For all projects that include land acquisition (Gulf Highlands Land Acquisition and Improvements, Little Lagoon Laguna Cove Natural Resources Protection, Dauphin Island Eco-Tourism and Environmental Education Area, and Mid-Island Parks and Public Beach Improvements – all parcels), use limitations would be put in place that could allow for future passive recreational use infrastructure on these sites. Should any additional passive public recreation infrastructure be built on these sites in the future (such as a land-based boardwalk, gazebo, benches, shade structures, and/or kayak launch) short- and long-term impacts on marine and estuarine fauna (fish, shellfish, and benthic organisms) would be similar to those stated below for each project site.

Table 5-14: Impacts on Marine and Estuarine Fauna from the No Action Alternative

No Action Alternative	Site-specific Impacts
No Action Alternative	Short-term: Access Improvement Projects on Currently Publicly Owned Lands The recreational amenities proposed for these alternatives would not move forward under the no action alternative. These sites would continue to operate in their current capacity, and no additional impacts would occur. Land Acquisition and Access Improvement Projects Acquisition and construction of amenities with NRDA funds would not occur under the no action alternative. If acquisition does not occur under NRDA or with other Gulf restoration funding mechanisms, it is likely that these sites would be developed, which would result in short-term, minor to moderate impacts on marine and estuarine fauna from construction activities depending on the nature and extent of the construction. If acquisition occurs with other Gulf restoration funding mechanisms with no associated access infrastructure, no impacts on marine and estuarine fauna are expected because these sites would remain in their current conditions. Projects Currently Under Construction Under the no action alternative, construction of lodge and conference center will continue; however, no elements of the lodge or conference center or any of the additional amenities are located in a marine environment, and no impacts will occur. Long-term: Access Improvement Projects on Currently Publicly Owned Lands Under the no action alternative, access improvements on currently publicly owned lands would not occur, and no impacts on marine and estuarine fauna of the coastal Baldwin and Mobile County areas are expected. Land Acquisition and Access Improvement Projects Acquisition and construction of amenities with NRDA funds would not occur under the no action alternative. If acquisition does not occur under NRDA or with other Gulf restoration funding mechanisms, it is likely that these sites would be developed, which would result in the potential for long-term, moderate to major impacts on marine and estuarine fauna from the development depending on the nature and extent of the development and if marine habitats are permanently impacted. If acquisition occurs with other Gulf restoration funding mechanisms with no or limited associated access infrastructure, there would be long-term benefits from the preservation of large areas of habitat, including habitat for marine species. These impacts would be the same as those Laguna Cove Little Lagoon Natural Resource Protection and Dauphin Island Eco-Tourism and Environmental Education Area alternatives, below.

No Action Alternative	Site-specific Impacts
	Projects Currently Under Construction Under the no action alternative, construction of lodge and conference center will continue; however, no elements of the lodge and conference center or any of the additional amenities are located in a marine environment, and no long-term impacts will occur.

Table 5-15: Impacts on Marine and Estuarine Fauna from Baldwin County Alternatives

Baldwin County Alternatives	Site-specific Impacts
Gulf State Park Lodge and Associated Public Access Amenities Project	Short- and Long-term: Impacts on marine and estuarine fauna and their habitats, which are not known to occur at the site are discussed under the Final Phase III ERP/PEIS (Section 11.7.6.5), which explains that no in-water work would be part of this alternative, and that no impacts on marine habitats would occur. A majority of the additional project elements (i.e., a tram stop at the lodge, public educational programs, and a bicycle sharing program) would be located within the footprint of disturbance analyzed in the Final Phase III ERP/PEIS. Additional tram stops along the rest of the route have not yet been determined but would be located on existing asphalt areas, would not include new ground disturbance, and would not affect habitats supporting marine and estuarine fauna. The pedestrian trail would be located outside the area of disturbance evaluated in the Final Phase III ERP/PEIS and would be approximately 620 feet long and 8 feet wide. This additional area is adjacent to the lodge and conference center and supports the same habitats as the original project area and is expected to have the same short- and long-term impacts.
Fort Morgan Pier Rehabilitation	Short-term: The rehabilitation of the pier may have minor, adverse impacts on marine mammals, such as manatees (discussed under protected species below) and dolphins; nearshore fish, such as redfish, trout, flounder, ground mullet, speckled trout, and Spanish mackerel; and shellfish, such as oysters, shrimp, and crab; and sea turtles. Impacts include bottom sediment disturbance causing an increase in turbidity and underwater noise that would disturb habitat and displace fish. Accidental mortality of these species is also possible from construction activities, but this mortality would be minimal and would not affect the continued existence of these species. Species displaced by disturbance would be expected to return to the site shortly after the six-month construction period. During any in-water construction, BMPs would be used to prevent the entrapment of marine mammals. These BMPs can be found at the following website: http://sero.nmfs.noaa.gov/protected_resources/section_7/guidance_docs/documents/entrapment_bmps_final.pdf. Overall impacts on these species is expected to be short term, minor, and adverse. Long-term: No new long-term, adverse impacts on marine and estuarine fauna are expected from the operation of this alternative because the fishing pier is already in existence; therefore, long-term impacts would revert back to when the pier was in full use. Impacts would include increased fishing of nearshore fish. Any adverse impacts would be minor because of the local nature of the fishing pier in a large habitable area. To further minimize interactions with bottlenose dolphins known to occur in Alabama state waters, the following mitigations would occur:

Baldwin County Alternatives	Site-specific Impacts
	1. NMFS' "Dolphin Friendly Fishing and Viewing Tip" signs and "Don't Feed Wild Dolphins" signs would be posted at the beginning/entrance of the pier and any flat surfaces at regular intervals along the pier. Examples of both signs may be found here: http://sero.nmfs.noaa.gov/protected_resources/section_7/protected_species_educational_signs/index.html In between where the signs are posted, NMFS' marine mammal and sea turtle pier surface placards would be install at regular intervals along the pier boardwalk itself. Monofilament fishing line recycling bins would be placed at regular intervals along the pier to prevent fishing line entanglements to marine wildlife and ensure they are routinely emptied. An example of the bins may be found here: http://mrrp.myfwc.com/. Potential impacts on sea turtles are discussed below under Protected Species.
Fort Morgan Peninsula Public Access Improvements	Because no in-water work would occur and BMPs, outlined in the CMBPP and inspected by a QCI, would be used to minimize sediment and erosion into surrounding waters, no short- or long-term impacts on marine and estuarine fauna are expected as a result of the implementation of the Fort Morgan Peninsula Public Access Improvements.
Gulf Highlands Land Acquisition and Improvements	Because no in-water work would occur and BMPs, outlined in the CMBPP and inspected by a QCI, would be used to minimize sediment and erosion into surrounding waters, no short- or long-term impacts on marine and estuarine fauna are expected as a result of the implementation of the Gulf Highlands Land Acquisition and Improvements.
Laguna Cove Little Lagoon Natural Resource Protection	Short-term: The construction of a proposed pier and kayak launch would potentially have adverse impacts on fish (e.g., speckled trout, redfish, and flounder) and shellfish (e.g., shrimp and crab) in the lagoon because of bottom sediments disturbance and underwater noise that would disturb habitat and displace fish. Accidental mortality of these species is also possible from construction activities, but this mortality would be minimal and would not affect the continued existence of these species. Species displaced by disturbance would be expected to return to the site shortly after the six-month construction period. During any in-water construction, BMPs would be used to prevent the entrapment of marine mammals. These BMPs can be found at the following website: http://sero.nmfs.noaa.gov/protected_resources/section_7/guidance_docs/documents/entrapment_bmps_final.pdf. Any adverse impacts would be short term and minor. Long-term: The fishing pier located on the eastern side of the property would cause minor, adverse impacts on species being fished due to the abundance of these species in a healthy lagoon habitat. This includes EFH for coastal migratory pelagics, reef fish, red drum, and shrimp. To further minimize interactions with bottlenose dolphins known to occur in Alabama state waters, the following mitigations would occur: 1. NMFS' "Dolphin Friendly Fishing and Viewing Tip" signs and "Don't Feed Wild Dolphins" signs would be posted at the beginning/entrance of the pier and any flat surfaces at regular intervals along the pier. Examples of both signs may be found here: http://sero.nmfs.noaa.gov/protected_resources/section_7/protected_species_educational_signs/index.html In between where the signs are posted, NMFS' marine mammal and sea turtle pier surface placards would be install at regular intervals along the pier boardwalk itself.

Baldwin County Alternatives	Site-specific Impacts
	Monofilament fishing line recycling bins would be placed at regular intervals along the pier to prevent fishing line entanglements to marine wildlife and ensure they are routinely emptied. An example of the bins may be found here: http://mrrp.myfwc.com/. No other long-term impacts on marine and estuarine fauna are expected from the operation of this alternative.

Table 5-16: Impacts on Marine and Estuarine Fauna from Mobile County Alternatives

Mobile County Alternatives	Site-specific Impacts
Dauphin Island Eco-Tourism and Environmental Education Area	Short-term: The construction of boardwalks, gazebos, and public restrooms would occur in upland habitat; therefore, marine and estuarine fauna would not be affected. If facilities are built over wetland areas, impacts could include soil disturbance and above and below water noise that would disturb habitat and displace species. Accidental mortality of these species is also possible from construction activities, but this mortality would be minimal and would not affect the continued existence of these species. The construction of the fishing pier would cause minor, adverse impacts on species that inhabit nearshore environments. Possible impacts include bottom sediment disturbance, above and underwater noise, and possible mortality from construction activities. Species displaced by disturbance would be expected to return to the site shortly after the construction period. During any in-water construction, BMPs would be used to prevent the entrapment of marine mammals. These BMPs can be found at the following website: http://sero.nmfs.noaa.gov/protected_resources/section_7/guidance_docs/documents/entrapment_bmps_final.pdf. Any adverse impacts would be short term and minor. Long-term: The fishing pier would cause adverse impacts on species being fished and as a result of bycatch; however, these adverse effects are expected to be minor because of the abundance of most fish species in the vicinity of the pier and the abundance of other habitat near to the fishing pier that are utilized by fish species. Accidental by catch is a possibility under this alternative. If facilities are built over wetland areas, they would be constructed in a manner that would allow for the continued existence of these species at this site. To further minimize interactions with bottlenose dolphins known to occur in Alabama state waters, the following mitigations would occur: 1. NMFS' "Dolphin Friendly Fishing and Viewing Tip" signs and "Don't Feed Wild Dolphins" signs would be posted at the beginning/entrance of the pier and any flat surfaces at regular intervals along the pier. Examples of both signs may be found here: http://sero.nmfs.noaa.gov/protected_resources/section_7/protected_species_educational_signs/index.html In between where the signs are posted, NMFS' marine mammal and sea turtle pier surface placards would be install at regular intervals along the pier boardwalk itself. Monofilament fishing line recycling bins would be placed at regular intervals along the pier to prevent fishing line entanglements to marine wildlife and ensure they are routinely emptied. An example of the bins may be found here: http://mrrp.myfwc.com/. Overall, impacts would be adverse, but minor. No other long-term impacts on species are expected from the operation of this alternative.

Mobile County Alternatives	Site-specific Impacts
Mid-Island Parks and Public Beach Improvements (Parcels A, B, and C)	Because no in-water work would occur, and BMPs, outlined in the CMBPP and inspected by a QCI, would be used to minimize sediment and erosion into surrounding waters, no short- or long-term impacts on marine and estuarine fauna are expected as a result of implementation of the alternative.
Mid-Island Parks and Public Beach Improvements (Parcels B and C)	Because no in-water work would occur, and BMPs, outlined in the CMBPP and inspected by a QCI, would be used to minimize sediment and erosion into surrounding waters, no short- or long-term impacts on marine and estuarine fauna are expected as a result of implementation of the alternative.

Protected Species

The following is a discussion of the potential impacts on threatened and endangered species from construction and operation of the proposed alternatives. Coordination with USFWS for all protected species that could potentially be affected by the action alternatives is ongoing, in accordance with Section 7 of ESA, and will continue throughout construction. Impacts on protected species associated with the no action alternative are described in Table 5-17. Tables 5-18 and 5-19 describe the anticipated impacts on protected species from the Baldwin and Mobile counties alternatives, respectively. For all projects that include land acquisition (Gulf Highlands Land Acquisition and Improvements, Little Lagoon Laguna Cove Natural Resources Protection, Dauphin Island Eco-Tourism and Environmental Education Area, and Mid-Island Parks and Public Beach Improvements – all parcels), use limitations would be put in place that could allow for future passive recreational use infrastructure on these sites. Should any additional passive public recreation infrastructure be built on these sites in the future (such as a land-based boardwalk, gazebo, benches, shade structures, and/or kayak launch), short- and long-term impacts on protected species would be similar to those stated below for each project site. Table 5-20 summarizes the protected species compliance determinations.

Table 5-17: Impacts on Protected Species from the No Action Alternative

No Action Alternative	Site-specific Impacts
No Action Alternative	<u>Short-term</u>: <u>Access Improvement Projects on Currently Publicly Owned Lands</u> The recreational amenities proposed for these alternative sites would not move forward under the no action alternative. These sites would continue to operate in their current capacity, and no additional impacts would occur if the no action alternative was selected. <u>Land Acquisition and Access Improvement Projects</u> Acquisition and construction of amenities with NRDA funds would not occur under the no action alternative. If acquisition does not occur under NRDA or with other Gulf restoration funding mechanisms and recreational amenities are not constructed, it is likely that these sites would be developed resulting in short-term, minor to moderate impacts on protected species from construction

No Action Alternative	Site-specific Impacts
	activities depending on the extent and intensity of the construction. If acquisition occurs with other Gulf restoration funding mechanisms and access infrastructure is not added, there would be no short-term impacts on protected species since these sites would remain in their current conditions. <u>Projects Currently Under Construction</u> Under the no action alternative, construction of the lodge and conference center will continue, including elements that will affect protected species. These impacts are described in the Final Phase III ERP/PEIS (Section 11.7.6.8), along with mitigation measures, which include implementing BMPs (e.g., avoiding construction during sea turtle nesting season, trapping Alabama beach mouse, and proper disposal of construction materials that would potentially harm these species). These BMPs are outlined in the CBMPP and are regularly inspected by a QCI. Additionally, some of the public access amenities associated with the lodge could be constructed, as described below. Therefore, the project is expected to result in short-term, minor impacts on protected species. <u>Long-term</u>: <u>Access Improvement Projects on Currently Publicly Owned Lands</u> Under the no action alternative, access improvements on currently publicly owned lands would not occur, and no long-term impacts on protected species of Mobile Bay are expected. <u>Land Acquisition and Access Improvement Projects</u> Acquisition and construction of amenities with NRDA funds would not occur under the no action alternative. If acquisition does not occur under NRDA or with other Gulf restoration funding mechanisms, it is likely that these sites would be developed, resulting in long-term, adverse impacts on protected species as the result of development and permanent loss of habitat, displacement from the site, and habitat fragmentation. If acquisition occurs with other Gulf restoration funding mechanisms, these sites would remain in their current conditions or have limited access infrastructure similar to the alternatives proposed in this RP/EIS, resulting in long-term, minor, adverse impacts from loss of habitat, but overall beneficial impacts from the preservation of large areas of habitat and areas for protected species. Any development of the site for preservation and restoration purposes would have impacts similar to those described for the Gulf Highlands Land Acquisition and Improvements, Laguna Cove Little Lagoon Natural Resource Protection, Dauphin Island Eco-Tourism and Environmental Education Area, and Mid-Island Parks and Public Beach Improvements alternatives, below. <u>Projects Currently Under Construction</u> Under the no action alternative, construction of the lodge and conference center will continue, including elements that will affect protected species as described in the Final Phase III ERP/PEIS (Section 11.7.6.8). Additionally, some of the public access amenities associated with the lodge could be constructed, as described below. Therefore, the project is expected to result in long-term, minor impacts on protected species.

Table 5-18: Impacts on Protected Species from Baldwin County Alternatives

Baldwin County Alternatives	Site-specific Impacts
Gulf State Park Lodge and Associated Public Access Amenities Project	Short- and Long-term: Short- and long-term, adverse impacts on protected species and their habitats that are known to occur or may potentially occur at the site, are characterized in the Final Phase III ERP/PEIS (Section 11.7.6.8). The area consists of approximately 22 acres, of which approximately 13 acres are currently disturbed by construction. An HCP is currently being implemented to avoid, minimize, or mitigate impacts on the Alabama beach mouse and other evaluated species during construction and operation. The majority of the additional project elements (i.e., a tram stop at the lodge site, public educational programs, and a bicycle sharing program) would be located within the footprint of disturbance analyzed in the Final Phase III ERP/PEIS. Additional tram stops are not yet determined, but would be located on existing asphalt areas that do not provide habitat for protected species. The pedestrian trail would be located outside the area of disturbance evaluated in the Final Phase III ERP/PEIS, and would be approximately 620 feet long and 8 feet wide. This additional area supports the same protected species as the original project area. These activities would be subject to the conditions of the HCP currently being implemented at the site during construction and operation. Therefore, the project is expected to result in long-term, minor, adverse impacts on protected species.
Fort Morgan Pier Rehabilitation	The Fort Morgan Pier Rehabilitation is located on the west end of the Fort Morgan Peninsula near the Fort Morgan State Historic Site. This western point of the peninsula supports a variety of protected species (as described in Chapter 4) and includes loggerhead sea turtle critical nesting habitat. Short-term: Rehabilitation of the pier would cause temporary disturbances to both terrestrial and marine protected species due noise and the presence of construction equipment and crews. In-water construction activities would consist of placement of anchored vinyl sheet pile to support the existing pier structure. The work would be completed from barges and could result in temporary disturbances to protected marine species including sea turtles, manatees, or Gulf sturgeon. Displaced individuals would likely return to the area upon completion of construction. Standard Manatee Conditions (A-D) for In-Water work (USFWS, 2011) would be followed and consultation for EFH would occur prior to project implementation that would provide mitigation measures that would further minimize impacts. Therefore, potential impacts on these species are anticipated to be adverse, but short term and minor. Although the project is located near non-critical habitat for the Alabama Beach Mouse, this species is not likely to be impacted because the project is located within a previously disturbed site which does not contain high quality beach mouse habitat. The only new construction on land would consist of a concrete sidewalk extending from the parking lot to the base of the pier. Conservation measures or BMPs would be implemented to minimize impacts. These BMPs would be outlined in the CBMPP and inspected regularly by a QCI. Monitoring during construction would ensure that activities remain within the designated footprint so as not to result in accidental harm to any Alabama Beach Mouse that may be in the vicinity of construction areas. In the unlikely event that an Alabama beach mouse were to be present during construction, potential impacts would be adverse but short term and minor.

Baldwin County Alternatives	Site-specific Impacts
	The proposed site is located adjacent to loggerhead sea turtle critical nesting habitat. However, no elements of the project would occur on sand beaches. Therefore, disturbances to sea turtle nesting would be minimal. Conservation measures or BMPs would be implemented to minimize impacts. Impacts include noise and increased lighting which could temporarily disorient the species. Due to the small construction footprint, adverse impacts are expected to be short term and minor. EFH would also be impacted for coastal migratory pelagics, shrimp, red drum, reef fish, and sharks. Impacts include noise and nearshore soil disturbances which could impact spawning. Due to the small construction footprint, impacts are expected to be short term, adverse and minor. <u>Long-term</u>: Long-term, adverse impacts would be similar to previous conditions at the site, when the pier was in full use. Potential long-term impacts could include accidental hooking of sea turtles or Gulf sturgeon increased fishing of EFH managed species, and an increase in human presence which could result in ongoing disturbances to terrestrial species. Additionally, lighting associated with the pier and/or parking area may disorient sea turtles which may potentially nest on nearby beaches. These impacts would be minimized by using appropriate lighting. Overall, long-term impacts would be adverse but minor.
Fort Morgan Peninsula Public Access Improvements	The installation of 11 public parking lots with dune walkovers to increase public access to Fort Morgan beaches would intersect with the Alabama beach mouse during the expected six-month construction period. Some, possibly all, of the proposed sites are located in an area covered under a HCP for the Alabama beach mouse and its critical habitat. There is also a possibility of proposed sites intersecting with sea turtle nesting sites for loggerhead, Kemp's riley, green, and leatherback sea turtles, as well as loggerhead critical habitat. <u>Short-term</u>: Construction of proposed amenities would cause temporary adverse impacts on protected species. Potential impacts would include soil compaction which could potentially impact Alabama beach mouse burrows. Compaction of sand on the ocean side of the primary dune may make the habitat less suitable for nesting sea turtles, however, the impacts would be minimal given the small footprint of the impact compared to the available beach habitat for nesting. Construction activities could also disturb nests that were laid the night before destroying eggs and compacting sand over the nests making it more difficult for hatchlings to emerge. However, monitoring for turtle crawls/nests each morning prior to the start of construction activities and marking the nests would allow construction activities to avoid any nests and minimize this potential impact. Other temporary adverse impacts would include temporary disturbances from noise and the presence of construction equipment and crews. This could temporarily disturb Alabama beach mice or migratory birds (including piping plover and red knot), if present during construction. Displaced individuals would likely return to the area upon completion of construction. Therefore, potential impacts on these species are anticipated to be adverse, but short term and minor. This alternative does not include in-water work, therefore marine species would not be affected while in the water, and no EFH would be affected. Overall, short-

Baldwin County Alternatives	Site-specific Impacts
	term impacts would be limited to the construction period and would be adverse but minor. Long-term: The increase in human presence could cause adverse impacts on protected species such as sea turtles, Alabama beach mice, and birds (including piping plover and red knot) over the long term. Visitation associated with the new facility would lead to increased pedestrian traffic and subsequent beach use. To help minimize impacts on sea turtles, birds, and Alabama beach mouse as a result of the increase in beach use, educational materials would be available at the new facilities. The installation of lighting associated with some proposed amenities could adversely impacts nesting sea turtles over the long term. Lighting systems that both directly and indirectly illuminate the beach can adversely impact sea turtles (USFWS 2004). Sea turtles tend to prefer dark beaches when selecting nest sites; therefore, an artificially illuminated beach can deter sea turtle nesting activity. Further, sea turtle hatchlings that emerge from the nest on an artificially illuminated beach can become disoriented and confused by the unnatural lighting and as a result may not be able to find the water. Hatchlings get disoriented on artificially illuminated beaches because they tend to move in the direction of the brightest light, especially when one light source is much brighter than the others. This condition is often created when improperly designed lighting systems are used. A properly designed lighting system minimizes direct and indirect illumination of the adjacent beach. A well-designed system incorporates the best available lighting technologies along with an effective light management program. Lights simply can be turned off during nesting season, or can be minimized in number and wattage. Recessing the lights or placing them behind structures, shielding the bulbs, lowering the fixtures to illuminate smaller targeted areas, and using timers and motion-detector switches to ensure lights are on only when needed are all effective measures to reduce the illumination of nesting beaches. The lighting systems that would be used for the illumination of the development proposed would be designed to minimize direct and indirect illumination of the beach (USFWS 2004) and would follow all of the stipulations set forth in the HCP. Furthermore, a light management program that requires dimming or totally extinguishing outdoor lighting that affects the beach during sea turtle nesting season would be implemented. Overall, long-term impacts on protected species would be adverse but minor. Because this project would occur entirely on land, there would be no long-term impacts on EFH, and no marine species would be affected while in the water.
Gulf Highlands Land Acquisition and Improvements	The Gulf Highlands project area consists of approximately 113 acres with over 2,700 feet of Gulf fronting beach and contains a variety of protected species as well as critical habitat for the Alabama beach mouse and loggerhead sea turtle (as described in Chapter 4). Construction of the proposed amenities, including a parking lot and boardwalk, could result in adverse impacts on these protected species and habitats. Short-term: Construction of the parking lot and boardwalk would result in temporary disturbances to protected species due to noise and the presence of construction equipment and crews. This could temporarily displace Alabama beach mice or migratory birds (including piping plover and red knot), if present

Baldwin County Alternatives	Site-specific Impacts
	during construction. Displaced individuals would likely return to the area upon completion of construction. Therefore, potential impacts on these species are anticipated to be adverse, but short term and minor. Compaction of soils during construction could potentially destroy some Alabama beach mouse burrows. Compaction of sand on the ocean side of the primary dune may make the habitat less suitable for nesting sea turtles, however, the impacts would be minimal given the small footprint of the impact compared to the available beach habitat for nesting. Construction activities could also disturb nests that were laid the night before destroying eggs and compacting sand over the nests making it more difficult for hatchlings to emerge. However, monitoring for turtle crawls/nests is completed each morning by USFWS and nonprofit organizations in the area. If a nest is found within the site, all construction activities would come to a halt until the nests hatch, approximately 60 days later. For this reason, construction would not be completed during nesting season (April to September). Additionally, construction work would be completed during the daytime to avoid the use of lights that can disorient turtles. Overall, these methods would minimize potential impacts resulting in minor, adverse, short-term impacts. This alternative does not include in-water work, therefore marine species would not be affected while in the water, and no EFH would be affected. <u>Long-term</u>: The increase in human presence could cause adverse impacts on protected species such as sea turtles, Alabama beach mice, and birds (including piping plover and red knot) over the long term. To help minimize impacts on sea turtles, birds, and Alabama beach mouse as a result of the increase in beach use, interpretive signage would be installed. Therefore, long-term impacts on protected species as a result of increased visitor use would be adverse but minor. Installation of the parking lot and boardwalk would remove some habitat within the project footprint that could be used by protected species. However, this areas would be small relative to the overall amount of habitat to be acquired. Therefore, these impacts would be adverse but minor over the long term. This alternative does not include in-water work, therefore marine species would not be affected while in the water, and no EFH would be affected. Adverse impacts associated with the construction of visitor amenities and subsequent increased visitation would be outweighed by the overall beneficial impacts on the species provided by the acquisition and conservation of the property. Acquiring the property would allow greater protection of ecologically sensitive areas that provide habitat for protected species and the ability to strategically manage passive recreational access to minimize additional impacts created by recreational access to sensitive habitat. It would also help protect the "night sky" by minimizing development that would otherwise increase nighttime lighting impacts on nesting sea turtles. Overall, the Gulf Highlands project would result in long-term minor adverse and beneficial impacts on protected species.
Laguna Cove Little Lagoon Natural Resource Protection	The proposed site at Laguna Cove consists of wetlands, maritime forest, dunes, and beach habitat and includes 26.25 acres of Alabama beach mouse non-critical habitat. Piping plover and red knot could potentially occur on the site during seasonal migrations, but are not likely to be present with regularity because the

Baldwin County Alternatives	Site-specific Impacts
	site does not contain large expanses of sandy shoreline. West Indian manatees are also known to enter Little Lagoon and may be present in waters adjacent to the proposed construction site. Construction of the proposed amenities, including a parking lot, boardwalk, and fishing pier could result in adverse impacts on protected species at the site. Short-term: Construction of the proposed amenities would result in temporary disturbances to protected species from noise and the presence of construction equipment and crews. This could temporarily displace Alabama beach mice or migratory birds (including piping plover and red knot), if present during construction. Construction of the fishing pier could disturb manatees if they are present in Little Lagoon. These species would likely avoid the area during construction, and displaced individuals would likely return to the area upon completion of construction. Therefore, these impacts are anticipated to be short term, minor, and adverse. Compaction of soils during construction could potentially destroy Alabama beach mouse burrows. Any affected Alabama beach mouse habitat would be restored to pre-project conditions, although dune features would likely be lost in some areas. Impacts during construction would be short term, minor and adverse because all measures would be taken to protect habitat during construction. EFH would also be affected during construction of the fishing pier. Impacts include noise, disturbance of benthic habitats, increased turbidity, and sedimentation, which could affect spawning. However, most protected species would likely avoid the area during construction. The construction footprint would be relatively small. Overall, short-term impacts on protected species would be adverse but minor. Long-term: Following construction, secondary effects associated with public use of the site and amenities may affect the Alabama beach mouse over the long term. Garbage or refuse left behind by visitors may attract predators, and lights may alter Alabama beach mouse nocturnal behavioral patterns. Although no studies have been performed on the impact of artificial illumination on Alabama beach mouse habitat, behavior of the nocturnal mouse could be altered or disturbed by direct and indirect illumination of its habitat. Studies have documented bright moonlight as an inhibitor to Alabama beach mouse activity (USFWS, 2004). The lighting systems for the parking lot areas and around walkways would be designed to minimize direct and indirect illumination of Alabama beach mouse habitat. Techniques to control light overspill from these areas would include the best available lighting technologies and effective light management programs. Once the facility is operational, increased visitation and pedestrian traffic may disturb protected species, including beach mice and migratory birds, over the long term. Boardwalks would safeguard against possible pedestrian impacts on protected species habitat. Overall, long-term impacts on protected species would be adverse and minor. Increased fishing activity associated with the proposed fishing pier located on the eastern side of the property would have minor, adverse impacts on EFH managed species over the long term. However, the abundance of these species and

Baldwin County Alternatives	Site-specific Impacts
	habitats in the area make it unlikely that increased fishing would lead to changes in populations. Fishing could also result in accidental bycatch of sea turtles. However, this is unlikely because of the location of the proposed fishing pier within Little Lagoon. Coordination with NMFS would occur prior to construction to ensure that impacts on protected species are avoided, minimized, or mitigated to the maximum extent practicable. Overall, impacts on protected species are expected to be adverse, but minor due to the small size of the alternative and the large area of adjacent habitat.

Table 5-19: Impacts on Protected Species from Mobile County Alternatives

Mobile County Alternatives	Site-specific Impacts
Dauphin Island Eco-Tourism and Environmental Education Area	The proposed site for the alternatives consists of approximately 90 acres of wetlands and water bottom habitat and 10 acres of upland habitat. The area contains EFH and may support a variety of protected species including gulf sturgeon and West Indian manatees. Piping plover, red knot, and wood storks may occasionally use the site as stopover habitat during seasonal migrations. Sea turtles are not likely to be present because the site is not located along Gulf-fronting waters. Construction of the proposed amenities, including but not limited to a parking lot, a boardwalk, and a fishing pier could result in adverse impacts on these protected species and habitats. <u>Short-term</u>: Construction of the proposed amenities would result in temporary disturbances to protected species due to noise and the presence of construction equipment and crews. This could temporarily displace migratory birds (including piping plover, red knot, and wood stork), if present during construction. Construction would be completed outside the winter season when piping plover may potentially be wintering in nearby habitats. Displaced individuals would likely use nearby habitats, and may return to the area upon completion of construction. Therefore, these impacts would be adverse, but short term and minor. Construction of the fishing pier and boardwalk would require in-water work which may temporarily displace Gulf sturgeon or manatees, if present in the area, as well as EFH for coastal migratory pelagics, shrimp, red drum, reef fish, and highly migratory species. Disturbances would include noise, disturbance of benthic habitats, increased turbidity, and sedimentation, which could impact spawning for EFH managed species. However, most protected species would likely avoid the area during construction. The construction footprint would be relatively small. Overall, short-term impacts on protected species would be adverse but minor. <u>Long-term</u>: Once the amenities are constructed, increased visitation and pedestrian traffic may disturb protected species, including migratory birds and manatees, over the long term. However, boardwalks would safeguard against possible pedestrian impacts on protected species habitats. Potential long-term, adverse impacts could include accidental hooking of Gulf sturgeon and increased fishing of EFH managed species. However, the abundance of these species and habitats in the area make it unlikely that increased fishing would lead to changes in populations. Accidental hooking of sea turtles is not

Mobile County Alternatives	Site-specific Impacts
	anticipated because it is unlikely that sea turtles would be present in the project area. Educational materials would be provided to help minimize impacts on species habitat. Overall long-term impacts would be adverse but minor.
Mid-Island Parks and Public Beach Improvements (Parcels A, B, and C)	The proposed alternative would result in the acquisition and management of approximately 8 acres of pristine beach and dune habitat that provides stopover and foraging habitats for protected birds, including the piping plover and red knot. The nearly 1,200 linear feet of beachfront (Parcel A) also provides non-critical nesting habitat for loggerhead and Kemp's ridley sea turtles. Parcels B and C consist of previously disturbed/fragmented habitat and are less likely to support protected species. Construction of the proposed amenities, including a boardwalk, parking area, and restroom facility, may result in impacts on protected species. Short-term: Construction of the proposed amenities on Parcels A, B, and C would result in temporary disturbances to protected species from noise and the presence of construction equipment and crews. This could temporarily displace migratory birds (including piping plover, red knot, and wood stork) or manatees, if present during construction. Displaced individuals would likely use nearby habitats, and may return to the area upon completion of construction. Construction of parking areas and restroom facilities on Parcels B and C would be less likely to affect protected species because these sites are previously disturbed/fragmented. Therefore, these impacts would be adverse, but short term and minor. Construction of dune walkovers on Parcel A would cause temporary disturbance of beach habitat which could affect nesting sites for loggerhead and/or Kemp's ridley sea turtles. However, BMPs would be implemented to avoid construction at night or during sea turtle nesting season. These BMPs would be outlined in the CBMPP and would be regularly inspected by a QCI. Other sea turtle species would not be affect because the alternative would not include in-water work. These impacts would be short term, minor, and adverse. Long-term: Once the amenities are constructed, increased visitation and pedestrian traffic may disturb protected species, including migratory birds, sea turtles, and manatees over the long term. However, boardwalks would safeguard against possible pedestrian impacts on protected species habitats. The installation of lighting associated with the parking lots on Parcels B and C is not likely to affect sea turtles because these parcels are not located near Gulf-fronting beaches, and lighting would not likely be visible from potential sea turtle nesting sites on Parcel A. The acquisition of Parcel A would prevent future development, resulting in long-term, beneficial impacts on protected species. Overall, long-term impacts are expected to be minor, adverse, and beneficial.

Mobile County Alternatives	Site-specific Impacts
Mid-Island Parks and Public Beach Improvements (Parcels B and C)	The proposed alternative would result the acquisition of 2 to 3 acres of previously disturbed/fragmented habitat located along the north side of Dauphin Island. These sites could serve as potential stopover habitat for protected birds, including piping plover and red knot. Manatees and Gulf sturgeon may be present in adjacent coastal waters. Construction of the proposed amenities, including two parking areas and a restroom facility may result in impacts on some protected species. Short-term: Construction of the proposed amenities on Parcels B and C could result in temporary disturbances to protected species from noise and the presence of construction equipment and crews. This could temporarily displace migratory birds (including piping plover and red knot) or manatees, if present during construction. Displaced individuals would likely use nearby habitats and may return to the area upon completion of construction. However, it is not likely that piping plover or red knot would frequently use these areas as stopover habitat, given their close proximity to developed areas. Therefore, adverse impacts would be short term and minor. This alternative would not affect sea turtles because Parcels B and C are located on the Mississippi sound side of Dauphin Island. No in-water work is proposed. Long-term: Upon completion, increased visitation and pedestrian traffic may disturb protected species, including migratory birds and manatees over the long term. Long-term impacts would be adverse and minor because of the small footprint of this alternative and the relatively low quality of habitat on Parcels B and C.

Table 5-20: Summary of Protected Species Compliance Determinations

	Status	Dauphin Island Eco-Tourism and Environmental Education Area	Fort Morgan Pier Rehabilitation	Laguna Cove Little Lagoon Natural Resource Protection	Mid-Island Parks and Public Beach Improvements	Gulf State Park Lodge and Associated Public Access Amenities *	Bayfront Park Restoration and Improvement E&D
ESA Species under NMFS jurisdiction							
Gulf sturgeon (estuarine or marine)	Threatened	NLAA	NLAA	NLAA	NE	NE	NE
Gulf sturgeon – CH	Designated	--	--	--	--	--	--
Loggerhead sea turtle – estuarine or marine	Threatened	LAA	LAA	LAA	NE	NE	NE
Loggerhead sea turtle – estuarine or marine – CH	Designated	--	--	--	--	--	--
Green sea turtle – estuarine or marine	Threatened	LAA	LAA	LAA	NE	NE	NE
Leatherback sea turtle – estuarine or marine	Endangered	NLAA	NLAA	NLAA	NE	NE	NE
Hawksbill sea turtle – estuarine or marine	Endangered	NLAA	NLAA	NLAA	NE	NE	NE
Kemp's ridley sea turtle – estuarine or marine	Endangered	LAA	LAA	LAA	NE	NE	NE
ESA Species under USFWS jurisdiction							
Loggerhead sea turtle – terrestrial	Threatened	NLAA	NLAA	NLAA	NLAA	NLAA	NE

	Status	Dauphin Island Eco-Tourism and Environmental Education Area	Fort Morgan Pier Rehabilitation	Laguna Cove Little Lagoon Natural Resource Protection	Mid-Island Parks and Public Beach Improvements	Gulf State Park Lodge and Associated Public Access Amenities *	Bayfront Park Restoration and Improvement E&D
Loggerhead sea turtle – terrestrial – CH	Designated	--	--	--	--	NDAM	--
Green sea turtle – terrestrial	Threatened	NLAA	NLAA	NLAA	NLAA	NLAA	NE
Kemp's ridley sea turtle – terrestrial	Endangered	NLAA	NLAA	NLAA	NLAA	NLAA	NE
West Indian manatee	Endangered	NLAA	NLAA	NLAA	NE	NE	NE
Piping plover	Threatened	NLAA	NLAA	NE	NLAA	NLAA	NE
Piping plover – CH	Designated	--	--	--	--	--	--
Red knot	Threatened	NLAA	NLAA	NE	NLAA	NLAA	NE
Wood stork	Threatened	NLAA	NLAA	NE	NLAA	NE	NE
Alabama beach mouse	Endangered	--	NE	LAA	--	LAA	--
Alabama beach mouse – critical habitat	Designated	--	--	--	--	DAM	--
Gopher tortoise	Threatened; Candidate**	--	NE	NE	--	NLAA	NE
Eastern indigo snake	Threatened	--	NE	NE	--	NE	NE
Alabama red-belly turtle	Endangered	--	NE	--	--	NE	NE

Notes: -- indicates the species or critical habitat does not occur in the project area

CH – critical habitat; NLAA – not likely to adversely affect; LAA – likely to adversely affect; NE – no effect; NDAM – no destruction or adverse modification; DAM – destruction or adverse modification

* Consultations and permits are current for this project.

**In Alabama, the gopher tortoise is threatened west of the Mobile and Tombigbee rivers and is a candidate for listing in the eastern part of its range.

5.2.4 Socioeconomic Environment

The CEQ regulations implementing NEPA state that when economic or social effects and natural or physical environmental effects are interrelated, the EIS discusses these effects on the human environment (40 CFR 1508.14). The CEQ regulations further state that the "human environment shall be interpreted comprehensively to include the natural and physical environment and the relationship of people with that environment." This socioeconomic analysis evaluates how elements of the human environment such as communities, employment, and tourism might be affected by the action alternatives.

Socioeconomics and Environmental Justice

EO 12898, "Federal Actions to Address Environmental Justice in Minority and Low-Income Populations," enables agencies to consider environmental and human health in low-income and minority areas. Strategies to reduce potential adverse impacts of projects should be implemented in communities that meet environmental justice criteria. This order requires lead agencies to evaluate impacts on minority or low-income populations during preparation of environmental and socioeconomic analyses of projects or programs that are proposed, funded, or licensed by federal agencies.

In addition to the direction referenced above, EO 12898 includes the following requirements:

- Each federal agency shall conduct its programs, policies, and activities that substantially affect human health or the environment in a manner that ensures that such programs, policies, and activities do not have the effect of excluding persons (including populations) from participation in, denying persons (including populations) the benefits of, or subjecting persons (including populations) to discrimination under such programs, policies, and activities, because of their race, color, or national origin.
- Each federal agency shall work to ensure that public documents, notices, and hearings relating to human health or the environment are concise, understandable, and readily accessible to the public.
- In addition, the presidential memorandum accompanying the executive order states that "(e)ach federal agency shall analyze the environmental effects, including human health, economic and social effects, of federal actions, including effects on minority communities and low-income communities, when such analysis is required by the NEPA of 1969."

According to CEQ (1997a) and USEPA guidelines (1998) established to assist federal and state agencies, a minority population is present in a project area if (1) the minority population of the affected area exceeds 50 percent, or (2) the minority-population percentage of the affected area is meaningfully greater than the minority-population percentage in the general population or other appropriate unit of geographic analysis. By the same rule, a low-income population exists if the project area consists of 50 percent or more people living below the poverty threshold, as defined by the U.S. Census Bureau, or is meaningfully greater than the poverty percentage of the general population or other appropriate unit of geographic analysis.

The CEQ guidance indicates that when agencies determine whether environmental effects are disproportionately high and adverse, they are to consider whether there is or would be an impact on the natural or physical environment (as defined by NEPA) that would adversely affect a minority population or low-income population. None of the published guidelines define the term "disproportionately high and adverse," but CEQ includes a non-quantitative definition stating that an effect is disproportionate if it appreciably exceeds the risk or rate to the general population (CEQ, 1997a).

The following is a discussion of the potential socioeconomic and environmental justice impacts from construction and operation of the proposed alternatives. This analysis considered race and ethnicity as well as per-capita income as it relates to the poverty level. The relevant demographic data were obtained from the U.S. Census Bureau. Data are presented at the county level to accommodate the geographic size of each portion of the study area.

In general, beneficial impacts on socioeconomics are anticipated from increases in construction employment as well as benefits to nearby businesses from increased visitation that would result from providing additional recreational amenities along the Alabama coast. Because none of the affected area populations within Baldwin County and Mobile County exceeded 50 percent minority, the minority population of the affected area is not meaningfully greater than the general population, and no more than 50 percent of the population living below the poverty threshold, environmental justice impacts are not anticipated.

Impacts on socioeconomics associated with the no action alternative are described in Table 5-21. Impacts from the alternatives in Baldwin and Mobile counties are described in Tables 5-22 and 5-23, respectively. For all projects that include land acquisition (Gulf Highlands Land Acquisition and Improvements, Little Lagoon Laguna Cove Natural Resources Protection, Dauphin Island Eco-Tourism and Environmental Education Area, and Mid-Island Parks and Public Beach Improvements – all parcels), use limitations would be put in place that could allow for future passive recreational use infrastructure on these sites. Should any additional passive public recreation infrastructure be built on these sites in the future (such as a land-based boardwalk, gazebo, benches, shade structures, and/or kayak launch) short- and long-term impacts on socioeconomics would be similar to those stated below for each project site.

Table 5-21: Impacts on Socioeconomics from the No Action Alternative

No Action Alternative	Site-specific Impacts
No Action Alternative	<u>For short- and long-term impacts for all project types</u>: No communities that would qualify for an environmental justice analysis exist within or in the vicinity of the project areas; as such, the projects would not have disproportionately adverse impacts on minority or low-income populations. <u>Short-term</u>: <u>Access Improvement Projects on Currently Publicly Owned Lands</u> Recreational amenities proposed for these sites would not move forward under the no action alternative. These sites would continue to operate in their current capacity, and no impacts on socioeconomics are expected. <u>Land Acquisition and Access Improvement Projects</u> Acquisition and construction of amenities with NRDA funds would not occur under the no action alternative. If acquisition does not occur under NRDA or with other Gulf restoration funding mechanisms and recreational amenities are not constructed, it is likely that these sites would be developed, which would result in short-term, beneficial impacts on socioeconomics as a result of employment generated during the construction phase. These short-term benefits would also be present in the event NRDA funds are used to fund access amenities. These impacts would be the same as those described for the Gulf Highlands Land Acquisition and Improvements, Laguna Cove Little Lagoon Natural Resource Protection, Mid-Island Parks and Public Beach Improvements, and Dauphin Island Eco-Tourism and

No Action Alternative	Site-specific Impacts
	Environmental Education Area sites, described below. If acquisition occurs, but no access amenities are constructed, the sites would continue to operate in their current capacity, and no additional impacts on socioeconomics would occur. Projects Currently Under Construction Under the no action alternative, construction of the lodge and conference center will continue, including elements that will affect socioeconomics as described in the Final Phase III ERP/PEIS (Section 11.7.6.9.1) (e.g., short-term, beneficial impacts from employment generated during construction). Additionally, some of the public amenities could be constructed, as described below, and would have similar beneficial impacts. Long-term: Access Improvement Projects on Currently Publicly Owned Lands Under the no action alternative, access improvements on currently publicly owned lands would not occur, and no long-term impacts on socioeconomics would occur. Land Acquisition and Access Improvement Projects Under the no action alternative, should developments go forward either as outside developments or NRDA funding access improvements, long-term socioeconomic benefits are expected to occur as a result of increased spending, visitation, and employment. Projects Currently Under Construction Under the no action alternative, construction of the lodge and conference center will continue, and long-term, beneficial socioeconomic impacts as a result of increased visitation, spending, and employment opportunities are expected. These benefits may also result from any additional public access amenities.

The City of Gulf Shores and has a 10.9 percent minority population, which is 5.9 percent lower than the county percentage of 16.8 percent. The percentage of the population below the poverty threshold in the City of Gulf Shores is 18.8 percent, which is 5 percentage points higher than the county poverty percentage of 13.8. All of the statistics for both the City of Gulf Shores and Baldwin County are well below the 50 percent thresholds for minority and poverty that would qualify them for environmental justice analyses. Therefore, environmental justice analyses were not performed for the alternatives in Baldwin County.

Table 5-22: Impacts on Socioeconomics from Baldwin County Alternatives

Baldwin County Alternatives	Site-specific Impacts
Gulf State Park Lodge and Associated Public Access Amenities Project	Short-term: Impacts related to socioeconomics and environmental justice from lodge and conference center construction are detailed in the Final Phase III ERP/PEIS (Section 11.7.6.9.1). The inclusion of additional amenities under this alternative would be consistent with that previous analysis. The construction of the Gulf State Park Lodge and Associated Public Access Amenities Project would lead to short-term employment opportunities for local residents and businesses and would result in short-term, beneficial socioeconomic impacts for the local communities.

Baldwin County Alternatives	Site-specific Impacts
	The City of Gulf Shores has a 10.9% minority population. This is 8.6% lower than the county minority population. The population below the poverty threshold in the City of Gulf Shores is 18.8 percent, which is higher than the county proportion of 13.8 percent. However, this is still much lower than the 50% threshold outlined in the USEPA (1998) guidelines that would warrant actions to alleviate environmental justice impacts. There would be no anticipated adverse social, economic, health, or environmental impacts on local communities due to the construction of this project. The adverse, environmental impacts are all expected to be minor with negligible air quality impacts. In addition, there would be short-term employment opportunities for local residents and businesses for the construction of the lodge and its facilities. Thus, the proposed project would result in short-term, beneficial impacts for the local communities. Long-term: Impacts related to socioeconomics and environmental justice from the lodge and conference center construction are detailed in the Final Phase III ERP/PEIS (Section 11.7.6.9.1). The inclusion of additional amenities under this alternative would be consistent with that previous analysis. Residents from nearby communities would benefit from the implementation of this project due to increased recreational and educational resources and activities at the park, including the provision of beach access, educational materials and programs offered, transportation within the park, and restrooms at the beach. Should the additional public amenities increase visitors to Gulf State Park, there could be benefits to some businesses in the general vicinity of the project area. Additionally, the operation of the lodge could result in long-term employment opportunities for local residents. With all these factors considered, the alternative would have long-term, beneficial socioeconomic impacts for local communities.
Fort Morgan Pier Rehabilitation	Short-term: Given that the implementation of the alternative could provide short-term employment for local residents, socioeconomic impacts on the community in the short term would be beneficial. The proposed alternative exists within the Fort Morgan State Historic Site boundaries. No existing communities that would qualify for an environmental justice analysis exists within, or in the vicinity of, the area. As such, the alternative would not have disproportionately adverse impacts on minority or low-income populations during the construction period. Long-term: The implementation of the proposed alternative would establish a safe fishing area for the local community. Returning fishing access to the area would allow the residents to reap recreational and economic benefits from the new pier. The reestablished pier and launch would also attract tourists to the west end of the Fort Morgan Peninsula, allowing small businesses along the peninsula to see an increase in activity. Thus, the long-term socioeconomic impacts of the proposed alternative would be beneficial for the local community.
Fort Morgan Peninsula Public Access Improvements	Short-term: Potential short-term employment benefits would occur for local residents from the construction of the parking lots, restrooms, and dune walkovers. Therefore, socioeconomic impacts would be minor and beneficial. All adverse impacts on the environment from this alternative would be minor and therefore would not pose a threat to human or environmental health for the local communities.

Baldwin County Alternatives	Site-specific Impacts
	Long-term: In the long term, this alternative is expected to increase visitation to the area. This would benefit businesses, such as lodging and restaurants, in the greater vicinity of the alternative. The alternative would also enable safe, free beach access along the peninsula to all visitors, including established parking facilities, which would discourage dangerous roadside parking, and safe beach access through the installation of dune walkovers. Furthermore, the enhanced protection of the walkovers through limiting informal beach access would allow for more stable dunes that would help protect local residents from storm surges. Therefore, the socioeconomic impacts on the local community would be long term and beneficial.
Gulf Highlands Land Acquisition and Improvements	Short-term: Potential short-term employment benefits would occur for local residents from the construction of the access improvements at the proposed alternative site. Therefore, short-term socioeconomic impacts would be minor and beneficial. Environmental impacts from the construction project are expected to be small and therefore there would be no expected harm incurred to environmental or human health from the implementation of this project with no effect. Long-term: Over the operational period of the proposed alternative, visitation to the area is expected to increase because of the enhanced public beach access that this alternative would provide. Increased visitation would benefit local businesses such as lodging and restaurants in the greater vicinity of the alternative. The newly established public access area would allow for safe, free beach access for all visitors over the walkover and an established parking area that would deter visitors from parking along the road. Given the expected economic boost from increased tourism and the increased safety features that the site would offer, the long-term socioeconomic impacts from the proposed alternative would be beneficial.
Laguna Cove Little Lagoon Natural Resource Protection	Short-term: No existing communities that would qualify for an environmental justice analysis are located in the vicinity of the alternative. The implementation of the alternative would provide construction jobs to the local residents during the construction period and result in short-term socioeconomic benefits. Long-term: The proposed alternative is expected to enhance recreational use in and around Laguna Cove by providing new recreational amenities, including a new boardwalk, bicycle path, nature walk, and kayak launch. These amenities would benefit the local population and visitors by providing new, free recreational opportunities. The kayak launch and boardwalk would provide safe access to Laguna Cove. The alternative would also increase visitation to the area, benefiting local businesses in the area. The long-term socioeconomic impacts from the alternative are expected to be beneficial.

The Town of Dauphin Island has a 7.4 percent minority population, which is 34.6 percent lower than the county proportion of 41.6 percent. The percent of population below the poverty threshold in the Town of Dauphin Island is 2.4 percent, which is 17.49 percentage points lower than the county poverty percentage of 19.89. All of the statistics for both the Town of Dauphin Island and Mobile County are below the 50 percent thresholds for minority and poverty that would qualify them for environmental justice analyses.

Table 5-23: Impacts on Socioeconomics from Mobile County Alternatives

Mobile County Alternatives	Site-specific Impacts
Dauphin Island Eco-Tourism and Environmental Education Area	Short-term: Construction of the proposed alternative would provide construction employment opportunities. The environmental impacts associated with alternative construction are expected to be localized and minor and would not pose a threat to environmental or human health. Hence, the short-term impacts are expected to be beneficial for the local community. Long-term: The proposed alternative is designed to provide opportunities for wildlife viewing, environmental education, and access to the waters of the Bayou Aloe, which were previously inaccessible. These eco-tourism attractions would enhance the local residents' recreational experience on Dauphin Island. They may also attract more visitation to the island, benefitting local businesses and stimulating the town's economy. As such, long-term impacts from the proposed alternative would be beneficial for the community. To assist with future project maintenance, a fee of $2 to $5 would be collected for use of the fishing pier. While the fee could result in some reduced access, it is not anticipated that it would result in a notable reduction in potential visitation. In addition, the maintenance of the pier would ensure that the recreational experience is sustained and the beneficial impacts on local businesses continue.
Mid-Island Parks and Public Beach Improvements (Parcels A, B, and C)	Short-term: Potential short-term employment benefits would occur for local residents during the construction period of the proposed alternative. Therefore, short-term socioeconomic impacts would be minor and beneficial. Based on the demographics of the area and the additional BMPs that would be implemented to ensure that all environmental impacts from construction would not threaten environmental or human health in the area, it is not anticipated that any environmental justice impacts would occur. Long-term: The proposed alternative is expected to increase visitation to the area. This would benefit businesses such as lodging and restaurants in the greater vicinity of the alternative. Furthermore, establishing parking facilities and dune walkovers would alleviate the problem of unwarranted beach access and provide a safe access area for the general public, while providing restroom facilities and showers would enhance sanitation and visitor experience. Thus, the long-term socioeconomic impacts from the proposed alternative are expected to be beneficial. To assist with future project maintenance, a fee of $3 would be collected for use of the parking lot. While the fee could result in some reduced access, it is not anticipated that it would result in a notable reduction in potential visitation. In addition, the maintenance of the facility would ensure that the recreational experience is sustained and the beneficial impacts on local businesses would continue.
Mid-Island Parks and Public Beach Improvements (Parcels B and C)	Short-term: The short-term impacts expected from this alternative are the same as those described above for the Mid-Island Parks and Public Beach Improvements (Parcels A, B, and C). Long-term: The expected long-term impacts as a result of the implementation of this proposed alternative are the same as those described above for the Mid-Island Parks and Public Beach Improvements (Parcels A, B, and C).

Cultural Resources

Table 5-24 describes the impacts on cultural resources associated with the no action alternative. Tables 5-25 and 5-26 describe the impacts on cultural resources associated with the alternatives in Baldwin and Mobile counties, respectively. For all projects that include land acquisition (Gulf Highlands Land Acquisition and Improvements, Little Lagoon Laguna Cove Natural Resources Protection, Dauphin Island Eco-Tourism and Environmental Education Area, and Mid-Island Parks and Public Beach Improvements – all parcels), use limitations would be put in place that could allow for future passive recreational use infrastructure on these sites. Should any additional passive public recreation infrastructure be built on these sites in the future (such as a land-based boardwalk, gazebo, benches, shade structures, and/or kayak launch) short- and long-term impacts on cultural resources would be similar to those stated below for each project site.

Table 5-24: Impacts on Cultural Resources from the No Action Alternative

No Action Alternative	Site-specific Impacts
No Action Alternative	Short- and Long-term: Access Improvement Projects on Currently Publicly Owned Lands The recreational amenities proposed for these alternatives would not move forward under the no action alternative. These sites would continue to operate in their current capacity, and no additional impacts on cultural resources would occur. Land Acquisition and Access Improvement Projects Acquisition and construction of amenities with NRDA funds would not occur under the no action alternative. If acquisition does not occur under NRDA or with other Gulf restoration funding mechanisms and recreational amenities are not constructed, it is likely that these sites would be developed and, depending on where new development is located, impacts on cultural resources could be short and long term and adverse if structures or archaeological resources are disturbed. If acquisition occurs with other Gulf restoration funding mechanisms, there would be no short-term impacts on cultural resources because these sites would remain in their current conditions, and any amenities developed would avoid cultural resources. Projects Currently Under Construction Under the no action alternative, construction of the lodge and conference center will continue. No impacts on cultural resources are expected to occur, as described in the Final Phase III ERP/PEIS (Section 11.7.6.9.3). The lodge and conference center are being constructed on a formerly developed area where all that remains of the previous development is a portion of the building foundation. The structures that formerly existed on the site were destroyed by Hurricane Ivan in 2004. A cultural resources assessment of the area was conducted in 2002, and no historic properties were identified during the assessment (Nielson, 2002). Any additional amenities that may be constructed are also in the area, resulting in no short- or long-term impacts on cultural resources under the no action alternative.

Baldwin County is rich in history and archaeology. The coast was a known gathering site for Native Americans and then became a frequently transited area by soldiers during the War of 1812 and the Civil

War. Fort Morgan State Historic Site preserves the battle-scarred remains of an important coastal fort that was built in 1813 and continued to serve as an important military post until World War II.

Table 5-25: Impacts on Cultural Resources from the Baldwin County Alternatives

Baldwin County Alternatives	Site-specific Impacts
Gulf State Park Lodge and Associated Public Access Amenities Project	Short- and long-term impacts on cultural resources, which are known to occur or could occur at the Gulf State Park Lodge and Associated Public Access Amenities Project site, are characterized in the Final Phase III Final ERP/PEIS (Section 11.7.6.9.3). The project area consists of approximately 22 acres, of which approximately 13 acres are currently disturbed by construction. The lodge is currently being constructed on a formerly developed area where all that was remaining of the previous development was a portion of the building foundation. The structures that formerly existed on the site were destroyed by Hurricane Ivan in 2004. A cultural resources assessment of the area was conducted in 2002, and no historic properties were identified during the assessment (Nielson, 2002). The beachfront area of the lodge has been impacted by numerous storms and hurricanes. During these events wind and wave action may have eroded and re-deposited any archaeological resources located along the beachfront. In addition, extensive construction activities associated with the original lodge occurred in the area. These events adversely impacted the integrity of any archaeological resources within the footprint of the proposed facility. Thus, it is unlikely that any buried intact archaeological sites, deposits, or artifacts are located in the area where the lodge and conference center are being established and are not expected to have any effect on historic properties The majority of the additional project elements (i.e., a tram stop at the lodge site, public educational programs, and a bicycle sharing program) would be located within the footprint of disturbance analyzed in the Final Phase III ERP/PEIS. Additional tram stops are not yet determined, but would be located on existing asphalt areas and would not disturb cultural resources. The pedestrian trail would be located outside the area of disturbance evaluated in the Final Phase III ERP/PEIS, but adjacent to the lodge site and would be expected to have conditions similar to the lodge site with no impacts on cultural resources.
Fort Morgan Pier Rehabilitation	The Fort Morgan pier is within Fort Morgan State Historic Site, the home of Fort Morgan, a Third System masonry fort built between 1819 and 1833. The fort played a significant role in the Battle of Mobile Bay in August 1864 and was used intermittently through the Spanish-American War, World War I, and World War II. It is likely that submerged cultural resources (sunken warships) are present, but not within the footprint of where the pier would be rehabilitated. The pier is a historic structure under the NRHP, and coordination with the State Historic Preservation Office is ongoing during this planning process. If any culturally or historically important resources are identified during project preparations or predevelopment surveys, such areas would be avoided during construction. A complete review of this alternative under Section 106 of the NHPA is ongoing and would be completed prior to any activities that would restrict consideration of measures to avoid, minimize or mitigate any adverse effects on historic properties located within the project area. This alternative would be implemented in accordance with all applicable laws and regulations concerning the protection of cultural and historic resources.

Baldwin County Alternatives	Site-specific Impacts
Fort Morgan Peninsula Public Access Improvements	If any culturally or historically important resources are identified during project preparations or predevelopment surveys, such areas would be avoided during construction. A complete review of this alternative under Section 106 of the NHPA is ongoing and would be completed prior to any activities that would restrict consideration of measures to avoid, minimize or mitigate any adverse effects on historic properties located within the project area. This alternative would be implemented in accordance with all applicable laws and regulations concerning the protection of cultural and historic resources.
Gulf Highlands Land Acquisition and Improvements	If any culturally or historically important resources are identified during project preparations or predevelopment surveys, such areas would be avoided during construction. A complete review of this alternative under Section 106 of the NHPA is ongoing and would be completed prior to any activities that would restrict consideration of measures to avoid, minimize or mitigate any adverse effects on historic properties located within the project area. This alternative would be implemented in accordance with all applicable laws and regulations concerning the protection of cultural and historic resources.
Laguna Cove Little Lagoon Natural Resource Protection	If any culturally or historically important resources are identified during project preparations or predevelopment surveys, such areas would be avoided during construction. A complete review of this alternative under Section 106 of the NHPA is ongoing and would be completed prior to any activities that would restrict consideration of measures to avoid, minimize or mitigate any adverse effects on historic properties located within the project area. This alternative would be implemented in accordance with all applicable laws and regulations concerning the protection of cultural and historic resources.

Alternative sites within Mobile County are restricted to Dauphin Island, a known popular site by Native Americans for fishing and gathering oysters and shellfish. Shell Mound Park preserves the remains of massive shell middens formed over the centuries from the refuse of these Indian meals. Part of the Alabama Coastal Birding Trail that contains ancient trees and rare plants is also within Shell Mound Park. The island later became a French settlement in the early 1700s before becoming part of the United States.

Table 5-26: Impacts on Cultural Resources from the Mobile County Alternatives

Mobile County Alternatives	Site-specific Impacts
Dauphin Island Eco-Tourism and Environmental Education Area	If any culturally or historically important resources are identified during project preparations or predevelopment surveys, such areas would be avoided during construction. A complete review of this alternative under Section 106 of the NHPA is ongoing and would be completed prior to any activities that would restrict consideration of measures to avoid, minimize or mitigate any adverse effects on historic properties located within the project area. This alternative would be implemented in accordance with all applicable laws and regulations concerning the protection of cultural and historic resources.

Mobile County Alternatives	Site-specific Impacts
Mid-Island Parks and Public Beach Improvements (Parcels A, B, and C)	If any culturally or historically important resources are identified during project preparations or predevelopment surveys, such areas would be avoided during construction. A complete review of this alternative under Section 106 of the NHPA is ongoing and would be completed prior to any activities that would restrict consideration of measures to avoid, minimize or mitigate any adverse effects on historic properties located within the project area. This alternative would be implemented in accordance with all applicable laws and regulations concerning the protection of cultural and historic resources.
Mid-Island Parks and Public Beach Improvements (Parcels B and C)	If any culturally or historically important resources are identified during project preparations or predevelopment surveys, such areas would be avoided during construction. A complete review of this alternative under Section 106 of the NHPA is ongoing and would be completed prior to any activities that would restrict consideration of measures to avoid, minimize or mitigate any adverse effects on historic properties located within the project area. This alternative would be implemented in accordance with all applicable laws and regulations concerning the protection of cultural and historic resources.

Infrastructure

The proposed alternative sites in Baldwin County are all located along the Gulf Coast or along Bon Secour Bay. Short-term impacts for all alternatives would be similar. Construction of the proposed alternatives would generate very little demand on utilities for all alternative elements. Demand on electricity would be limited to construction equipment and is not expected to exceed existing capacity. Readily available fossil fuel would power most construction equipment. Water required for construction processes and for workers' needs would be minimal and would be well within the capacity of existing supplies. Sewage generated by construction workers would be treated offsite via "porta-potties." No impacts on utilities from construction of the proposed alternatives are anticipated because of the minimal demand during construction. Impacts on existing infrastructure during construction would be short term, minor, and adverse for all alternatives under consideration in this RP/EIS. Table 5-27 describes the impacts on infrastructure associated with the no action alternative. Tables 5-28 and 5-29 address the impacts at each alternative in Baldwin County and Mobile counties, respectively. For all projects that include land acquisition (Gulf Highlands Land Acquisition and Improvements, Little Lagoon Laguna Cove Natural Resources Protection, Dauphin Island Eco-Tourism and Environmental Education Area, and Mid-Island Parks and Public Beach Improvements – all parcels), use limitations would be put in place that could allow for future passive recreational use infrastructure on these sites. Should any additional passive public recreation infrastructure be built on these sites in the future (such as a land-based boardwalk, gazebo, benches, shade structures, and/or kayak launch) short- and long-term impacts on infrastructure would be similar to those stated below for each project site. Additionally, these types of passive recreational amenities are not expected to require additional capacity from local utilities.

Table 5-27: Impacts on Infrastructure from the No Action Alternative

No Action Alternative	Site-specific Impacts
No Action Alternative	Short-term: *Utilities* Access Improvement Projects on Currently Publicly Owned Lands The recreational amenities proposed for these sites would not move forward under the no action alternative. These sites would continue to operate in their current capacity, and no additional impacts would occur. Land Acquisition and Access Improvement Projects Acquisition and construction of amenities with NRDA funds would not occur under the no action alternative. If acquisition does not occur under NRDA or with other Gulf restoration funding mechanisms and recreational amenities are not constructed, it is likely that these sites would be developed and, depending on the size and type of development, the impacts on utilities from construction activities could vary in duration and intensity. Projects Currently Under Construction Under the no action alternative, construction of the lodge and conference center will continue, including elements that will affect utilities. These impacts will be the same as those described in the Final Phase III ERP/PEIS (Section 11.7.6.9.4). Additionally, some of the public access amenities associated with the lodge could be constructed. Therefore, the project is expected to result in short-term, minor impacts on utilities from construction activities, as further described below. *Traffic and Transportation* Access Improvement Projects on Currently Publicly Owned Lands At these sites, if access improvements are not constructed, no short-term impacts would occur. Land Acquisition and Access Improvement Projects If acquisition does not occur under NRDA or with other Gulf restoration funding mechanisms, it is likely that these sites would be developed and, depending on the size and type of development, the impacts on traffic from construction activities could vary in duration and intensity. Projects Currently Under Construction Under the no-action alternative, construction of the lodge and conference center will continue. Related traffic will have minor, adverse impacts as detailed in the Final Phase III ERP/PEIS (Section 11.7.6.9.4), but these impacts will be temporary. Any infrastructure impacts from the associated amenities that may be developed are included in these impacts. Long-term: *Utilities* Access Improvement Projects on Currently Publicly Owned Lands The recreational amenities proposed for these sites would not move forward under the no action alternative. These sites would continue to operate in their current capacity, and no additional impacts would occur.

No Action Alternative	Site-specific Impacts
	Land Acquisition and Access Improvement Projects Acquisition and construction of amenities with NRDA funds would not occur under the no action alternative. If acquisition does not occur under NRDA or with other Gulf restoration funding mechanisms, it is likely that these sites would be developed, and the impacts on utilities from the operation of new development could vary in duration and intensity. If acquisition occurs with other Gulf restoration funding mechanisms, impacts on utilities would be long term, minor, and adverse because any infrastructure that would be placed on these sites would be expected to be minimal. Projects Currently Under Construction Under the no action alternative, construction of the lodge and conference center will continue, including elements that will affect utilities as described in the Final Phase III ERP/PEIS (Section 11.7.6.9.4). Additionally, some of the public access amenities associated with the lodge and conference center could be constructed. Therefore, the project is expected to result in long-term, minor impacts on utilities from the operation of the lodge and conference center, as further described below. It is unknown exactly how the alternative funding options may influence the design and schedule of the project, including conservation measures and demands on utilities. *Traffic and Transportation* Long-term: Access Improvement Projects on Currently Publicly Owned Lands Under the no action alternative, while formal access improvements would not be made, these sites would continue to be accessed informally and impacts on traffic would continue to be long term, minor, and adverse. Land Acquisition and Access Improvement Projects Acquisition and construction of amenities with NRDA funds would not occur under the no action alternative. If acquisition does not occur under NRDA or with other Gulf restoration funding mechanisms, it is likely that these sites would be developed and result in an increase in traffic around these developments. The level of these impacts would vary depending on the type and intensity of development. If acquisition occurs with other Gulf restoration funding mechanisms, long-term impacts on traffic and transportation would be minor and adverse because the sites could see an increase in visitation. Projects Currently Under Construction Under the no action alternative, construction of the lodge and conference center will continue. A traffic study conducted as part of the analysis for the Gulf State Park Enhancement Project under the Final Phase III ERP/PEIS (Section 11.7.6.9.4) noted that impacts on traffic and transportation as a result of the proposed project will be long term, moderate, and adverse because LOS will stay the same or slightly change for all approaches (USDOI, 2014). While the LOS may change slightly for some approaches, these approaches will still operate at an acceptable LOS (A-E), and no failing LOS will be created from the operation of the lodge and conference center. These impacts would be further minimized by mitigation measures, including implementing a tram system to connect the different elements of Gulf State Park,

No Action Alternative	Site-specific Impacts
	encouraging ride sharing, working with other lodging establishments to provide shuttle service, establishing check out/check in times to differ from peak traffic times, and adoption of specific time-of-day plans for the signal system or the installation of an adaptive signal system, among other appropriate traffic mitigation measures. The addition of the tram system would minimize these impacts, possibly reducing the adverse impact to minor; however, it is not known if this element would be funded through alternative funding sources.

Table 5-28: Impacts on Infrastructure from the Baldwin County Alternatives

Baldwin County Alternatives	Site-specific Impacts
Gulf State Park Lodge and Associated Public Access Amenities Project	Long-term: *Water and Energy* Impacts on infrastructure, including energy and water which are known to occur or may potentially occur at the Gulf State Park Lodge and Associated Public Access Amenities Project site are characterized in the Final Phase III ERP/PEIS (Section 11.7.6.9.4). Due to the design and scale of the proposed project, the facilities would place minimal demands on utilities. The construction of the facility and amenities would be up to LEED Gold and SITES Platinum standards and would include resource conservation components such as recycling and water and energy conservation. These conservation features include reflective surfaces to reduce heat absorption and reduce the amount of energy required for space cooling, use of pervious surfaces to reduce energy load associated with wastewater treatment, and fixtures that conserve water, such as low-flush toilets and low-flow showers. Additional measures include high-efficiency HVAC systems and lighting systems. During the Final Phase III ERP/PEIS, an analysis of utilities was conducted and it was determined that adequate capacity existed for the projected increased demand (USDOI, 2014). It is anticipated that there would be adequate capacity for the new demand on the utilities services and that the conservation measures result in long-term minor adverse impacts. *Traffic and Transportation* A traffic study, conducted as part of the analysis for the Gulf State Park Enhancement Project under the Final Phase III ERP/PEIS (Section 11.7.6.9.4), noted impacts on traffic and transportation as a result of the proposed project would be long term, moderate, and adverse because LOS would stay the same or slightly change for all approaches (DWH Trustees, 2014). While the LOS may change slightly for some approaches, these would still operate at an acceptable LOS (A-E), and no failing LOS would be created from the operation of the lodge. These impacts would be further minimized by implementing mitigation measures such as establishing a tram system to connect the different elements of Gulf State Park, encouraging ride sharing, working with other lodging establishments to provide shuttle service, establishing check out/check in times to differ from peak traffic times, and adoption of specific time-of-day plans for the signal system or the installation of an adaptive signal system, among other appropriate traffic mitigation measures. The addition of the tram system would minimize these impacts, possibly reducing the adverse impact to minor. While the roadway use in the vicinity of the project is expected to

Baldwin County Alternatives	Site-specific Impacts
	increase, it is not expected that this use would result in additional maintenance issues beyond normal wear and tear. The majority of the additional project elements under this alternative (i.e., a pedestrian walkway from the pier to the lodge, a tram stop at the lodge site, public educational programs, and a bicycle sharing program) would be located within or adjacent to the footprint of disturbance analyzed in the Final Phase III ERP/PEIS and would be included in the impacts discussed above.
Fort Morgan Pier Rehabilitation	*Water and Energy* Long-term: One single line runs across the parking lot of the existing pier to power a light that stands between the pier and the boat ramp on the parking lot. The proposed replacement pier and dock would include improved lighting but no other infrastructure that would place additional capacity demands on the system. Lights already operate at the site and it is assumed that the local utility has capacity to address any improvements. Because there would be adequate capacity for the minimal increase on electrical services and because there are no other utilities impacts, there would be no long-term impacts on infrastructure. *Traffic and Transportation* Short-term: Construction related traffic would have minor adverse impacts but would be temporary for the duration, which is estimated to be six months. The movement of construction equipment and materials has the potential to affect traffic volumes during specified periods. No roadways are anticipated to be closed as part of the construction process. The construction of the proposed project may have short-term, localized, and minor adverse impacts on traffic patterns because the presence of construction vehicles on affected roadways would likely slow the movement of other roadway users. However, because of current traffic volumes on affected roadways and lane configuration, adverse impacts are more likely to result in an inconvenience to drivers rather than an actual disruption in travel patterns. Because there would be negligible increase in local daily traffic volumes during construction, impacts would be adverse, but short term and minor. Long-term: It is anticipated that traffic would be similar to the previous levels before the pier was closed in 2014. Under these levels, no traffic issues were experienced and it is anticipated that none would occur once the site is reopened. Any long-term, adverse impacts on traffic and transportation would be negligible.
Fort Morgan Peninsula Public Access Improvements	*Water and Energy* Long-term: Trenching to provide lighting at the access points would be required. Once installed, the required lighting is anticipated to place little additional demand on the existing systems. Restrooms would utilize existing capacity from the public utility as well. Because there would be adequate capacity for the minimal increases on electrical and water/waste water services, no impacts on infrastructure are expected. *Traffic and Transportation* Short-term: Construction related traffic would have minor adverse impacts but would be temporary for the duration, which is estimated to be six months. The movement of construction equipment and materials has the potential to affect traffic volumes during specified periods. No roadways are anticipated to be closed

Baldwin County Alternatives	Site-specific Impacts
	as part of the construction process. The construction of the proposed project may have short-term, localized, and minor adverse impacts on traffic patterns because the presence of construction vehicles on affected roadways would likely slow the movement of other roadway users. However, because of current traffic volumes on affected roadways and lane configuration, adverse impacts are more likely to result in an inconvenience to drivers rather than an actual disruption in travel patterns. Because there would be negligible increase in local daily traffic volumes during construction, impacts would be adverse, but short term and minor. Long-term: There would be localized traffic increase at the 11 access points and parking spaces. As these sites are already accessed informally, it is not expected that the level of traffic would change beyond a minimal level and any long-term adverse impacts on traffic would be minor. Beneficial impacts would also result from providing formalized parking, which would remove current on street parking that is occurring and improve safety conditions along the roadway.
Gulf Highlands Land Acquisition and improvements	*Water and Energy* Long-term: Trenching to provide lighting at the access points would be required. Once installed, the required lighting is anticipated to place little additional demand on the existing systems. Because there would be adequate capacity for the minimal increase on electrical service, no impacts on infrastructure are expected. *Traffic and Transportation* Short-term: Construction related traffic would have minor adverse impacts but would be temporary for the duration, which is estimated to be six months. The movement of construction equipment and materials has the potential to affect traffic volumes during specified periods. No roadways are anticipated to be closed as part of the construction process. The construction of the proposed project may have short-term, localized, and minor adverse impacts on traffic patterns because the presence of construction vehicles on affected roadways would likely slow the movement of other roadway users. However, because of current traffic volumes on affected roadways and lane configuration, adverse impacts are more likely to result in an inconvenience to drivers rather than an actual disruption in travel patterns. Because there would be negligible increase in local daily traffic volumes during construction, impacts would be adverse, but short term and minor. Long-term: There would be localized traffic increase from vehicles accessing the parking and beach access. This type of use and traffic already occurs in this areas and it is not expected that the level of traffic would change beyond a minimal level and any long-term impacts adverse to traffic would be minor.
Laguna Cove Little Lagoon Natural Resource Protection	*Water and Energy* Long-term: Trenching to provide lighting at the access points would be required. Once installed, the required lighting is anticipated to place little additional demand on the existing systems. Restrooms would utilize existing capacity from the public utility as well. Because there would be adequate capacity for the minimal increases on electrical and water/waste water services, no impacts on infrastructure are expected.

Baldwin County Alternatives	Site-specific Impacts
	Traffic and Transportation Short-term: Construction related traffic would have minor adverse impacts but would be temporary for the duration, which is estimated to be six-month. The movement of construction equipment and materials has the potential to affect traffic volumes during specified periods. No roadways are anticipated to be closed as part of the construction process. The construction of the proposed project may have short-term, localized, and minor adverse impacts on traffic patterns because the presence of construction vehicles on affected roadways would likely slow the movement of other roadway users. However, because of current traffic volumes on affected roadways and lane configuration, adverse impacts are more likely to result in an inconvenience to drivers rather than an actual disruption in travel patterns. Because there would be negligible increase in local daily traffic volumes during construction, impacts would be adverse, but short term and minor. Long term: There would be localized traffic increase from vehicles accessing the parking and new site amenities. This type of use and traffic already occurs in this areas and it is not expected that the level of traffic would change beyond a minimal level and any long-term adverse impacts on traffic would be minor.

The proposed alternative sites in Mobile County are all located in Dauphin Island. Although the permanent population is small, the infrastructure on the island must be robust enough to support the population increase that occurs every summer.

Table 5-29: Impacts on Infrastructure from the Mobile County Alternatives

Mobile County Alternatives	Site-specific Impacts
Dauphin Island Eco-Tourism and Environmental Education Area	*Water and Energy* Long-term: Trenching to provide lighting at the access points would be required. Once installed, the required lighting is anticipated to place little additional demand on the existing systems. Restrooms would utilize existing capacity from the public utility as well. Because there would be adequate capacity for the minimal increases on electrical and water/waste water services, no impacts on infrastructure are expected. *Traffic and Transportation* Short-term: Construction related traffic would have minor adverse impacts but would be temporary for the duration, which is estimated to be one to two years. The movement of construction equipment and materials has the potential to affect traffic volumes during specified periods. No roadways are anticipated to be closed as part of the construction process. The construction of the proposed project may have short-term, localized, and minor adverse impacts on traffic patterns because the presence of construction vehicles on affected roadways would likely slow the movement of other roadway users. However, because of current traffic volumes on affected roadways and lane configuration, adverse impacts are more likely to result in an inconvenience to drivers rather than an actual disruption in travel patterns.

Mobile County Alternatives	Site-specific Impacts
	Because there would be negligible increase in local daily traffic volumes during construction, impacts would be adverse, but short term and minor. Long-term: There would be localized traffic increase from vehicles accessing the parking and site amenities. This type of use and traffic already occurs in this areas and it is not expected that the level of traffic would change beyond a minimal level and any long-term adverse impacts on traffic would be minor.
Mid-Island Parks and Public Beach Improvements (Parcels A, B, and C)	*Water and Energy* Long-term: Trenching to provide lighting at the access points would be required. Once installed, the required lighting is anticipated to place little additional demand on the existing systems. Restrooms would utilize existing capacity from the public utility as well. Because there would be adequate capacity for the minimal increases on electrical and water/waste water services, no impacts on infrastructure are expected. *Traffic and Transportation* Short-term: Construction related traffic would have minor adverse impacts but would be temporary for the duration, which is estimated to be four to six months. The movement of construction equipment and materials has the potential to affect traffic volumes during specified periods. No roadways are anticipated to be closed as part of the construction process. The construction of the proposed project may have short-term, localized, and minor adverse impacts on traffic patterns because the presence of construction vehicles on affected roadways would likely slow the movement of other roadway users. However, because of current traffic volumes on affected roadways and lane configuration, adverse impacts are more likely to result in an inconvenience to drivers rather than an actual disruption in travel patterns. Because there would be negligible increase in local daily traffic volumes during construction, impacts would be adverse, but short term and minor. Long-term: There would be localized traffic increase from vehicles accessing the parking and beach access. This type of use and traffic already occurs in this areas and it is not expected that the level of traffic would change beyond a minimal level and any long-term adverse impacts on traffic would be minor. Beneficial impacts would also result from providing formalized parking, which would remove current on street parking that is occurring and improve safety conditions along the roadway.
Mid-Island Parks and Public Beach Improvements (Parcels B and C)	*Water and Energy* Long-term: Trenching to provide lighting at the access points would be required. Once installed, the required lighting is anticipated to place little additional demand on the existing systems. Restrooms would utilize existing capacity from the public utility as well. Because there would be adequate capacity for the minimal increases on electrical and water/waste water services, no impacts on infrastructure are expected. *Traffic and Transportation* Short-term: Construction related traffic would have minor adverse impacts but would be temporary for the duration, which is estimated to be four to six months. The movement of construction equipment and materials has the potential to affect traffic volumes during specified periods. No roadways are anticipated to be closed as part of the construction process. The construction of the proposed project may

Mobile County Alternatives	Site-specific Impacts
	have short-term, localized, and minor adverse impacts on traffic patterns because the presence of construction vehicles on affected roadways would likely slow the movement of other roadway users. However, because of current traffic volumes on affected roadways and lane configuration, adverse impacts are more likely to result in an inconvenience to drivers rather than an actual disruption in travel patterns. Because there would be negligible increase in local daily traffic volumes during construction, impacts would be adverse, but short term and minor. Long term: There would be localized traffic increase from vehicles accessing the parking and beach access. This type of use and traffic already occurs in this areas and it is not expected that the level of traffic would change beyond a minimal level and any long-term adverse impacts on traffic would be minor. Beneficial impacts would also result from providing formalized parking, which would remove current on street parking that is occurring and improve safety conditions along the roadway.

Land and Marine Management

Impacts on land and marine management from the proposed alternatives would generally be beneficial as a result of increased recreational opportunities either from enhancements to visitor amenities or as a result of increased public access to sites. Short-term, adverse impacts could occur as a result of access disruptions to public recreational areas for construction activities. Impacts on marine management are not anticipated; however, all local ordinances and permitting requirements would be adhered to prior to construction. Potential impacts on land and marine management associated with the no action alternative are described in Table 5-30. Impacts on land and marine management associated with the alternatives proposed for Baldwin and Mobile counties are described in Tables 5-31. And 5-32, respectively. For all projects that include land acquisition (Gulf Highlands Land Acquisition and Improvements, Little Lagoon Laguna Cove Natural Resources Protection, Dauphin Island Eco-Tourism and Environmental Education Area, and Mid-Island Parks and Public Beach Improvements – all parcels), use limitations would be put in place that could allow for future passive recreational use infrastructure on these sites. Should any additional passive public recreation infrastructure be built on these sites in the future (such as a land-based boardwalk, gazebo, benches, shade structures, and/or kayak launch) short- and long-term impacts on land and marine management would be similar to those stated below for each project site.

Table 5-30: Impacts on Land and Marine Management from the No Action Alternative

No Action Alternative	Site-specific Impacts
No Action Alternative	Short-term: Access Improvement Projects on Currently Publicly Owned Lands The recreational amenities proposed for these alternative sites would not move forward under the no action alternative. These sites would continue to operate in their current capacity, and no additional impacts would occur. Land Acquisition and Access Improvement Projects Land acquisition and construction of amenities with NRDA funds would not occur under the no action alternative. If acquisition does not occur under NRDA or with other Gulf restoration funding mechanisms and recreational amenities are not

No Action Alternative	Site-specific Impacts
	constructed, it is likely that these sites would be developed, resulting in short-term impacts on land and marine management from construction activities that would vary based on the intensity of development. If acquisition occurs with other Gulf restoration funding mechanisms, these sites would remain in their current conditions and beneficial impacts could occur because the lands would be preserved. <u>Projects Currently Under Construction</u> Under the no action alternative, construction of lodge and conference center will continue, including elements that will affect land and marine management as described in the Final Phase III ERP/PEIS (Section 11.7.6.9.5). Additionally, some of the public access amenities associated with the lodge could be constructed, as described above. Therefore, the project is expected to result in short-term, minor impacts on land and marine management. <u>Long-term</u>: <u>Access Improvement Projects on Currently Publicly Owned Lands</u> Under the no action alternative, no long-term impacts on land and marine management are expected because access improvements on currently publicly owned lands would not be constructed and the sites would be maintained in their current conditions. <u>Land Acquisition and Access Improvement Projects</u> Land acquisition and construction of amenities with NRDA funds would not occur under the no action alternative. If acquisition does not occur under NRDA or with other Gulf restoration funding mechanisms, it is likely that these sites would be developed, resulting in long-term, adverse impacts on land and marine management from the operation of that new development. The scale of these impacts would vary based on the intensity of development. If acquisition occurs with other Gulf restoration funding mechanisms and no amenities are developed, these sites would remain in their current conditions and beneficial impacts could occur because the lands would be preserved. <u>Projects Currently Under Construction</u> Under the no action alternative, construction of the lodge and conference center will continue and will temporarily change the land use at the various sites from disturbed, but undeveloped, land to a construction zone. These impacts are described in the Final Phase III ERP/PEIS (Section 11.7.6.9.5). Additionally, some of the public access amenities associated with the lodge could be constructed, as described below. Therefore, long-term, adverse impacts on land and marine management will be minor because use will change but will be compatible with its surroundings.

Table 5-31: Impacts on Land and Marine Management from the Baldwin County Alternatives

Baldwin County Alternatives	Site-specific Impacts
Gulf State Park Lodge and Associated Public Access Amenities Project	Short-term: Impacts on land and marine management, which are known to occur or may potentially occur at the Gulf State Park Lodge and Associated Public Access Amenities Project site, are characterized in the Final Phase III ERP/PEIS (Section 11.7.6.9.5). The project area consists of approximately 22 acres, of which approximately 13 acres are currently disturbed by construction. During construction, land use at the lodge site is being changed from disturbed, but undeveloped land to a construction zone. Thus, land formerly available for informal use would no longer be available. As a result, construction of the proposed project will result in adverse but short-term and minor impacts on land use. After construction of the project, the land will no longer be a construction zone. Changes in land use during construction would be temporary and would not require a zoning change or amendment or affect overall use and management beyond the local area. The majority of the additional project elements (i.e., a tram stop at the lodge site, public educational programs, and a bicycle sharing program) would be located within the footprint of disturbance analyzed in the Final Phase III ERP/PEIS. Additional tram stops along the rest of the route have not yet been determined, but would be located on existing asphalt areas and would not change land use or management. The pedestrian trail would be located outside the area of disturbance evaluated in the Final Phase III ERP/PEIS, but is adjacent to the site and contains the same land and marine management considerations as the original project area. Long Term: Impacts on land and marine management, which are known to occur or may potentially occur at the Gulf State Park Lodge and Associated Public Access Amenities Project site, are characterized in the Final Phase III ERP/PEIS (Section 11.7.6.9.5). The park is public property of the State of Alabama and throughout the years has proven to be a popular tourist destination. Implementation of the proposed project would be consistent with prior usage at Gulf State Park. An application for a coastal zone use permit was submitted to the ADEM in June 2013. On August 14, 2013, ADEM provided a non-regulated use permit for the reestablished lodge, indicating that the proposed enhancements would be consistent with provisions of the CZMA. Because all elements of the proposed project are consistent with the CZMA, no impacts are anticipated, and this topic is not evaluated in detail. The majority of the additional project elements (i.e., a tram stop at the lodge site, public educational programs, and a bicycle sharing program) would be located within the footprint of disturbance analyzed in the Final Phase III ERP/PEIS. Additional tram stops along the rest of the route have not yet been determined, but would be located on existing asphalt areas and would not change land use or management. The pedestrian trail would be located outside the area of disturbance evaluated in the Final Phase III ERP/PEIS but would be adjacent to the site and would contain the same land and marine management considerations as the original project area.
Fort Morgan Pier Rehabilitation	Short-term: Some short-term, minor, adverse impacts could result during construction as a result of potential site closures and subsequent reduced access to existing recreational opportunities from the presence of construction equipment, materials staging, and other associated construction activities. These impacts would last only through the construction period.

Baldwin County Alternatives	Site-specific Impacts
	Long-term: Implementation of the proposed alternative would not disrupt and would be consistent with existing site land use. The rehabilitation of the pier would improve public access to the site, restore uses previously available, and enhance recreational opportunities, including fishing, wildlife observation, and beach and boating activities. It would also be in adherence with the zoning of the site as outdoor recreation. In addition, existing land uses in the vicinity of the site would not be disturbed, and the proposed rehabilitation and enhancements would be comparable with existing and surrounding zoning. Therefore, long-term impacts on land use from the alternative would be beneficial. No long-term impacts on the coastal zone or marine management are anticipated because all future uses would be consistent with existing management and use. Although no significant adverse impacts are expected to the coastal zone, the alternative would require a determination of consistency with the CZMA.
Fort Morgan Peninsula Public Access Improvements	Short-term: Short-term, minor, adverse impacts could occur as a result of construction activities and equipment and materials staging. No impacts on the coastal zone or the marine management of the area are anticipated because all future uses would be consistent with existing management and use. Although no significant adverse impacts are expected to the coastal zone, the alternative would require a determination of consistency with the CZMA. Long-term: Impacts on land and marine management would be long term and beneficial as a result of enhanced public access and recreational opportunities, consistency with zoning regulations of the site as outdoor recreation, and consistency with existing site land uses. Some surrounding site land use and zoning is light residential; however, the alternative sites are currently accessible to the public and, as such, the proposed enhancements would provide greater guidance and structure to reaching the sites, resulting in long-term, beneficial impacts.
Gulf Highlands Land Acquisition and Improvements	Short-term: Short-term, minor, adverse impacts from construction and equipment and materials for enhancements would occur, similar to those noted above. Long-term: Impacts on land use would be similar to those described below for the Laguna Cove Little Lagoon Natural Resource Protection alternative with long-term, beneficial impacts as a result of increased habitat protection, public access, and recreational opportunities. In addition, the use of the site as a public beach would be consistent with site zoning as outdoor recreation and would be consistent and would not degrade surrounding land uses. When compared to other potentially imminent uses of the site as residential or commercial development, the proposed use of the site for conservation would offer additional long-term, beneficial impacts in terms of greater consistency with existing land use and local ordinances as well as greater potential for public access to recreational opportunities. No long-term impacts on the coastal zone or marine management are anticipated because all future uses would be consistent with existing management and use. Though no significant adverse impacts are expected to the coastal zone, the alternative would require a determination of consistency with the CZMA.

Baldwin County Alternatives	Site-specific Impacts
Laguna Cove Little Lagoon Natural Resource Protection	Short-term: Short-term, minor, adverse impacts from construction and equipment and materials for enhancements would occur, similar to those noted above. Long-term: The proposed alternative would be consistent with existing and surrounding land uses, particularly the Bon Secour National Wildlife Refuge, and would protect coastal wetlands and could provide habitat for threatened and endangered species. The proposed uses are allowed by right under the current zoning (Bauer, 2017). Land management of the Bon Secour National Wildlife Refuge is directed and guided by the 2005 Bon Secour National Wildlife Refuge Comprehensive Conservation Plan; however, management of the refuge is limited to its boundaries and does not affect outside land use and outside land use management and would not have any impacts on the proposed alternative. Additionally, the implementation of the proposed alternative would provide additional public access to Little Lagoon and, by preserving habitat and providing a parking lot and boardwalk, it would provide additional recreational opportunities now and into the future through eco-tourism. Similarly, the alternative would enhance access to recreation within, and appreciation of, coastal wetlands and uplands. Therefore, the implementation of the proposed alternative would result in long-term, beneficial impacts on land and marine management. Although the site had previously been approved for a subdivision and large scale marina, acquisition of the land would result in long-term, beneficial impacts on land use because it would be consistent with the existing site land uses and would provide better public access when compared to a subdivision and large scale marina. No long-term impacts on the coastal zone or marine management are anticipated because all future uses would be consistent with existing management and use. Although no significant adverse impacts are expected to the coastal zone, the alternative would require a determination of consistency with the CZMA.

Table 5-32: Impacts on Land and Marine Management from the Mobile County Alternatives

Mobile County Alternatives	Site-specific Impacts
Dauphin Island Eco-Tourism and Environmental Education Area	Short-term: Short-term, minor, adverse impacts from construction and equipment and materials for enhancements would occur, similar to those noted above. Long-term: Impacts from the acquisition would be similar to those noted above for Gulf Highlands Land Acquisition and Improvements and Laguna Cove Little Lagoon Natural Resource Protection alternatives, with long-term, beneficial impacts as a result of increased public access to wetland sites and subsequently increased eco-tourism opportunities, enhanced visitor amenities, and consistency with local ordinances and surrounding land uses. In addition, the land acquisition would be in alignment with the Dauphin Island Strategic Planning Interim Planning Report and the Dauphin Island Climate Resiliency Land Use Planning Report, both of which highlight the importance of natural resource protection, improvement of community facilities, and economic sustainability (Five E's Unlimited, 2007; Janise, Deal, 2015).

Mobile County Alternatives	Site-specific Impacts
	No long-term impacts on the coastal zone or marine management are anticipated because all future uses would be consistent with existing management and use. Although no significant adverse impacts are expected to the coastal zone, the alternative would require a determination of consistency with the CZMA.
Mid-Island Parks and Public Beach Improvements (Parcels B and C)	Short-term: Short-term, minor, adverse impacts from construction and equipment and materials for enhancements would occur, similar to those noted above. Long-term: Impacts on land and marine management as a result of the acquisition would be the same as those presented above for Dauphin Island Eco-Tourism and Environmental Education Area. Impacts would be long term and beneficial as a result of increased public access and recreational opportunities and would be consistent with local ordinances and surrounding land uses. For all zoning districts where parcels are located, "Public Parks and Recreational Areas" are an allowable use and as part of the zoning process. Park uses do fall under the category, “Uses Require Review.” At the appropriate time, the Dauphin Island’s Planning Commission would post notice of a Public Hearing to receive comments on the request to create these "Public Parks and Recreational Areas." This review would ensure that the end product, which is an allowed use, fits in with the surrounding neighborhood/area (Collier, 2017). No long-term impacts on the coastal zone or marine management are anticipated because all future uses would be consistent with existing management and use. Although no significant adverse impacts are expected to the coastal zone, the alternative would require a determination of consistency with the CZMA.
Mid-Island Parks and Public Beach Improvements (Parcels A, B, and C)	Short-term: Short-term, minor, adverse impacts as a result of construction would be similar to those presented above. Long-term: Impacts as a result of the proposed alternative would be similar to those presented above for Mid-Island Parks and Public Beach Improvements (Parcels B and C); however, they would be more pronounced as a result of the additional Parcel A acquisition that would serve as a protective barrier and would protect habitat and increase opportunities for eco-tourism and subsequent appreciation for the natural habitat, resulting in long-term, beneficial impacts. For all zoning districts where parcels are located, "Public Parks and Recreational Areas" are an allowable use and as part of the zoning process. Park uses do fall under the category, “Uses Require Review.” At the appropriate time, the Dauphin Island’s Planning Commission would post notice of a Public Hearing to receive comments on the request to create these "Public Parks and Recreational Areas." This review would ensure that the end product, which is an allowed use, fits in with the surrounding neighborhood/area (Collier, 2017). No impacts on the coastal zone nor marine management are anticipated because all future uses would be consistent with existing management and use. Although no significant adverse impacts are expected to the coastal zone, the alternative would require a determination of consistency with the CZMA.

Tourism and Recreational Use

The proposed sites are located on Alabama's Gulf Coast, which boasts white sand beaches adjacent to turquoise waters. Numerous opportunities are available for visitors to enjoy the natural resources present in the area. The main attraction of the Gulf Coast of Alabama is the beach. Impacts on tourism and recreational use associated with the no action alternative are described in Table 5-33. Impacts associated with the alternatives in Baldwin and Mobile counties are described in Tables 5-34 and 5-35, respectively. For all projects that include land acquisition (Gulf Highlands Land Acquisition and Improvements, Little Lagoon Laguna Cove Natural Resources Protection, Dauphin Island Eco-Tourism and Environmental Education Area, and Mid-Island Parks and Public Beach Improvements – all parcels), use limitations would be put in place that could allow for future passive recreational use infrastructure on these sites. Should any additional passive public recreation infrastructure be built on these sites in the future (such as a land-based boardwalk, gazebo, benches, shade structures, and/or kayak launch) short- and long-term impacts on tourism and recreation would be similar to those stated below for each project site.

Table 5-33: Impacts on Tourism and Recreational Use from the No Action Alternative

No Action Alternative	Site-specific Impacts
No Action Alternative	Short-term: Access Improvement Projects on Currently Publicly Owned Lands The recreational amenities proposed for these alternative sites would not move forward under the no action alternative. These sites would continue to operate in their current capacity, and no additional impacts on tourism and recreational use would occur. Land Acquisition and Access Improvement Projects Land acquisition and construction of amenities with NRDA funds would not occur under the no action alternative. If acquisition does not occur under NRDA or with other Gulf restoration funding mechanisms and recreational amenities are not constructed, it is likely that these sites would be developed, resulting in short-term, minor, adverse impacts on tourism from construction activities, including limiting access to roads and beaches surrounding construction sites. If acquisition occurs with other Gulf restoration funding mechanisms, there could be either no short-term, beneficial impacts or no adverse impacts on tourism because these sites could either be opened to the public (resulting in a beneficial impact) or acquired and protected in a manner that excludes public use similar to their current condition as private property (resulting in adverse impacts on tourism and recreational use). Projects Currently Under Construction Under the no action alternative, construction of the lodge and conference center will continue, including elements that will affect tourism, as described in the Final Phase III ERP/PEIS (Section 11.7.6.9.7). This construction process is ongoing and will last two years and affect visitation to the area. Heavy material haul trucks are accessing the site, with potential to slow traffic patterns in specified areas when such activities are ongoing and may result in some minor delays in visitors accessing their preferred site. Visitors may also experience noise and fugitive dust emissions from construction. Additionally, some of the public access amenities associated with the lodge could be constructed, as described above. Therefore,

No Action Alternative	Site-specific Impacts
	the project is expected to result in short-term, minor impacts on tourism and recreation, as further described below. Long-term: Access Improvement Projects on Currently Publicly Owned Lands Under the no action alternative, access improvements on currently publicly owned lands would not be constructed, and no long-term impacts on tourism would be expected. Land Acquisition and Access Improvement Projects Under the no action alternative, if acquisition occurs with other Gulf restoration funding mechanisms, there could be either long-term, adverse or no impacts on tourism because these sites could either likely be opened to the public (resulting in a beneficial impact) or acquired and protected in a manner that excludes public use similar to their current condition as private property (resulting in no impacts on tourism and recreational use). If the land were acquired for development, impacts on tourism would depend on the type of buildings developed. The development of hotels would attract more visitors, while condominiums would attract more permanent residents. However, both may have adverse impacts because public access would be restricted. Projects Currently Under Construction Under the no action alternative, construction of the lodge and conference center will continue, including elements that will affect recreation and tourism, as described in the Final Phase III ERP/PEIS (Section 11.7.6.9.7). The construction of the lodge and conference center will increase tourism in the area by increasing lodging facilities, recreational and educational activities, and conference opportunities, including any additional amenities.

Table 5-34: Impacts on Tourism and Recreational Use from the Baldwin County Alternatives

Baldwin County Alternatives	Site-specific Impacts
Gulf State Park Lodge and Associated Public Access Amenities Project	Short-term: The impacts on tourism and recreational use of the Gulf State Park Lodge and Associated Public Access Amenities Project site are characterized in the Final Phase III ERP/PEIS (Section 11.7.6.9.7). Construction associated with the project is ongoing and expected to last a total of approximately two years. The reestablished lodge is sited in a location that visitors do not currently access on a regular basis because it is behind the dune line separating the project site and the recreational beach uses. For those users who might desire to access the construction site, reestablishment of the lodge and conference center on this site restricts access during construction; however, as previously stated, visitors do not regularly access the site. During construction activities, heavy material haul trucks will access the site, which has the potential to slow traffic patterns in specified areas when such activities are ongoing and may result in some minor delays in visitors accessing their preferred site. A detailed construction action plan has been developed to minimize potential delays. In addition, it is anticipated that the movement of heavy material haul trucks will occur during off peak travel times to minimize potential adverse impacts. Construction of the lodge and conference center generates noise and fugitive dust in those areas within proximity of the

Baldwin County Alternatives	Site-specific Impacts
	project site, as discussed further under Air Quality. Mitigation measures, such as fencing, have been implemented to reduce construction noise and fugitive dust, which could minimize short-term, localized, adverse impacts on visitor use and experience. Project elements that have been added since the Final Phase III ERP/PEIS (including a tram system, public educational programs, and a bicycle sharing program) would be located within the footprint of disturbance analyzed in the Final Phase III ERP/PEIS, except for the tram stops and pedestrian pathway to the fishing pier. Construction of these additional elements would not affect tourism and recreation beyond those impacts described in the Final Phase III ERP/PEIS. The parking lot to the public fishing pier would remain open while the walkway is constructed. It is anticipated that because the project site location is away from areas frequented by many visitors, impacts on visitor use and experience, while potentially adverse, would be localized, short term and minor during construction. The site is closed to protect public safety and will be re-opened to visitors after the construction is completed. Long-term: The proposed alternative is anticipated to generate new visits, enhance existing visits, and provide a range of amenities accessible by all members of the public. It would enhance visitor use and experience and provide increased opportunities for education and interpretation as well as replace opportunities that previously existed at the park, such as the lodge. During implementation of the alternative, the beach in front of the lodge, along with the rest of the Gulf State Park beaches would remain accessible to the public. Some of the benefits would include new opportunities for education and beach access at the lodge site, which is currently not easily accessible by the public. The tram system would allow visitors to move more easily around the park to experience all of the park's resources. Because of the variety of new and enhanced opportunities provided by each of the elements of the proposed project, it is anticipated that the proposed alternative would result in long-term benefits to tourist operations in the local area, in addition to Gulf State Park-specific tourism.
Fort Morgan Pier Rehabilitation	Short-term: Short-term impacts would be similar to those described above for the Gulf State Park Lodge and Associated Public Access Amenities Project. During rehabilitation of the pier, the public would not be able to access the site but because the site is currently closed, this would not represent a change from existing conditions. These impacts would be short term and minor, adverse because the area where the improvements would occur are only on a portion of the site, and other areas of the site would be accessible. The pier itself is currently not accessible because of its deteriorating condition, so during construction there would be no change in access. Further, the construction would last only six months, after which time the site would be open to the public. Long-term: Rehabilitation of the currently closed pier is expected to provide the public with recreational benefits in the form of increased and enhanced recreational fishing and boating in coastal Alabama. Prior to being closed, the pier was a highly visited site and is expected to be equally utilized once re-opened. Provision of these additional amenities would result in long-term benefits to recreational use and tourism.

Baldwin County Alternatives	Site-specific Impacts
Fort Morgan Peninsula Public Access Improvements	Short-term: Short-term impacts would be similar to those described above for the Gulf State Park Lodge and Associated Public Access Amenities Project. During construction of the proposed access improvements, the public would not be able to access the 11 sites. These impacts would be short term and minor and adverse because the construction period is expected to be short and not all the sites would be closed at the same time, leaving some sites accessible while other are under construction. Further, the construction would last only six months, after which time the sites would be open to the public. Long-term: Providing access improvements at 11 sites on the Fort Morgan Peninsula would enhance beach visits and other beach-based recreational activities in this area. Formalized and more efficient parking would allow for a better visitor experience and restroom facilities would provide an amenity not currently present in these areas. These additional amenities would provide long-term benefits to recreational use and tourism.
Gulf Highlands Land Acquisition and Improvements	Short-term: During construction of the proposed access improvements, the public would not be able to access the site, resulting in short-term, minor, adverse impacts. However, the area where the improvements would occur are only on a portion of the site, and other areas of the site would be accessible. Further, the construction would last only six months, after which time the site would be open to the public. Long-term: Gulf Highlands is the largest privately held parcel along Alabama's small 54-mile coastline. This alternative would convert what is currently private property into a public beach for visitors to enjoy. Should the site remain in private ownership and be developed, this type of public access would be limited and not occur. Preserving this site and providing access improvements would provide long-term benefits to tourism and recreation in this area.
Laguna Cove Little Lagoon Natural Resource Protection	Short-term: Short-term impacts would be similar to those described above for the Gulf State Park Lodge and Associated Public Access Amenities Project. During construction of the proposed access improvements and recreational use amenities, the public would not be able to access the site, resulting in short-term, minor, adverse impacts. However, the area where the improvements would occur are only on a portion of the site, and other areas of the site would be accessible. Further, the construction would last only six months, after which time the site would be open to the public. Long-term: The proposed alternative at Little Lagoon is expected to yield additional recreation benefits. Little Lagoon is culturally valuable for its serene beauty that provides a natural recreation area with white sand beaches, nature walks, and bird watching. These additional amenities would provide long-term benefits to recreational use and tourism.

In 2015, Mobile County had more than 3 million visitors, making it the third most visited county in the State of Alabama. The alternative sites located within Mobile County are restricted to Dauphin Island, a small 6.2-square mile island approximately 4 miles west/northwest of the Fort Morgan Peninsula offering numerous opportunities for visitors to enjoy the natural resources present in the area.

Table 5-35: Impacts on Tourism and Recreational Use from the Mobile County Alternatives

Mobile County Alternatives	Site-specific Impacts
Dauphin Island Eco-Tourism and Environmental Education Area	Short-term: During construction of the proposed access improvements and recreational use amenities, the public would not be able to access this site would not be accessible by the public, resulting in short-term, minor, adverse impacts. However the area where the improvements would occur are only on a portion of the site, and other areas of the site would be accessible. Further, the construction would last up to two years but would likely be phased so that not all areas are closed at the same time. During phased construction activities, the heavy material haul trucks would access the site and could slow traffic patterns in specific areas, resulting in minor delays to visitors. A detailed construction action plan would be developed as the alternative is further refined to minimize potential delays. In addition, it is anticipated that the movement of heavy material haul trucks would occur during off peak travel times to minimize potential adverse impacts. Construction would generate noise and fugitive dust in areas within the alternative site. Mitigation measures, such as fencing, that would be implemented to reduce construction noise and fugitive dust would also minimize short-term, localized, adverse impacts on visitor use and experience. After construction, the site would be open to the public. Long-term: This alternative would increase public access to wetland habitats adjacent to Aloe Bay, where no public access currently exists by constructing a parking area and boardwalks. Visitor experience would be enhanced by the addition of gazebos and restroom facilities. Educational signage would promote public awareness of environmental resources and habitats. Potential recreational opportunities that would be created by this alternative include bird and wildlife watching, walking, and picnicking. Access created by the alternative would connect visitors with resources that were lost or damaged as a result of the DWH oil spill. Provision of these additional amenities in an area currently not accessible to the public would result in long-term benefits to recreational use and tourism.
Mid-Island Parks and Public Beach Improvements (Parcels A, B, and C)	Short-term: During construction of the proposed access improvements, the public would not be able to access the site, resulting in short-term, minor, adverse impacts. However, the area where the improvements would occur are only on a portion of the site, and other areas of the site would be accessible. Further, the construction would last only six months and would likely be phased so that not all areas are closed at the same time. During phased construction activities, heavy material haul trucks would access the site, which could slow traffic patterns in specific areas and may result in minor delays to visitors. A detailed construction action plan would be developed as the alternative is further refined to minimize potential delays. In addition, the movement of heavy material haul trucks is anticipated to occur during off peak travel times to minimize potential adverse impacts. Construction would generate noise and fugitive dust in areas within the alternative site. Mitigation measures, such as fencing, that would be implemented to reduce construction noise and fugitive dust would also minimize short-term, localized, adverse impacts on tourism and recreational use. After construction, the site would be open to the public. Long-term: This alternative would increase access and enhance visitor experience at Dauphin Island by providing public parking, restroom/shower facilities, and eco-friendly beach access to Mississippi Sound waters. Additional parking areas would include approximately 12 spaces for vehicles with trailers and 125 vehicles without

Mobile County Alternatives	Site-specific Impacts
	trailers. Provision of these additional amenities would result in long-term benefits to recreational use and tourism.
Mid-Island Parks and Public Beach Improvements (Parcels B and C)	Short-term: During construction of the proposed access improvements, the public would not be able to access the site, resulting in short-term, minor, adverse impacts. However, the area where the improvements would occur are only on a portion of the site, and other areas of the site would be accessible. Further, the construction would last only six months and would likely be phased so that not all areas are closed at the same time. During phased construction activities, heavy material haul trucks would access the site, which could slow traffic patterns in specific areas and may result in minor delays to visitors. A detailed construction action plan would be developed as the alternative is further refined to minimize potential delays. In addition, it is anticipated that the movement of heavy material haul trucks would occur during off peak travel times to minimize potential adverse impacts. Construction would generate noise and fugitive dust in areas within the alternative site. Mitigation measures, such as fencing, that would be implemented to reduce construction noise and fugitive dust would also minimize short-term, localized, adverse impacts on visitor use and experience. After construction, the site would be open to the public. Long-term: This alternative would increase access and enhance visitor experience at Dauphin Island by providing public parking, restroom/shower facilities, and eco-friendly beach access to Mississippi Sound waters. Additional parking areas would include approximately 12 spaces for vehicles with trailers and 125 vehicles without trailers. Provision of these additional amenities would result in long-term benefits to recreational use and tourism.

Aesthetics and Visual Resources

The southern coast of Baldwin County, where the proposed alternatives are located, consists of white sand beaches and dunes that attract a variety of residents and tourists. Some high-rise condos and hotels exist along the shoreline but then transition into smaller, beachfront homes moving west along the Fort Morgan Peninsula. The Gulf State Park Lodge and Associated Public Access Amenities Project and Fort Morgan Peninsula Public Access Improvement sites are low to moderately developed areas that boast natural beach views and an untrammeled visual character. Impacts on visual resources at each proposed alternative site are described below. During construction, impacts on visual resources at the proposed sites would be short term, minor, and adverse primarily because of the presence of construction personnel, equipment (e.g., fences, stockpiles), vehicles, and unfinished structures visible to the public and recreational users. Table 5-36 describes the impacts on aesthetics and visual resources associated with the no action alternative, and Tables 5-37 and 5-38 describe the impacts of the Baldwin and Mobile County alternatives, respectively. For all projects that include land acquisition (Gulf Highlands Land Acquisition and Improvements, Little Lagoon Laguna Cove Natural Resources Protection, Dauphin Island Eco-Tourism and Environmental Education Area, and Mid-Island Parks and Public Beach Improvements – all parcels), use limitations would be put in place that could allow for future passive recreational use infrastructure on these sites. Should any additional passive public recreation infrastructure be built on these sites in the future (such as a land-based boardwalk, gazebo, benches, shade structures, and/or kayak launch) short- and long-term impacts on aesthetics and visual resources would be similar to those stated below for each project site.

Table 5-36: Impacts on Aesthetics and Visual Resources from the No Action Alternative

No Action Alternative	Site-specific Impacts
No Action Alternative	Short-term: Access Improvement Projects on Currently Publicly Owned Lands The recreational amenities proposed for these alternative sites would not move forward under the no action alternative. These sites would continue to operate in their current capacity, and no additional impacts would occur. Land Acquisition and Access Improvement Projects Acquisition and construction of amenities with NRDA funds would not occur under the no action alternative. If acquisition does not occur under NRDA or with other Gulf restoration funding mechanisms and recreational amenities are not constructed, it is likely that these sites would be developed, which would result in short-term, moderate, adverse impacts on visual resources from construction activities that would vary depending on the extent of development. If acquisition occurs with other Gulf restoration funding mechanisms, impacts on aesthetics and visual resources would be beneficial because these sites would remain in their current, undeveloped conditions. Projects Currently Under Construction Under the no action alternative, construction of the lodge and conference center will continue, including elements that will affect visual resources, as described in the Final Phase III ERP/PEIS (Section 11.7.6.9.6). The construction process will last two years, and heavy machinery, fences, and partially developed infrastructure will be visible on the site. Additionally, some of the public access amenities associated with the lodge could be constructed, as described above. Therefore, the project is expected to result in short-term, minor, adverse impacts on visual resources, as further described below. Long-term: Access Improvement Projects on Currently Publicly Owned Lands Under the no action alternative, Fort Morgan fishing pier would continue to deteriorate, which would negatively affect the visual resources of the area. Other improvements on publicly owned lands would not occur, and there would be no long-term impacts. Land Acquisition and Access Improvement Projects Under the no action alternative, if properties were acquired for preservation, long-term impacts on visual resources would be beneficial. If the properties were developed, long-term impacts on visual resources would be moderate and adverse because permanent infrastructure (e.g., condominiums, parking lots) would be placed over the currently undeveloped area. Projects Currently Under Construction Under the no action alternative, construction of the lodge and conference center will continue, including elements that will affect visual resources, as described in the Final Phase III ERP/PEIS (Section 11.7.6.9.6). Visual resources will be affected in the long term by the presence of large structures that could block the view of the beach from the road. Therefore, long-term impacts on visual resources as a result of the no action alternative are expected to be minor and adverse.

Table 5-37: Impacts on Aesthetics and Visual Resources from the Baldwin County Alternatives

Baldwin County Alternatives	Site-specific Impacts
Gulf State Park Lodge Associated and Public Access Amenities Project	Short-term: Impacts associated with aesthetics and visual resources of the Gulf State Park Lodge and Associated Public Access Amenities Project site are characterized in the Final Phase III ERP/PEIS (Section 11.7.6.9.7). The site currently consists primarily of packed, white sand surrounded by dunes, beach, and the Gulf of Mexico with ongoing construction at the site. The fishing pier is visible to the west of the site, which extends out into the Gulf of Mexico. Beyond the fishing pier are beach condos several stories high, located outside of the Gulf State Park boundary. To the north, a series of zipline towers are visible (the towers are approximately 50 feet high), but these towers are slated for removal. To the east is a view of the beach and shoreline with the existing beach pavilion visible in the distance, and to the south is the Gulf of Mexico. Based on the addition of other project elements (a tram system, public educational programs, a bicycle sharing program, and a pedestrian path from the pier parking area to the lodge), the project site has been expanded; however, many of these elements (a tram system, public educational programs, and a bicycle sharing program) would be located within the footprint of disturbance analyzed in the Final Phase III ERP/PEIS. Additional tram stops along the rest of the route have not yet been determined, but would be located on existing asphalt areas and would not include new ground disturbance. The pedestrian trail would be located outside the area of disturbance evaluated in the Final Phase III ERP/PEIS. This additional area consists of the same aesthetics and visual resources as the original project area. Ongoing construction activities have affected the visual resources of the site with the presence of construction equipment, fences, and partially completed structures, resulting in short-term, minor, adverse impacts. Long-term: Over the operational period of the lodge and conference center, views will be obstructed from State Highway 182 looking south because of the presence of new buildings. However, dunes will be restored, the lodge and conference center will incorporate eco-friendly features, and the presence of a public tram will decrease traffic in the area. This will increase the natural aesthetic of the coastal area and enhance its restoration, resulting in long-term, beneficial impacts.
Fort Morgan Pier Rehabilitation	Short-term: During construction, impacts on visual resources at the proposed alternative site would be short term, minor, and adverse, primarily because of the presence of construction personnel, equipment (e.g., fences, stockpiles), vehicles, and unfinished structures visible to the public and recreational users. Construction activities could detract from the overall visual environment at the site, but these activities would be temporary. As construction of the alternative elements progresses, potential impacts would increase in intensity. For all construction efforts, a screen or visual barrier at the construction site to obscure the site for the duration of the construction could minimize impacts. These screens could also be used to educate visitors and include information (such as posters or banners) about the flora and fauna of Fort Morgan Peninsula or other issues of interest. Impacts for all elements discussed would short term, minor, and adverse during construction. Even though existing viewsheds would be temporarily affected, these impacts would not dominate the view or detract from current user activities or experiences. Long-term: Implementation of the proposed alternative would change the current visual character of the proposed pier rehabilitation site; however, the proposed

Baldwin County Alternatives	Site-specific Impacts
	development would not introduce an unfamiliar aesthetic because the site currently contains a deteriorating pier that was closed in 2014. The existing site, which primarily consists of undeveloped and undisturbed land, would remain the same. The presence of a new structure would not be out of character with previous site use. The pier would be approximately 500 feet long and would be constructed on approximately 1.14 acres, a footprint slightly larger than the original pier. Views that would change the most would be the views of the pier because no other amenities in the surrounding area are proposed. While some visitors may be sensitive to the change in the visual environment, most should find the potential impacts beneficial because the existing site would no longer include a deteriorating pier. The pier improvements would incorporate new decking and a sidewalk, which would improve the aesthetics of the existing area. The proposed pier rehabilitation would be constructed with appropriate materials and include a muted color scheme that would fit with the overall beach environment. Therefore, long-term impacts from the rehabilitation of the pier would be considered minor and beneficial.
Fort Morgan Peninsula Public Access Improvements	Short-term: During construction, short-term impacts on visual resources at the proposed alternative site would be minor, primarily because of the presence of construction personnel, equipment (e.g., fences, stockpiles), vehicles, and unfinished structures visible to the public and recreational users. Construction activities could detract from the overall visual environment at the site, but these activities would be temporary. As construction of the alternative elements progresses, potential impacts would increase in intensity. For all construction efforts, a screen or visual barrier at the construction site to obscure the site for the duration of the construction could minimize impacts. These screens could also be used to educate visitors and could include information (such as posters or banners) about the flora and fauna of Fort Morgan Peninsula or other issues of interest. Impacts for all elements discussed would be short term, minor, and adverse during construction. Even though existing viewsheds would be temporarily affected, these impacts would not dominate the view or detract from current user activities or experiences. Long-term: Implementation of the proposed alternative would change the current visual character of the proposed access sites. The existing sites, which primarily consist of white sand Gulf beaches, would change to developed areas containing parking lots, dune walkovers, and restrooms. The presence of new structures would not be out of character with what other public access sites in the Gulf Coast region contain. Dune walkovers would range from 45 to 140 feet long and include 3 to 30 parking spaces. All sites but one would contain a restroom. The existing views that would change the most would be the views from the roads looking toward the coast and from the beach looking back at the roads. While some visitors may be sensitive to the change in the visual environment and consider these impacts adverse, others may find the potential impacts beneficial because the proposed access sites would be constructed with appropriate materials and include a muted color scheme that would fit the overall beach feel of the area. Therefore, long-term impacts from the access sites would be considered minor and adverse to some and beneficial to others.

Baldwin County Alternatives	Site-specific Impacts
Gulf Highlands Land Acquisition and Improvements	Short-term: During construction, short-term impacts on visual resources at the proposed alternative site would be minor and adverse, primarily because of the presence of construction personnel, equipment (e.g., fences, stockpiles), vehicles, and unfinished structures visible to the public and recreational users. Construction activities could detract from the overall visual environment at the site, but these activities would be temporary. As the construction of the elements progress, potential impacts would increase in intensity. For all construction efforts, a screen or visual barrier at the construction site to obscure the site for the duration of the construction could minimize impacts. These screens could also be used to educate visitors and could include information (such as posters or banners) about the flora and fauna of Gulf Highlands or other issues of interest. Impacts for all elements discussed would be short term, minor, and adverse during construction. Even though existing viewsheds could be temporarily affected, these impacts would not dominate the view or detract from current user activities or experiences. Long-term: Implementation of the proposed alternative would change the current visual character of the proposed access points by adding dune walkovers, a parking lot, boardwalk, and interpretive signage; however, the site is currently under development pressure to implement high density residential buildings that this proposed alternative would eliminate. The existing site, which contains the last complete mosaic of dune system, would change to a developed area containing the facilities listed above. The presence of new structures would not be out of character with other beach access points in the region or with the boardwalks in Bon Secour National Wildlife Refuge. The parking lot would include approximately 40 parking spaces, and the boardwalk would be approximately 1,280 feet long. Existing views that would change most would be the views from the beach looking north and from the road looking south towards the Gulf. While some visitors may be sensitive to the change in the visual environment and consider these impacts adverse, others may find the potential impacts beneficial because developmental pressures would alter the visual environment drastically. The proposed facilities would be constructed with appropriate materials and include a muted color scheme that would fit the overall beach feel of the area. Therefore, long-term impacts from the proposed alternative would be considered minor and adverse to some visitors and beneficial to others.
Laguna Cove Little Lagoon Natural Resource Protection	Short-term: During construction, short-term impacts on visual resources at the proposed alternative site would be minor and adverse, primarily because of the presence of construction personnel, equipment (e.g., fences, stockpiles), vehicles, and unfinished structures visible to the public and recreational users. Construction activities could detract from the overall visual environment at the site, but these activities would be temporary. As the construction of the alternative elements progress, potential impacts would increase in intensity. For all construction efforts, a screen or visual barrier at the construction site to obscure the site for the duration of the construction could minimize impacts. These screens could also be used to educate visitors and could include information (such as posters or banners) about the flora and fauna of the area or other issues of interest. Impacts for all elements discussed would be short term, minor and adverse during construction. Even though existing viewsheds could be temporarily affected, these impacts would not dominate the view or detract from current user activities or experiences.

Baldwin County Alternatives	Site-specific Impacts
	Long-term: Implementation of the proposed alternative would change the current visual character of the proposed access points by adding a parking lot, fishing pier, bathhouse, restroom, boardwalk, and kayak launch; however, the site is currently under development pressure to implement 69 single family residences and a 69 slip marina that this proposed alternative would eliminate. The existing site, which primarily consists of 2,700 feet of Gulf coastline, would change to a developed area containing the amenities described above. The presence of new structures would not be out of character with other beach access points in the region or boardwalks in the Bon Secour National Wildlife Refuge. The parking lot would include 60 parking spaces, the fishing pier and boardwalk would be approximately 8 feet by 600 feet each, the kayak launch would be 10 feet by 20 feet, and the restrooms would be approximately 20 feet by 30 feet. The existing views that would change the most would be the views from the lagoon and from homes on the Gulf of Mexico. While some visitors may be sensitive to the change in visual environment and consider these impacts adverse, others may find the potential impacts beneficial because developmental pressures would alter the visual environment drastically. The proposed facilities would be constructed with appropriate materials and include a muted color scheme that would fit the overall beach feel of the area. Therefore, long-term impacts from the proposed alternative would be considered minor and adverse to some visitors and beneficial to others.

Dauphin Island, where the three Mobile County alternatives are located, is a popular destination for its beautiful Gulf coastline, beaches, and small town aesthetic. The views and quaint atmosphere of the island give it its visual character and attract thousands of visitors there each year. During construction, impacts on visual resources at the proposed alternative sites would be short term, minor, and adverse, primarily because of the presence of construction personnel, equipment (e.g., fences, stockpiles), vehicles, and unfinished structures visible to the public and recreational users.

Table 5-38: Impacts on Aesthetics and Visual Resources from the Mobile County Alternatives

Mobile County Alternatives	Site-specific Impacts
Dauphin Island Eco-Tourism and Environmental Education Area	Short-term: During construction, short-term impacts on visual resources at the proposed alternative site would be minor and adverse, primarily because of the presence of construction personnel, equipment (e.g., fences, stockpiles), vehicles, and unfinished structures visible to the public and recreational users. Construction activities could detract from the overall visual environment at the site, but these activities would be temporary. As construction of the alternative elements progresses, potential impacts would increase in intensity. For all construction efforts, a screen or visual barrier at the construction site to obscure the site for the duration of the construction could minimize impacts. These screens could also be used to educate visitors and could include information (such as posters or banners) about the flora and fauna of Dauphin Island or other issues of interest. Impacts for all elements discussed would be short term, minor, and adverse during construction. Even though existing viewsheds, could be temporarily

Mobile County Alternatives	Site-specific Impacts
	affected, the impacts would not dominate the view or detract from current user activities or experiences. Long-term: Implementation of the proposed alternative would change the current visual character of the proposed access points with a parking lot, fishing pier, restroom facility, boardwalk, gazebo, and bicycle path. The existing site, which consists of 90 acres of upland habitat and 10 acres of wetland, would change to a developed area containing the amenities described above. The presence of new structures would not be out of character with other access points in the region or with the boardwalks in Bon Secour National Wildlife Refuge. The parking lot would include 100 parking spaces, the fishing pier would be approximately 10 feet by 530 feet with four fingers approximately 10 feet by 100 feet each, the boardwalk would be approximately 1,520 feet long by 8 feet wide, the restrooms would be approximately 500 square feet, the gazebo would be approximately 450 square feet, and the bicycle path would be approximately 2,355 linear feet by 8 feet wide. Existing views that would change the most would be the views from the road looking north and west towards the bay. While some visitors may be sensitive to the change in visual environment and consider these impacts adverse, others may find the potential impacts beneficial because they could now access and view wetlands that were once not available to the public. The proposed facilities would be constructed with appropriate materials and include a muted color scheme that would fit the overall beach feel of the area. Long-term impacts from the proposed alternative would be considered minor and adverse to some visitors and beneficial to others.
Mid-Island Parks and Public Beach Improvements (Parcels A, B, and C)	Short-term: During construction, short-term impacts on visual resources at the proposed alternative site would be minor and adverse, primarily because of the presence of construction personnel, equipment (e.g., fences, stockpiles), vehicles, and unfinished structures visible to the public and recreational users. Construction activities could detract from the overall visual environment at the site, but these activities would be temporary. As construction of the alternative elements progresses, potential impacts would increase in intensity. For all construction efforts, a screen or visual barrier at the construction site to obscure the site for the duration of the construction could minimize impacts. These screens could also be used to educate visitors and could include information (such as posters or banners) about the flora and fauna of Dauphin Island or other issues of interest. Impacts for all elements discussed would be short term, minor, and adverse during construction. Even though existing viewsheds, would be temporarily affected, the impacts would not dominate the view or detract from current user activities or experiences. Long-term: Implementation of the proposed alternative would change the current visual character of the proposed access points with a dune walkover, parking lots, and restrooms; however, acquisition of these parcels would protect them from future development. The existing site, which contains beach and dunes, would change to a developed area containing facilities listed above. The presence of new structures would not be out of character with other beach access points in the region. The parking lots would include approximately 200 parking spaces, the dune walkover would be approximately 975 feet long by 6 feet wide, and the restrooms would require approximately 500 square feet. The existing views that

Mobile County Alternatives	Site-specific Impacts
	would change most would be the views from the roads looking in either direction (north or south) to the separate parcels, and for those residing in nearby homes. While some visitors may be sensitive to the change in visual environment and consider these impacts adverse, others may find the potential impacts beneficial because developmental pressures would alter the visual environment drastically. The proposed facilities would be constructed with appropriate materials and include a muted color scheme that would fit with the overall beach feel of the area. Long-term impacts from the proposed alternative would be considered minor and adverse to some visitors and beneficial to others.
Mid-Island Parks and Public Beach Improvements (Parcels B and C)	Short-term: During construction, short-term impacts on visual resources at the proposed alternative site would be minor and adverse, primarily because of the presence of construction personnel, equipment (e.g., fences, stockpiles), vehicles, and unfinished structures visible to the public and recreational users. Construction activities could detract from the overall visual environment at the site, but these activities would be temporary. As construction of the alternative elements progresses, potential impacts would increase in intensity. For all construction efforts, a screen or visual barrier at the construction site to obscure the site for the duration of the construction could minimize impacts. These screens could also be used to educate visitors and could include information (such as posters or banners) about the flora and fauna of Dauphin Island or other issues of interest. Impacts for all elements discussed would be short term, minor, and adverse during construction. Even though existing viewsheds would be temporarily affected, these impacts would not dominate the view or detract from current user activities or experiences. Long-term: Implementation of the proposed alternative would change the current visual character of the proposed access points with parking lots and restrooms; however, acquisition of these parcels would protect them from future development. The existing site, which contains beach and dunes, would change to a developed area containing the facilities listed above. The presence of new structures would not be out of character with other beach access points in the region. The parking lots would include approximately 200 parking spaces, and the restrooms would require approximately 500 square feet. The existing views that would change most would be the views from the roads looking north to the separate parcels, and for those residing in nearby homes. While some visitors may be sensitive to the change in visual environment and consider these impacts adverse, others may find the potential impacts beneficial because developmental pressures would alter the visual environment drastically. The proposed facilities would be constructed with appropriate materials and include a muted color scheme that would fit with the overall beach feel of the area. Therefore, long-term impacts from the proposed alternative would be considered minor and adverse to some visitors and beneficial to others.

Public Health and Safety, Including Flood and Shoreline Protection

Public health and safety issues relate to the short-term construction of projects and long-term operations and maintenance. Additional discussion of the potential for direct or indirect impacts on

public health and safety within the Gulf Coast region is found in the individual proposed alternative descriptions and discussion of possible environmental consequences.

Flood control refers to all methods used to reduce or prevent the detrimental effects of flood waters, including the construction of floodways (human-made channels to divert floodwater), levees, lakes, dams, reservoirs, or gates to hold extra water during times of flooding. Shoreline protection consists of engineered structures, living shorelines, or other solutions meant to slow erosion by rising sea levels and wave action. Impacts on public health and safety from the no action alternative are described in Table 5-39. Most of the impacts on public health and safety associated with the alternatives proposed for Baldwin and Mobile counties would be beneficial because they would provide amenities to visitors that would not otherwise be available. Impacts on public health and safety are described in Tables 5-40 and 5-41. For all projects that include land acquisition (Gulf Highlands Land Acquisition and Improvements, Little Lagoon Laguna Cove Natural Resources Protection, Dauphin Island Eco-Tourism and Environmental Education Area, and Mid-Island Parks and Public Beach Improvements – all parcels), use limitations would be put in place that could allow for future passive recreational use infrastructure on these sites. Should any additional passive public recreation infrastructure be built on these sites in the future (such as a land-based boardwalk, gazebo, benches, shade structures, and/or kayak launch) short- and long-term impacts on public health and safety would be similar to those stated below for each project site.

Table 5-39: Impacts on Public Health and Safety from the No Action Alternative

No Action Alternative	Site-specific Impacts
No Action Alternative	<u>Short-term</u>: <u>Access Improvement Projects on Currently Publicly Owned Lands</u> The recreational amenities proposed for these sites would not move forward under the no action alternative. These sites would continue to operate in their current capacity, and no additional impacts on public health and safety would occur. <u>Land Acquisition and Access Improvement Projects</u> Acquisition and construction of amenities with NRDA funds would not occur under the no action alternative. If acquisition does not occur under NRDA or with other Gulf restoration funding mechanisms and recreational amenities are not constructed, it is likely that these sites would be developed. Development would not affect public health and safety because appropriate construction safety precautions would be implemented. If acquisition occurs with other Gulf restoration funding mechanisms, there would be no short-term impacts on public health and safety because these sites would remain in their current conditions. <u>Projects Currently Under Construction</u> Under the no action alternative, construction of the lodge and conference center will continue, and impacts on public health and safety will be the same as those detailed in the Final Phase III ERP/PEIS (Section 11.7.6.9.8). While no known hazardous or contaminated sites are located within proximity of the proposed project, the construction action plan identifies measures to be followed should such sites be revealed during construction activities, which also includes any additional amenities that may be constructed. Therefore, the project is expected to result in short-term, minor impacts on public health and safety.

No Action Alternative	Site-specific Impacts
	Long-term: Access Improvement Projects on Currently Publicly Owned Lands Under the no action alternative, access improvement on currently publicly owned lands would not be constructed, and no long-term impacts on public health and safety, including flood and shoreline protection, would be expected. Land Acquisition and Access Improvement Projects Under the no action alternative, no long-term impacts on public health and safety are expected. If the sites are not acquired for preservation and developed, the development would be expected to adhere to local building ordinances and not affect public health and safety. If the land is acquired for preservation, no impacts would be expected. Projects Currently Under Construction Under the no action alternative, construction of the lodge and conference center will continue as described in the Final Phase III ERP/PEIS (Section 11.7.6.9.8). There will be no impacts on public health and safety because the site includes no known hazardous materials. Operations will be maintained to minimize soil erosion. As a result, no impacts on shoreline erosion are anticipated. All buildings will be resilient to flooding events and dunes will be restored. Therefore, long-term, beneficial impacts on flood protection are expected. Additional amenities may be constructed but would not contribute to these impacts.

Table 5-40: Impacts on Public Health and Safety from the Baldwin County Alternatives

Baldwin County Alternatives	Site-specific Impacts
Gulf State Park Lodge and Associated Public Access Amenities Project	Short- and long-term impacts on public health and safety, including flood and shoreline protection of the Gulf State Park Lodge Associated and Public Access Amenities Project site are characterized in the Final Phase III ERP/PEIS (Section 11.7.6.9.8). The project area consists of approximately 22 acres, of which approximately 13 acres are currently disturbed by construction. The majority of the additional project elements (i.e., a tram stop at the lodge site, public educational programs, and a bicycle sharing program) would be located within the footprint of disturbance analyzed in the Final Phase III ERP/PEIS. Additional tram stops along the rest of the route have not yet been determined, but would be located on existing asphalt areas and would not include new ground disturbance. The pedestrian trail would be located outside the area of disturbance evaluated in the Final Phase III ERP/PEIS. This additional area would contain the same public health and safety, and flood and shoreline protection as the original project area. No additional impacts are expected from the pedestrian trail due to the extent of footprint expansion being minimal in relation to a larger 22-acre site.
Fort Morgan Pier Rehabilitation	Short-term: Hazardous Waste Generation or Disposal, or Human Exposure During construction of the proposed alternative elements, workers would follow standard safety measures in accordance with Occupational Safety and Health Administration (OSHA) regulations. While no known hazardous or contaminated sites are located within proximity of the proposed alternative, the construction

Baldwin County Alternatives	Site-specific Impacts
	action plan would identify measures to be followed should such sites be revealed during construction activities. The construction action plan would identify measures to contain and/or remove materials in a way that would not result in adverse impacts on construction workers, visitors, or resources present in the area, including water sources. Overall, construction of the proposed alternative is not anticipated to result in adverse impacts on public health and safety as long as identified safety protocols are enforced when such activities are ongoing. <u>Impacts on Shoreline Erosion</u> Construction of the new pier and concrete sidewalk would require a NPDES permit to ensure that measures are taken to maintain the quality of water discharged from the construction site. This would ensure that adjacent waters such as lakes, wetlands, and other waterbodies do not receive excessive pollution that would change their water quality status. Additionally, during construction, the contractor would prepare an E&S plan and employ BMPs to ensure that soil erosion does not occur. These BMPs would be outlined in the CBMPP and be regularly inspected by a QCI. After final grading, bare areas would be replanted to further ensure that loose soil does not erode from the area. These elements of the proposed alternative would result in small, localized changes to water quality that would become undetectable quickly after construction is complete. State water quality standards regarding drinking water and primary and secondary interactions would not be exceeded. There would be no increased risk of exposure to potential hazards from construction of these alternative elements. Impacts from construction on public health would be short term, minor, and adverse because construction of these elements would not cause soil, groundwater, and/or surface contamination or exceedances in state water quality standards and, erosion of soil material would be minimized. <u>Long-term</u>: <u>Impacts on Shoreline Erosion</u> Because measures would be taken to maintain the quality of water, ensure soil erosion does not occur, and replant vegetation, no long-term impacts are expected. <u>Hazardous Waste Generation or Disposal, or Human Exposure</u> Because no brownfield, voluntary cleanup, or superfund sites are located within the site, no long-term impacts are expected.
Fort Morgan Peninsula Public Access Improvements	<u>Short-term</u>: <u>Hazardous Waste Generation or Disposal, or Human Exposure</u> During construction of the proposed alternative, workers would follow standard safety measures in accordance with OSHA regulations. While no known hazardous or contaminated sites are located within proximity of the proposed alternative, the construction action plan would identify measures to be followed should such sites be revealed during construction activities. The construction action plan would identify measures to contain and/or remove materials in a way that would not result in adverse impacts on construction workers, visitors, or resources present in the area, including water sources. Overall, construction of the proposed alternative

Baldwin County Alternatives	Site-specific Impacts
	is not anticipated to result in adverse impacts on public health and safety should as long as safety protocols are enforced when such activities are ongoing. <u>Impacts on Shoreline Erosion</u> Construction of the dune walkovers, parking lots, restrooms, and showers would require a NPDES permit to ensure that measures are taken to maintain the quality of water discharged from the construction site. This would ensure that adjacent waters such as lakes, wetlands, and other waterbodies do not receive excessive pollution that would change their water quality status. Additionally, during construction, the contractor would prepare an E&S plan and employ BMPs to ensure that soil erosion does not occur. These BMPs would be outlined in the CBMPP and regularly inspected by a QCI. After final grading, bare areas would be replanted to further ensure that loose soil does not erode from the area. These elements of the proposed alternative would result in small, localized changes to water quality that would become undetectable quickly after construction is complete. State water quality standards regarding drinking water and primary and secondary interactions would not be exceeded. There would be no increased risk of exposure to potential hazards from construction of these elements of the proposed alternative. Impacts from construction on public health would be short term, minor, and adverse because construction of these elements would not cause soil, groundwater, and/or surface contamination or exceedances in state water quality standards, and erosion of soil material would be minimized. <u>Long-term</u>: <u>Hazardous Waste Generation or Disposal, or Human Exposure</u> Because no brownfield, voluntary cleanup, or superfund sites are located within the site, no long-term impacts are expected. <u>Impacts on Shoreline Erosion</u> Because measures will be taken to maintain the quality of water, ensure soil erosion does not occur, and replant vegetation, no long-term impacts are expected.
Gulf Highlands Land Acquisition and Improvements	<u>Short-term</u>: <u>Hazardous Waste Generation or Disposal, or Human Exposure</u> During construction of the proposed alternative elements, workers would follow standard safety measures in accordance with OSHA regulations. While no known hazardous or contaminated sites are located within proximity of the proposed alternative, the construction action plan would identify measures to be followed should such sites be revealed during construction activities. The construction action plan would identify measures to contain and/or remove materials in a way that would not result in adverse impacts on construction workers, visitors, or resources present in the area, including water sources. Overall, construction of the proposed alternative elements is not anticipated to result in adverse impacts on public health and safety as long as identified safety protocols are enforced when such activities are ongoing.

Baldwin County Alternatives	Site-specific Impacts
	Impacts on Shoreline Erosion Construction of controlled access points, dune walkovers, perimeter fencing, and parking lots would require a NPDES permit to ensure that measures are taken to maintain the quality of water discharged from the construction site. This would ensure that adjacent waters such as lakes, wetlands, and other waterbodies do not receive excessive pollution that would change their water quality status. Additionally, during construction, the contractor would prepare an E&S plan and employ BMPs to ensure that soil erosion does not occur. These BMPs would be outlined in the CBMPP and regularly inspected by a QCI. After final grading, bare areas would be replanted to further ensure that loose soil does not erode from the area. These elements of the proposed alternative would result in small, localized changes to water quality that would become undetectable quickly after construction is complete. State water quality standards regarding drinking water and primary and secondary interactions would not be exceeded. There would be no increased risk of exposure to potential hazards from construction of these elements of the proposed alternative. Impacts from construction on public health would be short term, minor, and adverse because construction of these elements of the proposed alternative would not cause soil, groundwater, and/or surface contamination or exceedances in state water quality standards, and erosion of soil material would be minimized. Long-term: Hazardous Waste Generation or Disposal, or Human Exposure Because no brownfield, voluntary cleanup, or superfund sites are located within the site, no long-term impacts are expected. Impacts on Shoreline Erosion Because measures would be taken to maintain the quality of water, ensure soil erosion does not occur, and replant vegetation, no long-term impacts are expected.
Laguna Cove Little Lagoon Natural Resource Protection	Short-term: Hazardous Waste Generation or Disposal, or Human Exposure During construction of the proposed alternative elements, workers would follow standard safety measures in accordance with OSHA regulations. While no known hazardous or contaminated sites are located within proximity of the proposed alternative, the construction action plan would identify measures to be followed should such sites be revealed during construction activities. The construction action plan would identify measures to contain and/or remove materials in a way that would not result in adverse impacts on construction workers, visitors, or resources present in the area, including water sources. Overall, construction of the proposed alternative elements is not anticipated to result in adverse impacts on public health and safety as long as identified safety protocols are enforced when such activities are ongoing.

Baldwin County Alternatives	Site-specific Impacts
	Impacts on Shoreline Erosion Construction of the parking lot, fishing pier, bathhouse, boardwalk, restrooms, and kayak launch would require a NPDES permit to ensure that measures are taken to maintain the quality of water discharged from the construction site. This would ensure that adjacent waters such as lakes, wetlands, and other waterbodies do not receive excessive pollution that would change their water quality status. Additionally, during construction activities, the contractor would prepare an E&S plan and employ BMPs to ensure that soil erosion does not occur. These BMPs would be outlined in the CBMPP and regularly inspected by a QCI. After final grading, bare areas would be replanted to further ensure that loose soil does not erode from the area. These elements of the proposed alternative would result in small, localized changes to water quality that would become undetectable quickly after construction is complete. State water quality standards regarding drinking water and primary and secondary interactions would not be exceeded. There would be no increased risk of exposure to potential hazards from construction of these elements of the proposed alternative. Impacts from construction on public health would be short term, minor, and adverse because construction of these elements would not cause soil, groundwater, and/or surface contamination or exceedances in state water quality standards. Long-term: Hazardous Waste Generation or Disposal, or Human Exposure Because no brownfield, voluntary cleanup, or superfund sites are located within the site, no long-term impacts are expected. Impacts on Shoreline Erosion Because measures will be taken to maintain the quality of water, ensure soil erosion does not occur, and replant vegetation, no long-term impacts are expected.

Table 5-41: Impacts on Public Health and Safety from the Mobile County Alternatives

Mobile County Alternatives	Site-specific Impacts
Dauphin Island Eco-Tourism and Environmental Education Area	Short-term: Hazardous Waste Generation or Disposal, or Human Exposure During construction of the proposed alternative elements, workers would follow standard safety measures in accordance with OSHA regulations. While no known hazardous or contaminated sites are located within proximity of the proposed alternative, the construction action plan would identify measures to be followed should such sites be revealed during construction activities. The construction action plan would identify measures to contain and/or remove materials in a way that would not result in adverse impacts on construction workers, visitors, or resources present in the area, including water sources. Overall, construction of the proposed alternative elements is not anticipated to result in adverse impacts

Mobile County Alternatives	Site-specific Impacts
	on public health and safety as long as identified safety protocols are enforced when such activities are ongoing. Impacts on Shoreline Erosion Construction of the parking lot, fishing pier, restrooms, boardwalk, gazebo, and bicycle path would require a NPDES permit to ensure that measures are taken to maintain the quality of water discharged from the construction site. This would ensure that adjacent waters such as lakes, wetlands, and other waterbodies do not receive excessive pollution that would change their water quality status. Additionally, during construction, the contractor would prepare an E&S plan and employ BMPs to ensure that soil erosion does not occur. These BMPs would be outlined in the CBMPP and regularly inspected by a QCI. After final grading, bare areas would be replanted to further ensure that loose soil does not erode from the area. These elements of the proposed alternative would result in small, localized changes to water quality that would become undetectable quickly after construction is complete. State water quality standards regarding drinking water and primary and secondary interactions would not be exceeded. There would be no increased risk of exposure to potential hazards from construction of these elements of the proposed alternative. Impacts from construction on public health would be short term, minor, and adverse because construction of these elements would not cause soil, groundwater, and/or surface contamination or exceedances in state water quality standards, and erosion of soil material would be minimized. Long-term: Hazardous Waste Generation or Disposal, or Human Exposure Because no brownfield, voluntary cleanup, or superfund sites are located within the site, no long-term impacts are expected. Impacts on Shoreline Erosion Because measures would be taken to maintain the quality of water, ensure soil erosion does not occur, and replant vegetation, no long-term impacts are expected.
Mid-Island Parks and Public Beach Improvements (Parcels A, B, and C)	Short-term: Hazardous Waste Generation or Disposal, or Human Exposure During construction of the proposed alternative elements, workers would follow standard safety measures in accordance with OSHA regulations. While no known hazardous or contaminated sites are located within proximity of the proposed alternative, the construction action plan would identify measures to be followed should such sites be revealed during construction activities. The construction action plan would identify measures to contain and/or remove materials in a way that would not result in adverse impacts on construction workers, visitors, or resources present in the area, including water sources. Overall, construction of the proposed alternative elements is not anticipated to result in adverse impacts on public health and safety as long as identified safety protocols are enforced when such activities are ongoing.

Mobile County Alternatives	Site-specific Impacts
	Impacts on Shoreline Erosion Construction of dune walkovers, parking lots, and restrooms would require a NPDES permit to ensure that measures are taken to maintain the quality of water discharged from the construction site. This would ensure that adjacent waters such as lakes, wetlands, and other waterbodies do not receive excessive pollution that would change their water quality status. Additionally, during construction, the contractor would prepare an E&S plan and employ BMPs to ensure that soil erosion does not occur. These BMPs would be outlined in the CBMPP and regularly inspected by a QCI. After final grading, bare areas would be replanted to further ensure that loose soil does not erode from the area. These elements of the proposed alternative would result in small, localized changes to water quality that would become undetectable quickly after construction is complete. State water quality standards regarding drinking water and primary and secondary interactions would not be exceeded. There would be no increased risk of exposure to potential hazards from construction of these elements of the proposed project. Impacts from construction on public health would be short term, minor, and adverse because construction of these elements would not cause soil, groundwater, and/or surface contamination or exceedances in state water quality standards, and erosion of soil material would be minimized. Long-term: Hazardous Waste Generation or Disposal, or Human Exposure Because no brownfield, voluntary cleanup, or superfund sites are located within the site, no long-term impacts are expected. Impacts on Shoreline Erosion Because measures would be taken to maintain the quality of water, ensure soil erosion does not occur, and replant vegetation, no long-term impacts are expected.
Mid-Island Parks and Public Beach Improvements (Parcels B and C)	Short-term: Hazardous Waste Generation or Disposal, or Human Exposure During construction of the proposed alternative elements, workers would follow standard safety measures in accordance with OSHA regulations. While no known hazardous or contaminated sites are located within proximity of the proposed alternative, the construction action plan would identify measures to be followed should such sites be revealed during construction activities. The construction action plan would identify measures to contain and/or remove materials in a way that would not result in adverse impacts on construction workers, visitors, or resources present in the area, including water sources. Overall, construction of the proposed alternative elements is not anticipated to result in adverse impacts on public health and safety as long as identified safety protocols are enforced when such activities are ongoing. Impacts on Shoreline Erosion Construction of the parking lots and restrooms would require a NPDES permit to ensure that measures are taken to maintain the quality of water discharged from the construction site. This would ensure that adjacent waters such as lakes,

Mobile County Alternatives	Site-specific Impacts
	wetlands, and other waterbodies do not receive excessive pollution that would change their water quality status. Additionally, during construction activities the contractor would prepare an E&S plan and employ BMPs to ensure that soil erosion does not occur. These BMPs would be outlined in the CBMPP and regularly inspected by a QCI. After final grading, bare areas would be replanted to further ensure that loose soil does not erode from the area. These elements of the proposed alternative would result in small, localized changes to water quality that would become undetectable quickly after construction is complete. State water quality standards regarding drinking water and primary and secondary interactions would not be exceeded. There would be no increased risk of exposure to potential hazards from construction of these elements of the proposed alternative. Impacts from construction on public health would be short term, minor, and adverse because construction of these elements would not cause soil, groundwater, and/or surface contamination or exceedances in state water quality standards, and erosion of soil material would be minimized. Long-term: Hazardous Waste Generation or Disposal, or Human Exposure Because no brownfield, voluntary cleanup, or superfund sites are located within the site, no long-term impacts are expected. Impacts on Shoreline Erosion Because measures would be taken to maintain the quality of water, ensure soil erosion does not occur, and replant vegetation, no long-term impacts are expected.

5.3 CUMULATIVE IMPACTS OF THE RESTORATION ALTERNATIVE(S)

5.3.1 Potential Cumulative Impacts

The CEQ regulations to implement NEPA require the assessment of cumulative impacts in the decision-making process for federal projects, plans, and programs. Cumulative impacts are defined as "the impact on the environment which results from the incremental impact of the action when added to other past, present, and reasonably foreseeable future actions regardless of what agency (federal or nonfederal) or person undertake such other actions" (40 CFR § 1508.7). As stated in the CEQ handbook, Considering Cumulative Effects (CEQ, 1997b), cumulative impacts need to be analyzed in terms of the specific resource, ecosystem, and human community being affected and should focus on effects that are truly meaningful. Cumulative impacts should be considered for all alternatives, including the no action. Consistent with CEQ regulations, the cumulative impacts analysis considers the environmental impacts of proposed alternatives when added to impacts of past, present, and reasonably foreseeable future actions along coastal Alabama. The following section describes the multistep approach used for evaluating cumulative impacts in this document.

5.3.2 Methodology for Assessing Cumulative Impacts

Cumulative impacts are typically analyzed using four steps:

- Step 1—identify resources affected. In this step, each resource affected by the alternatives is identified. It is important to note that when direct and indirect impact analyses conclude that a particular resource is not affected, a cumulative impact analysis for that resource is not

required. The following cumulative impact analysis is organized corresponding to specific affected resources.

- Step 2—establish boundaries. In order to identify the past, present, and reasonably foreseeable actions to consider in the cumulative impact analysis, affected-resource-specific spatial and temporal boundaries must be identified. The spatial boundary is the area where past, present, and reasonably foreseeable future actions have taken place, are taking place, or could take place and result in cumulative impacts on the affected resource when combined with the impacts of the alternatives being considered. The temporal boundary describes how far into the past and forward into the future actions should be considered in the impact analysis. Appropriate spatial and temporal boundaries may vary for each resource.
- Step 3—identify a cumulative action scenario. In this step, the past, present, and reasonably foreseeable future actions to be included in the impact analysis for each specific affected resource are identified. These actions fall within the spatial and temporal boundaries established in Step 2. The following analysis identifies these actions below.
- Step 4—cumulative impact analysis. This final step develops the analysis in the context of the incremental impact of the alternative (X), when added to the impacts from applicable past, present, and reasonably foreseeable future actions (Y), yielding the potential cumulative impacts of the alternative and applicable actions on an affected resource (Z); more simply, X + Y = Z.

5.3.3 Identification of Resources Affected and Boundaries of Analysis (Steps 1 and 2)

Resources Affected

In this RP/EIS, cumulative impacts include all of the resources identified in “Environmental Consequences” section above.

Spatial Boundary of Analysis

As discussed above, the spatial boundaries used to provide the necessary context for the cumulative impact analysis typically are defined based on the particular resource being assessed. For the purpose of this analysis, the spatial boundary includes those areas where each of the proposed alternatives would occur and adjacent areas, focusing on actions occurring along the Alabama coast.

Temporal Boundary of Analysis

Guidance on determining what actions to consider in the cumulative impact analysis comes from a variety of sources. The CEQ has produced several guidance documents, including a memorandum entitled “Guidance on Consideration of Past Actions in Cumulative Effects Analysis” (CEQ, 2005). This CEQ document states that consideration of past actions is only necessary insofar as it informs agency decision making. Typically, the only types of past actions considered are those that continue to have current cumulative impacts effects on the affected resources. This present effect will dictate how far into the past actions are considered and how the impacts of these past actions are captured in the discussion of the affected environment for each resource. The guidance states that “[a]gencies are not required to list or analyze the effects of individual past actions unless such information is necessary to describe the cumulative effect of all past actions” (CEQ, 2005). Agencies are allowed to aggregate the effects of past actions without delving into the historical details of individual past actions. Courts have agreed with this approach, giving deference to the CEQ’s interpretation of NEPA and stating that, as it relates to past actions, NEPA requires “adequate cataloging of relevant past projects in the area” (*Ecology Center v. Castaneda*, 574 F.3d 652, 667 [9th Cir. 2009]). Present actions are those that are

currently occurring and result in impacts on the same resources within the same spatial boundary that the alternatives affect. Reasonably foreseeable future actions are those actions that are likely to occur and affect the same resource as the proposed alternatives. The determination of what future actions should be considered requires a level of certainty that they will occur. This level of certainty could be met by a number of factors such as the completion of permit applications, the subject of approved proposals or planning documents, or other similar evidence. Determining how far into the future to consider actions is based on the impact of the alternatives being considered. Once the impacts of the alternatives are no longer experienced by the affected resource, future actions beyond that need not be considered. For this RP/EIS, future actions are identified as those actions likely to be initiated prior to finalization of the potential projects proposed in this RP/EIS and actions that are likely to occur beyond finalization of the RP/EIS and are determined to be reasonably foreseeable and likely to contribute to the overall cumulative impacts.

5.3.4 Identify a Cumulative Action Scenario (Step 3)

In order to effectively consider the potential cumulative impacts, the AL TIG identified past, present, and reasonably foreseeable future actions along the Alabama coast in the vicinity of the proposed project areas. Table 5-42 below identifies the cumulative action scenario for this RP/EIS.

Table 5-42: Cumulative Action Scenario

Category	Projects	Applicable Projects	Project Description	Key Resource Areas with Potential to Contribute to Cumulative Impacts
Restoration Related to the Spill (DWH Early Restoration, Resources and Ecosystems Sustainability, Tourist Opportunities, and Revived Economies of the Gulf Coast States Act (RESTORE Act), GEBF, North American Wetlands Conservation Fund, National Academy of Sciences)	*DWH Phase I ERP – Dune Restoration Project*	Gulf State Park Lodge and Associated Public Access Amenities Project	The Alabama Dune Restoration Project is a collaborative effort among federal and state agencies and coastal municipalities in Baldwin County. The goal of this project is to restore 55 acres of dune habitat by installing sand fencing, planting native dune vegetation, and posting signage to minimize human disturbance.	Geology and substrates; habitats; wildlife species; and protected species
Restoration Related to the Spill (DWH Early Restoration, RESTORE Act, GEBF, North American Wetlands Conservation Fund, National Academy of Sciences)	*DWH Phase II ERP – Restoring the Night Sky*	All of the proposed alternative areas (Baldwin and Mobile counties)	Restoring the Night Sky aims to improve the quality of sea turtle nesting habitat along Baldwin County beaches by reducing negative impacts on turtles from artificial lighting. The project involves multiple components in Alabama: (1) site-specific surveys of existing light sources for each targeted beach; (2) coordination with site managers on development of plans to eliminate, retrofit, or replace existing light fixtures on the property or to otherwise decrease the amount of light reaching the loggerhead sea turtle nesting beach; and (3) retrofitting streetlights and parking lot lights.	Protected species and tourism and recreation

Category	Projects	Applicable Projects	Project Description	Key Resource Areas with Potential to Contribute to Cumulative Impacts
Restoration Related to the Spill (DWH Early Restoration, RESTORE Act, GEBF, North American Wetlands Conservation Fund, National Academy of Sciences)	*DWH Phase III ERP – Gulf State Park Enhancement Project (not including the lodge)*	Gulf State Park Lodge and Associated Public Access Amenities Project	The Gulf State Park Enhancement Project would provide ecologically sensitive enhancements to Gulf State Park, a 6,150-acre park located in Baldwin County, Alabama, and operated by ADCNR. The project consists of four components that are currently underway: dune restoration, an interpretive center, an education center, and trail enhancements. Construction of the lodge is part of the proposed action and not part of this cumulative action.	Geology and substrates; hydrology and water quality; air quality and GHG emissions; habitats; wildlife species; protected species; socioeconomics; cultural resources; infrastructure; land and marine management; and tourism and recreational Use
Restoration Related to the Spill (DWH Early Restoration, RESTORE Act, GEBF, North American Wetlands Conservation Fund, National Academy of Sciences)	*DWH Phase IV ERP – Osprey Restoration in Alabama*	Fort Morgan Pier Rehabilitation Fort Morgan Peninsula Public Access Improvements	The Osprey Restoration in Coastal Alabama Project will establish five nesting platforms along the coast in Mobile and Baldwin counties to provide enhanced nesting opportunities for fish-eating raptors, including osprey. The nesting sites will be located in the vicinities of Portersville Bay, Dauphin Island, Fort Morgan, Little Lagoon in Gulf Shores, and in Gulf State Park.	Geology and substrates; habitats; wildlife species; protected species; and tourism and recreation

Category	Projects	Applicable Projects	Project Description	Key Resource Areas with Potential to Contribute to Cumulative Impacts
Other Restoration Programs	*Boggy Point Living Shoreline Project*	Fort Morgan Pier Rehabilitation Fort Morgan Public Access Improvements Gulf State Park Lodge and Associated Public Access Amenities Project Laguna Cove Little Lagoon Natural Resource Protection	The project would design living shorelines adjacent to the heavily used ADCNR Boggy Point Boat Ramp to restore and protect existing shoreline and salt marsh habitat.	Geology and substrates; hydrology and water quality; air quality and GHG emissions; habitats; wildlife species; marine and estuarine fauna; protected species; and tourism and recreational use
Other Restoration Programs	*Coffee Island Living Shoreline Study*	Mid-Island Parks and Public Beach Improvements Dauphin Island Eco-Tourism and Environmental Education Area	The design goals for the Coffee Island Living Shoreline Study involve augmenting and modifying the existing living shorelines breakwaters on the southeastern side of the island to improve shoreline protection performance.	Geology and substrates; hydrology and water quality; air quality and GHG emissions; habitats; wildlife species; marine and estuarine fauna; protected species; and tourism and recreational use

Category	Projects	Applicable Projects	Project Description	Key Resource Areas with Potential to Contribute to Cumulative Impacts
Other Restoration Programs	*Alabama Submerged Aquatic Vegetation Restoration & Monitoring Program, Lower Perdido Bay SAV Restoration & Protection, Baldwin County, Orange Beach*	Gulf State Park Lodge and Associated Public Access Amenities Project Laguna Cove Little Lagoon Natural Resource Protection	The project seeks to utilize RESTORE Act funds to further the State's comprehensive efforts to sustain and restore SAV in coastal Alabama. These efforts advance the goals and objectives of the Comprehensive Conservation and Management Plan of the Mobile Bay National Estuary Program (MBNEP, 2014) and support ongoing efforts of the NOAA-funded Alabama Coastal Zone Management Program. While the proposed projects are targeted to the State of Alabama, SAV losses are documented throughout the Gulf (Handley, 1995). Alabama proposes to develop a model SAV restoration and monitoring program that is foundational in nature and can be applied Gulf-wide.	Geology and substrates; hydrology and water quality; air quality and GHG emissions; habitats; wildlife species; and marine and estuarine fauna
Other Restoration Programs	*Marsh Restoration in Oyster Bay, NOAA-led Hydrological Restoration Projects (southern side of Mobile Bay, Baldwin County)*	Fort Morgan Pier Rehabilitation Fort Morgan Peninsula Public Access Improvements	This project would restore 150 acres of estuarine marsh in Oyster Bay by replacing undersized culverts, removing nuisance vegetation, and planting native species.	Geology and substrates; hydrology and water quality; air quality and GHG emissions; habitats; wildlife species; and marine and estuarine fauna
Military Operations	*No known projects.*	NA	NA	NA
Marine Transportation	*No known projects.*	NA	NA	NA

Category	Projects	Applicable Projects	Project Description	Key Resource Areas with Potential to Contribute to Cumulative Impacts
Energy Activities (Offshore oil production, Offshore Natural Gas Facilities, State Oil and Gas Activities)	*No known projects.*	NA	NA	NA
Marine Mineral Mining, Including Sand and Gravel Mining	*No known projects*	NA	NA	NA
Coastal Development and Land Use	*Amber Isle Development (Restaurant, Hotel and Surf Shop)*	Gulf State Park Lodge and Associated Public Access Amenities Project	The Amber Isle Development expands current development in Orange Beach to include a restaurant, retail store, and 150-room hotel with attached meeting facility. The development site is located directly south of the Gulf State Park campground.	Geology and substrates; hydrology and water quality; air quality and GHG emissions; noise; habitats; wildlife species; protected species; infrastructure; socioeconomic resources; land and marine management; and tourism
Coastal Development and Land Use	*Phoenix West II Condominium*	Gulf State Park Lodge and Associated Public Access Amenities Project	The Phoenix West II condominium complex was completed in 2013. The $245 million high-rise is located on the waterfront at the west end of Orange Beach and is currently Alabama's largest residential building.	Geology and substrates; hydrology and water quality; air quality and GHG emissions; noise; habitats; wildlife species; protected species; infrastructure; socioeconomic resources; land and marine management; and tourism

Category	Projects	Applicable Projects	Project Description	Key Resource Areas with Potential to Contribute to Cumulative Impacts
Coastal Development and Land Use	*Gulf State Park Master Plan*	Gulf State Park Lodge and Associated Public Access Amenities Project	Master Plan elements that are currently proposed for implementation are campground improvements, picnic area enhancements, conversion of the existing golf course to a more natural state to serve as an area for additional outdoor recreational activities, and pedestrian walkovers at the lodge site and at the interpretive center site.	Geology and substrates; hydrology and water quality; air quality and GHG emissions; noise; habitats; wildlife species; protected species; cultural resources; land and marine management; and tourism and recreation
Fisheries and Aquaculture	*Alabama Artificial Reef System*	Gulf State Park Lodge and Associated Public Access Amenities Project	Alabama's Artificial Reef Program aims to create or improve habitat for commercially and recreationally harvested fish species through the placement of hard structures on offshore mud/sand bottom types. The program was initiated in 1953 under the direction of ADCNR and currently comprises an extensive network of artificial reefs.	Geology and substrates; hydrology and water quality; air and GHG emissions; noise; marine and estuarine fauna; and protected species
Tourism and Recreation	*City of Orange Beach Trail System*	Gulf State Park Lodge and Associated Public Access Amenities Project Laguna Cove Little Lagoon Natural Resource Protection	The Backcountry Trail project is a collaborative effort between the City of Orange Beach, Gulf State Park, and property owners along the trail's alignment. Approximately 11 miles of city trail have been established or are currently under development adjacent to the park that tie in with the park trail system.	Geology and substrates; hydrology and water quality; air quality and GHG emissions; habitats; wildlife species; land and marine management; and tourism and recreation

Category	Projects	Applicable Projects	Project Description	Key Resource Areas with Potential to Contribute to Cumulative Impacts
Tourism and Recreation	*Orange Beach, Gulf State Park, and Gulf Shores Beach Nourishment Projects*	Gulf State Park Lodge and Associated Public Access Amenities Project	Alabama beach nourishment projects are a collaborative effort between ADCNR and local municipalities. These projects aim to restore beaches that have suffered a loss due to storms and/or erosion to historic conditions by placing sand from offshore borrow sites via dredge and pipe.	Geology and substrates; hydrology and water quality; air quality and GHG emissions; noise; habitats; wildlife species; protected species; land and marine management; and tourism and recreation
Tourism and Recreation	*Rehabilitation of a Boat Ramp at the Fort Morgan Pier Site*	Fort Morgan Pier Rehabilitation	ADCNR is rehabilitating an existing boat ramp at the Fort Morgan pier site. This project consists of removal and replacement of a concrete boat ramp, aluminum pier, and deteriorating aluminum sheet piling, and replacement with new and improved features.	Geology and substrates; hydrology and water quality; air quality and GHG emissions; noise; habitats; wildlife species; protected species; land and marine management; and tourism and recreation

Notes: NA – not applicable.

5.3.5 Cumulative Impact Analysis (Step 4)

The following section describes the cumulative impacts of the alternatives being considered when combined with other past, present, and reasonably foreseeable future actions. The analysis below considers the impacts of the cumulative actions identified above. The analysis recognizes that in most cases the contribution to the cumulative impacts for a given resource from implementing the action alternatives would be difficult to discern. In many situations, implementing one of the action alternatives would likely help reduce overall long-term, adverse impacts by providing a certain level of offsetting benefits, especially when considered in concert with other actions of similar nature (e.g., stewardship programs or non-NRDA restoration). The cumulative impact analysis is evaluated by affected resource. There are several ways in which effects may come together to result in cumulative effects. For purposes of the following analysis, cumulative effects have been identified and may fall under one or more of four categories:

- **Additive adverse or beneficial effect—**Occurs when the negative or beneficial impact on a resource adds to effects from other actions.
- **Synergistic (interactive) adverse effect—**Occurs when the net adverse impact on a resource is greater than the sum of the adverse impacts from individual actions (this could also result in a different type of impact than the impact of the individual impacts; e.g., increased temperature discharges in water when added to increased nutrient loading can result in reduced dissolved oxygen).
- **Synergistic (interactive) beneficial effect—**Occurs when the net beneficial impact on a resource is greater than the sum of the benefits from individual actions (this could also result in a different type of impact than the impact of the individual impacts).
- **Countervailing effect—**Occurs when the overall net effect of two or more actions, when combined, is less than the sum of their individual effects.

In the following sections, the analysis is organized by resource and alternative. The analysis follows the pattern below:

- Direct and indirect effects of the proposed alternatives (X). Although each potential proposed alternative may not be implemented through this RP/EIS, all are included in the analysis of the proposed alternative at this time. If not selected under this RP/EIS, many of the alternatives are actively seeking funding from multiple sources and would likely be implemented through other sources at some time and should be considered in the cumulative impact scenario. The below analysis when considering the impact of the proposed alternatives will refer to it as the “range of proposed projects in this RP/EIS.”
- Impacts on the resources from applicable past, present, and reasonably foreseeable future actions (Y).
- Potential cumulative impacts of the alternative and applicable actions on an affected resource (Z), where the effects may interact and be additive; more simply, X + Y = Z. The potential cumulative impacts also consider the cumulative impact analysis from the Final PDARP/PEIS (Section 6.6), as noted below.

Geology and Substrates

The range of proposed alternatives in this RP/EIS would have short-term, minor, adverse impacts on geology and substrates in Mobile and Baldwin counties as a result of ground disturbance for the

additional recreational use amenities, including the Gulf State Park Lodge and Associated Public Access Amenities Project access point improvements in both counties, boardwalks, dune walkovers, restroom and shower facilities, parking, and pier and boat ramp rehabilitation. On sites that are already disturbed, such as the Gulf State Park Lodge and Associated Public Access Amenities Project, Fort Morgan Pier Rehabilitation, and Fort Morgan Peninsula Public Access Improvement sites, these impacts would be further minimized. Long-term impacts from implementation of these alternatives would be minor and adverse on geology because the sites would be altered, but BMPs would be employed to ensure that all improvements are designed in a manner that is sensitive to the coastal environment, allowing coastal processes to occur. Long-term benefits to geology and substrates would occur from alternatives that include dune walkovers (Fort Morgan Peninsula Public Access Improvements, Gulf Highlands Land Acquisition and Improvements, and Mid-Island Parks and Public Beach Improvements) because these walkovers would funnel foot traffic into a single area and reduce disturbance to dunes and other areas. Long-term benefits would also be realized for land acquisition projects (Gulf Highlands Land Acquisition and Improvements, Laguna Cove Little Lagoon Natural Resource Protection, and Mid-Island Parks and Public Beach Improvements), and acquisition of these lands for context sensitive recreational improvements would remove the potential for them to be developed with high intensity uses.

Fourteen projects in Table 5-42 are identified as having potential impacts on geology and substrates. However, five projects are living shoreline or marsh restoration projects where impacts on geology and substrates are anticipated to occur in water. Because of their geographic separation from the alternatives in the RP/EIS that include in-water work (Fort Morgan Pier Rehabilitation and Dauphin Island Eco-Tourism and Environmental Education Area), their interaction with the range of proposed alternatives in the RP/EIS would not produce cumulative impacts for geology and substrates. These five projects are: Boggy Point Living Shoreline Project, Coffee Island Living Shoreline Study, Alabama SAV Restoration & Monitoring Program, Marsh Restoration in Oyster Bay, and the Alabama Artificial Reef System.

The remaining projects that could have cumulative impacts with the range of alternatives in the RP/EIS include:

- DWH Phase I ERP Dune Restoration
- DWH Phase III ERP – Gulf State Park Enhancement Project (other project elements)
- DWH Phase IV ERP – Osprey Restoration in Alabama
- Amber Isle Development
- Phoenix West II Condominium
- Gulf State Park Master Plan
- City of Orange Beach Trail System
- Orange Beach, Gulf State Park, and Gulf Shores Beach Nourishment Projects
- Rehabilitation of a Boat Ramp at the Fort Morgan Pier Site

For all nine projects, the impacts would occur mainly during construction. Construction impacts of each project would vary from very minimal in the case of the osprey tower installation, which would have a very limited area of ground disturbance, to large in the case of the Amber Isle Development and Phoenix West II Condominium. For those projects that include large-scale ground disturbance during construction, it is expected that these projects would follow construction guidelines to reduce sedimentation and erosion, resulting in short-term, minor to moderate, adverse impacts for cumulative

actions involving development. Actions that include mostly in-water work, such as the rehabilitation of the boat ramp at Fort Morgan, would have minimal impacts related to construction staging and ground disturbance where the ramps meet the shore. For those actions related to dune restoration, short-term, minor, adverse impacts would occur during construction because the natural substrate would be disturbed, but these impacts would cease once restoration has occurred.

Long-term, projects related to the large scale development described above would permanently alter the geology and substrate of the area. Projects that are assumed to have conventional building techniques, such as the Amber Isle Development and Phoenix West II Condominium, would have larger impacts than buildings that employ LEED and other context sensitive design solutions, such as those proposed as part of the Gulf State Park Enhancement Project, the Gulf State Park Master Plan, and the Gulf State Park Lodge and Associated Public Access Amenities Project. Projects with a small footprint, such as the osprey restoration, would not have noticeable long-term impacts. These long-term impacts would range from minor to moderate, adverse from the change in geology and substrates, but natural processes would still be allowed to occur in most cases. Long-term impacts from projects related to dune restoration (DWH Phase I ERP) and dune restoration under the Gulf State Park Enhancement Project) and beach nourishment would have long-term, beneficial impacts because these projects would restore and enhance these systems.

When the range of proposed alternatives in this RP/EIS is analyzed in combination with other past, present, and reasonably foreseeable future actions, short- and long-term, adverse cumulative impacts on geology and substrates would likely occur ranging from minor to moderate, adverse. However, they would not contribute substantially to adverse cumulative impacts. The range of alternatives in this RP/EIS, when carried out in conjunction with other environmental restoration efforts has the potential to result in some long-term, beneficial cumulative impacts on geology and substrates.

The Final PDARP/PEIS found that implementation of recreational use projects is consistent with the goals of the alternative selected in that plan and is not expected to contribute substantially to short-term or long-term, adverse cumulative impacts on physical resources when analyzed in combination with other past, present, and reasonably foreseeable future actions. This site-specific analysis for geology and substrates is consistent with that finding.

Hydrology and Water Quality

The range of proposed alternatives in this RP/EIS would have short-term, minor, adverse impacts on hydrology and water quality in Mobile and Baldwin counties as a result of ground disturbance for the additional recreational use amenities, including the lodge and conference center, access point improvements in both counties, boardwalks, dune walkovers, restroom and shower facilities, parking, and pier and boat ramp rehabilitation. BMPs would be employed during construction activities to minimize erosion and runoff, further minimizing impacts. Impacts on floodplains would be avoided. Impacts on wetlands would also be avoided to the extent possible, and unavoidable impacts would be offset by mitigation. Overall, impacts on water quality and hydrology in the short term from the range of alternatives in the RP/EIS would be minor to moderate (for the Gulf State Park Lodge and Associated Public Access Amenities Project where wetland area would be filled, but mitigation would occur). Long-term impacts on water quality and hydrology from implementation of these alternatives would range to having none to minor, adverse because the sites would be altered, but BMPs would be employed to ensure that all improvements are designed in a manner that is sensitive to the coastal environment, allow coastal processes to occur, and maintain the hydrological functions of the site. Long-term benefits to hydrology and water quality would occur as a result of alternatives that provide for land acquisition (Gulf Highlands Land Acquisition and Improvements, Laguna Cove Little Lagoon Natural Resource

Protection, and Mid-Island Parks and Public Beach Improvements), because hydrological functions on these lands would be left undeveloped.

Twelve projects in Table 5-42 are identified as having potential impacts on hydrology and water quality including:

- DWH Phase III ERP – Gulf State Park Enhancement Project (other project elements)
- Boggy Point Living Shoreline Project
- Coffee Island Living Shoreline Study
- Alabama SAV Restoration & Monitoring Program
- Marsh Restoration in Oyster Bay
- Amber Isle Development
- Phoenix West II Condominium
- Gulf State Park Master Plan
- Alabama Artificial Reef System
- City of Orange Beach Trail System
- Orange Beach, Gulf State Park, and Gulf Shores Beach Nourishment Projects
- Rehabilitation of a Boat Ramp at the Fort Morgan Pier Site

For all 12 projects, the impacts would occur mainly during construction. Living shoreline projects, SAV, marsh restoration, boat ramp rehabilitation, and artificial reefs would be expected to cause short-term water quality impacts because construction would occur in or around the water and would be expected to increase turbidity during construction. These impacts would be expected to be short term and minor, and the hydrological qualities of the site are expected to return to preconstruction or improved conditions—in the case of hydrological restoration efforts such as Marsh Restoration in Oyster Bay—after the activities cease. For all other projects that include some type of construction along the shoreline, all projects would be constructed in accordance with state water quality requirements, and water quality conditions would be expected to return to baseline levels shortly after construction, which would result in short-term, minor impacts on water quality and hydrology including wetlands and floodplains.

The intensity of the long-term impacts on hydrology and water quality varies between the cumulative actions. Projects related to large-scale development (e.g., condominium development) have the potential to cause long-term hydrological or water quality impacts that are minor to moderate as a result of increases in impervious surfaces, which could result in increased stormwater runoff and affect surface water and wetlands. Restoration projects occurring in or near the water (living shoreline projects, SAV, boat ramp rehabilitation, marsh restoration, and artificial reefs) would have long-term benefits because the purpose of these projects is to restore and enhance these areas.

When the range of proposed alternatives in this RP/EIS is analyzed in combination with other past, present, and reasonably foreseeable future actions, short- and long-term, adverse cumulative impacts on hydrology and water quality would likely occur ranging from minor to moderate, adverse. However, they would not contribute substantially to adverse cumulative impacts because the moderate impacts would be related to large-scale development projects in the area. The range of alternatives in this RP/EIS, when carried out in conjunction with other environmental restoration efforts has the potential to result in some long-term, beneficial cumulative impacts on water quality and hydrology.

The Final PDARP/PEIS found that implementation of recreational use projects is consistent with the goals of the selected alternative and is not expected to contribute substantially to short-term or long-term, adverse cumulative impacts on physical resources when analyzed in combination with other past, present, and reasonably foreseeable future actions. This site-specific analysis for water quality and hydrology is consistent with that finding.

Air Quality and Greenhouse Gas Emissions

The range of proposed alternatives in this RP/EIS would have short-term, minor, adverse impacts on air quality and GHG emissions in Mobile and Baldwin counties as a result of construction activities that could range from four months to two years in length. During construction, air quality standards are not expected to be exceeded, and GHG emissions would be low. Long-term, minor, adverse impacts may occur on air quality and GHG emissions from facility operations or an increase in vehicle traffic to the sites. These impacts would minimal either because of the small size of the proposed alternatives or the use of green building techniques.

Twelve projects in Table 5-42 are identified as having potential impacts on air quality and GHG emissions, including:

- DWH Phase III ERP – Gulf State Park Enhancement Project (other project elements)
- Boggy Point Living Shoreline Project
- Coffee Island Living Shoreline Study
- Alabama SAV Restoration & Monitoring Program
- Marsh Restoration in Oyster Bay
- Amber Isle Development
- Phoenix West II Condominium
- Gulf State Park Master Plan
- Alabama Artificial Reef System
- City of Orange Beach Trail System
- Orange Beach, Gulf State Park, and Gulf Shores Beach Nourishment Projects
- Rehabilitation of a Boat Ramp at the Fort Morgan Pier Site

For all 12 projects, the impacts would occur mainly during construction because of the use of construction equipment on and around the project sites. Construction impacts of each project would be short term in nature, would constitute a very small portion of the overall inventory of air emissions in the region, and are not expected to violate any state or federal standards. The duration and intensity of these short-term impacts would depend on the project size and range from minor (for small restoration projects or small recreational infrastructure projects) to moderate (for large development projects). Long-term impacts on air quality would be minor because many of these actions are focused on restoration and would not produce emissions. Those actions that include facility development are assumed to not be major source polluters and not exceed long-term, minor, adverse impacts.

When the range of proposed alternatives in this RP/EIS is analyzed in combination with other past, present, and reasonably foreseeable future actions, short- and long-term, adverse cumulative impacts on air quality and GHG emissions would be minor. However, they would not contribute substantially to adverse cumulative impacts.

The Final PDARP/PEIS found that implementation of recreational use projects is consistent with the goals of the selected alternative and is not expected to contribute substantially to short-term or long-term, adverse cumulative impacts on physical resources when analyzed in combination with other past, present, and reasonably foreseeable future actions. This site-specific analysis for air quality and GHG emissions is consistent with that finding.

Noise

The range of proposed alternatives in this RP/EIS would have short-term, minor, adverse impacts on noise in Mobile and Baldwin counties as a result of construction activities that could range from four months to two years in length. During construction, all projects would implement BMPs to reduce noise impacts (e.g., when construction occurs and what type of equipment is utilized). Long-term, minor, adverse impacts may occur from noise related to facility operations or an increase in vehicle traffic to the sites. These impacts would be minimal due to either the small size of the proposed projects or incorporation of project elements aimed at reducing traffic (e.g., trams, bicycle shares).

Twelve projects in Table 5-42 are identified as having potential impacts on noise, including:

- DWH Phase III ERP – Gulf State Park Enhancement Project (other project elements)
- Boggy Point Living Shoreline Project
- Coffee Island Living Shoreline Study
- Alabama SAV Restoration & Monitoring Program
- Marsh Restoration in Oyster Bay
- Amber Isle Development
- Phoenix West II Condominium
- Gulf State Park Master Plan
- Alabama Artificial Reef System
- City of Orange Beach Trail System
- Orange Beach, Gulf State Park, and Gulf Shores Beach Nourishment Projects
- Rehabilitation of a Boat Ramp at the Fort Morgan Pier Site

For all 12 projects, the impacts would occur mainly during construction because of the use of construction equipment on and around the project sites. Construction impacts related to noise for each project would be short term in nature and would conclude once construction is over. The duration and intensity of these short-term impacts would depend on the project size and range from minor (for small restoration projects or small recreational infrastructure) to moderate (for large development projects). For those actions related to restoration actions, long-term impacts on noise would be minor because the actions are focused on restoration and would produce no to minimal noise once in operation. Those actions that include facility development would be assumed to have long-term, minor impacts because they are located in developed areas, and the incremental increase in operational noise would be small.

When the range of proposed alternatives in this RP/EIS is analyzed in combination with other past, present, and reasonably foreseeable future actions, short- and long-term, adverse cumulative impacts on noise would be minor. However, they would not contribute substantially to adverse cumulative impacts.

The Final PDARP/PEIS found that implementation of recreational use projects is consistent with the goals of the selected alternative and is not expected to contribute substantially to short-term or long-term, adverse cumulative impacts on physical resources when analyzed in combination with other past, present, and reasonably foreseeable future actions. This site-specific analysis for noise is consistent with that finding.

Habitats

The range of proposed alternatives in this RP/EIS would have short-term, minor, adverse impacts on habitats in Mobile and Baldwin counties resulting from construction activities that may limit habitat availability during the construction period, lasting four months to two years for the range of projects. Any long-term, adverse impacts would be minor. Long-term, habitats disturbed during construction would be restored and become available again for species use. For those projects that involve land acquisition (Gulf Highlands Land Acquisition and Improvements, Laguna Cove Little Lagoon Natural Resource Protection, Dauphin Island Eco-Tourism Environment and Education Area, and Mid-Island Parks and Public Beach Improvements), there would be long-term benefits from preserving habitat from future development because the majority of these sites and their habitats would remain undeveloped.

Fourteen projects in Table 5-42 are identified as having potential impacts on habitats including:

- DWH Phase I ERP – Dune Restoration
- DWH Phase III ERP – Gulf State Park Enhancement Project (other project elements)
- DWH Phase IV ERP – Osprey Restoration in Alabama
- Boggy Point Living Shoreline Project
- Coffee Island Living Shoreline Study
- Alabama SAV Restoration & Monitoring Program
- Marsh Restoration in Oyster Bay
- Amber Isle Development
- Phoenix West II Condominium
- Gulf State Park Master Plan
- Alabama Artificial Reef System
- City of Orange Beach Trail System
- Orange Beach, Gulf State Park, and Gulf Shores Beach Nourishment Projects
- Rehabilitation of a Boat Ramp at the Fort Morgan Pier Site

For all 14 projects, the impacts would occur mainly during construction. Living shoreline projects, SAV, marsh restoration, boat ramp rehabilitation, small-scale recreational infrastructure from the Gulf State Park Master Plan, and artificial reefs would be expected to have short-term impacts on habitats in and around the shoreline because construction would occur in or around the water. These impacts would be expected to be short term and minor because the sites would to return to preconstruction conditions after the activities cease. For all other projects that include some type of construction along the shoreline, short-term, minor, adverse impacts would occur because temporary species displacement would occur during the construction period. After construction, these species would be expected to return to their previously used habitat.

The intensity of the long-term impacts on habitats varies between the cumulative actions. Projects related to large scale development have the potential to cause long-term, minor habitat impacts. For example, the Amber Isle Development and Phoenix West II Condominium could result in displacement of species in the direct area of the development; however, lands adjacent to these projects are already developed, and the project sites are not expected to provide high quality, unfragmented habitat. Development for the Gulf State Park Enhancement Project and Gulf State Park Master Plan is occurring in a way that would enhance habitats (e.g., with dune restoration or trail development to manage human use) or minimize impacts on habitats through low-scale development. Operation of the City Orange Beach Trail System would occur in the area of existing trails and is not be expected to contribute to habitat fragmentation or species disturbance because the level of activity in the area would not greatly change. Other projects related to restoration, including osprey restoration, living shoreline projects, SAV, and marsh restoration would have long-term benefits because the purpose of these projects is to restore and enhance these areas to provide additional, higher quality habitat.

When the range of proposed alternatives in this RP/EIS is analyzed in combination with other past, present, and reasonably foreseeable future actions, short- and long-term, minor, adverse cumulative impacts on habitats would likely occur. However, they would not contribute substantially to adverse cumulative impacts. The range of alternatives in this RP/EIS, when carried out in conjunction with other environmental restoration efforts has the potential to result in some long-term, beneficial cumulative impacts on habitats by preserving and enhancing shoreline areas.

The Final PDARP/PEIS found that implementation of recreational use projects is consistent with the goals of the selected alternative and is not expected to contribute substantially to short-term or long-term, cumulative adverse impacts on biological resources when analyzed in combination with other past, present, and reasonably foreseeable future actions. This site-specific analysis for habitats is consistent with that finding.

Wildlife

The range of proposed alternatives in this RP/EIS would have short-term, minor, adverse impacts on wildlife (including birds) in Mobile and Baldwin counties resulting from construction activities that may cause species displacement, loss of preferred habitat, or direct mortality during the construction period, which could last from four months to two years for the range of projects. While there would be short-term impacts on wildlife, many species would be expected to use adjacent habitats and return to the sites once construction is completed. Direct mortality is assumed to be minimal and, in general, species would not be affected at a population level. Long-term, any habitats disturbed would be restored and available for species use, with any long-term, adverse impacts being minor. For those projects that involve land acquisition (Gulf Highlands Land Acquisition and Improvements, Laguna Cove Little Lagoon Natural Resource Protection, Dauphin Island Eco-Tourism Environment and Education Area, and Mid-Island Parks and Public Beach Improvements), there would be long-term benefits from preserving habitat from future development because the majority of these sites and their habitats would remain undeveloped for wildlife to use. Long-term benefits would also occur from designated walkovers that funnel foot traffic to sites current being accessed informally, thereby reducing species disturbance.

Fourteen projects in Table 5-42 are identified as having potential impacts on wildlife, including:

- DWH Phase I ERP – Dune Restoration
- DWH Phase III ERP – Gulf State Park Enhancement Project (other project elements)
- DWH Phase IV ERP – Osprey Restoration in Alabama
- Boggy Point Living Shoreline Project

- Coffee Island Living Shoreline Study
- Alabama SAV Restoration & Monitoring Program
- Marsh Restoration in Oyster Bay
- Amber Isle Development
- Phoenix West II Condominium
- Gulf State Park Master Plan
- Alabama Artificial Reef System
- City of Orange Beach Trail System
- Orange Beach, Gulf State Park, and Gulf Shores Beach Nourishment Projects
- Rehabilitation of a Boat Ramp at the Fort Morgan Pier Site

For all 14 projects, the impacts would occur mainly during construction. For all projects, species may avoid using the area during this time and limited, direct mortality of smaller, less mobile species may occur during construction. These impacts would be expected to be short term and minor because the sites would return to preconstruction conditions after the activities cease. After construction, these species would be expected to return to their previously used habitat. Impacts would be short term, minor, and adverse.

The intensity of the long-term impacts on wildlife varies between the cumulative actions. Projects related to large scale development have the potential to cause long-term, minor habitat impacts. For example, the Amber Isle Development and Phoenix West II Condominium could result in displacement of species in the direct area of the development; however, lands adjacent to these projects are already developed, and the project sites are not expected to provide high quality, unfragmented habitat. Development for the Gulf State Park Enhancement Project and Gulf State Park Master Plan is occurring in a way that would enhance habitats (e.g., with dune restoration or trail development to manage human use) or minimize impacts on habitats through low-scale development and would also include educational components about the area's wildlife. Operation of the City of Orange Beach Trail System would occur in the area of existing trails and is not be expected to contribute to habitat fragmentation or species disturbance because the level of activity in the area would not greatly change. Other projects related to restoration, including osprey restoration, living shoreline projects, SAV, and marsh restoration would have long-term benefits because the purpose of these projects is to restore and enhance these areas to provide additional, higher quality habitat for the wildlife occupying that habitat.

When the range of proposed alternatives in this RP/EIS is analyzed in combination with other past, present, and reasonably foreseeable future actions, short- and long-term, minor, adverse cumulative impacts on wildlife would likely occur. However, they would not contribute substantially to cumulative adverse impacts. The range of alternatives in this RP/EIS, when carried out in conjunction with other environmental restoration efforts has the potential to result in some long-term, beneficial cumulative impacts on wildlife by preserving and enhancing shoreline areas.

The Final PDARP/PEIS found that implementation of recreational use projects is consistent with the goals of the selected alternative and is not expected to contribute substantially to short-term or long-term, cumulative adverse impacts on biological resources when analyzed in combination with other past, present, and reasonably foreseeable future actions. This site-specific analysis for wildlife is consistent with that finding.

Marine and Estuarine Fauna

The range of proposed alternatives in this RP/EIS would have short-term, minor, adverse impacts on marine and estuarine fauna in Mobile and Baldwin counties as a result of construction activities that may cause species displacement, loss of preferred habitat, or direct mortality during the construction period. For the alternatives that are occurring in upland areas, these impacts would not occur. These impacts are expected for a subset of the proposed alternatives in this RP/EIS, including the Fort Morgan Pier Rehabilitation, Laguna Cove Little Lagoon Natural Resource Protection, and the Dauphin Island Eco-Tourism and Environmental Education Area. For all of these alternatives, all permit requirements would be followed and BMPs would be implemented to minimize potential impacts on these resources. Long term, any in-water infrastructure would replace existing infrastructure or would be built to ADCNR regulations (e.g., boardwalks as tall as they are wide) to ensure that any long-term impacts on these species are minor. For those alternatives that involve land acquisition (Gulf Highlands Land Acquisition and Improvements, Laguna Cove Little Lagoon Natural Resource Protection, and Dauphin Island Eco-Tourism and Environmental Education Area), there would be long-term benefits from preserving habitat from future development because the majority of these sites and their habitats would remain undeveloped for wildlife to use. Long-term benefits would also occur from designated walkovers that funnel foot traffic to sites current being accessed informally, thereby reducing species disturbance.

Six projects in Table 5-42 are identified as having potential impacts on marine and estuarine fauna, including:

- Boggy Point Living Shoreline Project
- Coffee Island Living Shoreline Study
- Alabama SAV Restoration & Monitoring Program
- Marsh Restoration in Oyster Bay
- Alabama Artificial Reef System
- Rehabilitation of a Boat Ramp at the Fort Morgan Pier Site

For all six projects, the impacts would occur mainly during construction and may result in adverse effects to benthic organisms and fish; however, these effects would be short term and localized and would be no more than minor. Disturbance of individual species would occur; however, there would be no change in the diversity or local populations of marine and estuarine species. All projects have coordinated or would be required to coordinate with NMFS, to evaluate potential adverse effects on EFH and potential adverse impact on threatened or endangered marine species and marine mammals, and USFWS to evaluate potential adverse impacts on manatees and sea turtles. Consultation with these resource agencies would ensure that adverse effects on protected marine species are minimized to the maximum extent practicable. In the long term, these projects would contribute to additional habitat for living marine resources and result in long-term, beneficial effects with the exception of the boat ramp rehabilitation, which would have long-term, minor, adverse impacts because operation of these ramps would result in ongoing disturbance in those areas.

When the range of proposed alternatives in this RP/EIS is analyzed in combination with other past, present, and reasonably foreseeable future actions, short- and long-term, minor, adverse cumulative impacts on marine and estuarine fauna would likely occur. However, they would not contribute substantially to cumulative adverse impacts. The range of alternatives in this RP/EIS, when carried out in conjunction with other environmental restoration efforts has the potential to result in some long-term,

beneficial cumulative impacts on marine and estuarine fauna by preserving and enhancing shoreline areas.

The Final PDARP/PEIS found that implementation of recreational use projects is consistent with the goals of the selected alternative and is not expected to contribute substantially to short-term or long-term, cumulative adverse impacts on biological resources when analyzed in combination with other past, present, and reasonably foreseeable future actions. This-site specific analysis for marine and estuarine fauna is consistent with that finding.

Protected Species

The range of proposed alternatives in this RP/EIS would have short-term, minor, adverse impacts on protected species in Mobile and Baldwin counties as a result of construction activities that may cause species displacement or loss of preferred habitat during the construction period, which could last four months to two years for the range of alternatives. These species are mobile and would likely exit the area during the construction period. While protected species, both terrestrial and aquatic, occur in and around the sites, planning for each project includes consultation with the applicable regulatory agencies (USFWS and NOAA) to ensure that any potential impacts are minimized and that there would be no impact on the overall population. During operation of these alternatives, any long-term, adverse impacts would be minor. Long-term benefits would occur from alternatives that include land acquisition (e.g., Gulf Highlands Land Acquisition and Improvements, Laguna Cove Little Lagoon Natural Resource Protection, Dauphin Island Eco-Tourism Environment and Education Area, and Mid-Island Parks and Public Beach Improvements) by preserving habitat from future development because the majority of these sites and their habitats would remain undeveloped for wildlife to use. Long-term benefits would also occur as a result of designated walkovers that funnel foot traffic to sites current being accessed informally, thereby reducing species disturbance.

Thirteen projects in Table 5-42 are identified as having potential impacts on protected species, including:

- DWH Phase I ERP – Dune Restoration
- DWH Phase II ERP – Restoring the Night Sky
- DWH Phase III ERP – Gulf State Park Enhancement Project (other project elements)
- Boggy Point Living Shoreline Project
- Coffee Island Living Shoreline Study
- Alabama SAV Restoration & Monitoring Program
- Marsh Restoration in Oyster Bay
- Amber Isle Development
- Phoenix West II Condominium
- Gulf State Park Master Plan
- Alabama Artificial Reef System
- Orange Beach, Gulf State Park, and Gulf Shores Beach Nourishment Projects
- Rehabilitation of a Boat Ramp at the Fort Morgan Pier Site

For all 13 projects, the impacts would occur mainly during construction; however, species may avoid using the area during this time. These impacts would be expected to be short term and minor because

the sites would to return to preconstruction conditions after the activities cease. After construction, these species would be expected to return to their previously used habitat, resulting in short-term, minor, adverse impacts. Projects occurring in protected species habitat would be required to conduct consultation with the appropriate agency (USFWS and/or NOAA) and implement the appropriate BMPs. Projects proposed to occur in or near the shore, which includes all of the projects noted above, have the potential to affect protected marine species, specifically sea turtles. In the short term, construction activities occurring during development projects adjacent to sea turtle habitat would result in short-term, temporary disturbance from noise during the period of construction. Light from construction activities would not affect nesting turtles at night because construction activities would be limited to daytime hours and would occur outside the nesting season. During operation of these development projects, all projects are expected to follow local regulations related to turtle-friendly lighting to minimize potential impacts. These projects would also occur in areas with the potential for Alabama beach mouse and other protected terrestrial species. Impacts could occur from displacement of this species during construction and operation, if the species are present in this area. Long term, many of these projects would have beneficial impacts on protected species because they focus on the restoration of habitat used by these species. The DWH Early Restoration Phase I and II projects (Dune Restoration and Restoring the Night Sky) and the projects to establish living shorelines, restore marsh, and restore SAV are all designed to benefit protected species (terrestrial and aquatic) (DWH Trustees, 2012a; 2012b). Therefore, although adverse impacts are possible, these initiatives are expected to result in long-term, beneficial impacts on protected species in coastal Alabama. The two development projects within the spatial boundaries for the cumulative analysis—the Amber Isle Development and Phoenix West II Condominium—may result in some level of species displacement in the short and long term; however, they are occurring in high use areas that are not expected to provide habitat.

When the range of proposed alternatives in this RP/EIS is analyzed in combination with other past, present, and reasonably foreseeable future actions, short- and long-term, minor, adverse cumulative impacts on protected species would likely occur. However, they would not contribute substantially to adverse cumulative impacts. The range of alternatives in this RP/EIS, when carried out in conjunction with other environmental restoration efforts has the potential to result in some long-term, beneficial cumulative impacts on protected species by preserving and enhancing shoreline areas.

The Final PDARP/PEIS found that implementation of recreational use projects is consistent with the goals of the selected alternative and is not expected to contribute substantially to short-term or long-term, adverse cumulative impacts on biological resources when analyzed in combination with other past, present, and reasonably foreseeable future actions. This site-specific analysis for protected species is consistent with that finding.

Socioeconomics and Environmental Justice

The range of proposed alternatives in this RP/EIS would not result in adverse impacts on socioeconomics in Mobile and Baldwin counties. Potential short- and long-term benefits could occur from construction and operation employment opportunities.

Three projects in Table 5-42 are identified as having potential impacts on socioeconomics and environmental justice, including:

- DWH Early Restoration Phase III – Gulf State Park Enhancement Project (other project elements)
- Amber Isle Development
- Phoenix West II Condominium

For all three projects, the short- and long-term impacts would occur as a result of employment during construction and operation of the projects. These projects are not expected to have adverse impacts or disproportionally affect segments of the population.

When the range of proposed alternatives in this RP/EIS is analyzed in combination with other past, present, and reasonably foreseeable future actions, there would be no adverse short- and long-term, cumulative adverse impacts on socioeconomics and environmental justice. The range of alternatives in the RP/EIS would not contribute substantially to cumulative adverse impacts. The range of alternatives in this RP/EIS, when carried out in conjunction with other environmental restoration efforts has the potential to result in some short- and long-term, beneficial cumulative impacts on socioeconomics through the creation of job opportunities.

The Final PDARP/PEIS found that implementation of recreational use projects is consistent with the goals of the selected alternative and is not expected to contribute substantially to short- or long-term, adverse cumulative impacts on socioeconomic resources when analyzed in combination with other past, present, and reasonably foreseeable future actions. This site-specific analysis for socioeconomics and environmental justice is consistent with that finding.

Cultural Resources

The range of proposed alternatives in this RP/EIS would occur in coordination with the State Historic Preservation Office, Indian tribes, and other applicable agencies. Through this consultation, any impacts on cultural resources present on the sites would be mitigated or avoided. At this time, there would be no known impacts on cultural resources and no cumulative impacts.

Infrastructure/Transportation

The range of proposed alternatives in this RP/EIS would have short-term, minor, adverse impacts on infrastructure in Mobile and Baldwin counties as a result of construction activities. Construction of the proposed projects would generate very little demand on utilities for all project elements. Demand on electricity from construction equipment is not expected to exceed existing capacity. Power for most construction equipment would be supplied by burning readily available fossil fuel. Water needed for construction processes and for workers' needs would be minimal and would be well within the capacity of existing supplies. Sewage generated by construction workers would be treated offsite via "porta-potties." No impacts on utilities due to construction of the proposed project are anticipated because of the minimal demand that would be generated during construction. Construction traffic would be expected to cause minor delays, but road closures would not be anticipated and impacts on traffic would be short term and minor. Long-term, adverse impacts would be minor because utilities exist in the vicinity of all project sites and would be readily accessible. The nature of the improvements, generally, would be limited lighting and restrooms and would not exceed capacity of the local utility provider. The design and scale of the facilities associated with the Gulf State Park Lodge and Associated Public Access Amenities Project would place minimal demands on utilities. The construction of the facility and amenities would be up to LEED Gold and SITES Platinum standards and would include resource conservation components such as recycling and water and energy conservation. For traffic and transportation, the majority of the sites would be able to accommodate the increase in traffic, and impacts would be long term, minor, and adverse. At the Gulf State Park Lodge and Associated Public Access Amenities Project, mitigation measures, including ride sharing, bicycle share programs, and a tram would be used to mitigate potential traffic impacts.

Three projects in Table 5-42 are identified as having potential impacts on infrastructure including:

- DWH Phase III ERP – Gulf State Park Enhancement Project (other project elements)
- Amber Isle Development
- Phoenix West II Condominium

For all three projects, short-term impacts would occur during construction and include the energy required to construct the project. Similar to the range of proposed alternatives in this RP/EIS, impacts would be short term and minor, for similar reasons as discussed above. It is assumed that in the planning and development of the Amber Isle Development and Phoenix West II Condominium, coordination with the local municipality occurred to ensure that utilities would have adequate capacity to handle the development. For the Gulf State Park Enhancement Project, development is of low scale and size, and like the Gulf State Park Lodge and Associate Public Access Amenities Project, incorporates green building design. Long-term, adverse impacts from these projects are all expect to be minor. Impacts on traffic and transportation from the Amber Isle Development and Phoenix West II Condominium are unknown. However, all new developments must coordinate with the Alabama Department of Transportation regarding potential effects on traffic, which is expected to minimize to the extent possible the impacts of these projects.

When the range of proposed alternatives in this RP/EIS is analyzed in combination with other past, present, and reasonably foreseeable future actions, there would be short- and long-term, minor adverse cumulative impacts on infrastructure/transportation. However, the range of alternatives in the RP/EIS would not contribute substantially to adverse cumulative impacts.

The Final PDARP/PEIS found that implementation of recreational use projects is consistent with the goals of the selected alternative and is not expected to contribute substantially to short-term or long-term, adverse cumulative impacts on socioeconomic resources when analyzed in combination with other past, present, and reasonably foreseeable future actions. This site-specific analysis for infrastructure/transportation is consistent with that finding.

Land and Marine Management

Impacts on land and marine management from the range of proposed alternatives in the RP/EIS would generally be beneficial as a result of increased recreational opportunities either from enhancements to visitor amenities or increased public access to sites. Short-term, minor, adverse impacts could occur as a result of access disruptions to public recreational areas during construction activities. Impacts on marine management are not anticipated. All local ordinances and permitting requirements would be adhered to prior to construction.

Six projects in Table 5-42 are identified as having potential impacts on land and marine management, including:

- DWH Phase III ERP – Gulf State Park Enhancement Project (other project elements)
- Amber Isle Development
- Phoenix West II Condominium
- Gulf State Park Master Plan
- City of Orange Beach Trail System
- Orange Beach, Gulf State Park, and Gulf Shores Beach Nourishment Projects

For all six projects, short- and long-term impacts are expected to be similar to those for the range of proposed alternatives this RP/EIS. For actions that provide increased recreational opportunities, impacts would be beneficial. Development projects such as the Amber Isle Development and Phoenix West II Condominium would require coordination with the local municipality and would be consistent with their guiding regulations and land use plans. All projects in the coastal zone would require an ADEM-authorized CZMA permit. Any short-or long-term impacts from these projects would be minor.

When the range of proposed alternatives in this RP/EIS is analyzed in combination with other past, present, and reasonably foreseeable future actions, cumulative impacts on land and marine management would be short and long term, minor, and adverse. However, the alternatives in this RP/EIS would not contribute substantially to adverse cumulative impacts. The range of alternatives in this RP/EIS, when carried out in conjunction with other projects along the Alabama coast has the potential to result in some long-term, beneficial cumulative impacts from enhancing access to shoreline areas.

The Final PDARP/PEIS found that implementation of recreational use projects is consistent with the goals of the selected alternative and is not expected to contribute substantially to short-term or long-term, adverse cumulative impacts on socioeconomic resources when analyzed in combination with other past, present, and reasonably foreseeable future actions. This site-specific analysis for land and marine management is consistent with that finding.

Tourism and Recreation

Impacts on tourism and recreation from the range of proposed alternatives in the RP/EIS would generally be long term and beneficial as a result of increased recreational opportunities from enhancements to visitor amenities or from increased public access to sites. Short-term, minor, adverse impacts could occur as a result of access disruptions to public recreational areas for construction activities, but these disruptions would be short and last only during the construction period.

Seven projects in Table 5-42 are identified as having potential impacts on tourism and recreation, including:

- DWH Phase II ERP – Restoring the Night Sky
- DWH Phase III ERP – Gulf State Park Enhancement Project (other project elements)
- Gulf State Park Master Plan
- Alabama Artificial Reef System
- City of Orange Beach Trail System
- Orange Beach, Gulf State Park, and Gulf Shores Beach Nourishment Projects
- Rehabilitation of a Boat Ramp at the Fort Morgan Pier Site

For all seven projects, similar to the range of alternatives analyzed in this RP/EIS, there would be short-term, minor impacts during construction, and the public would not be able to access the sites. Once construction is completed, these sites would be open to visitor use, and the enhancements would provide long-term benefits. Restoring the Night Sky would benefit species and would provide dark sky viewing opportunities for the public. The amenities being provided as part of the Gulf State Park Enhancement Project (i.e., the interpretive center, education center, and trails), the Gulf State Park Master Plan, and the City of Orange Beach Trail Project would provide a variety of new recreational opportunities to the area and offer education about the resources of the Alabama coast. The Alabama Artificial Reef System project is aimed at benefiting tourism and improving recreational experiences.

Beach nourishment projects would provide areas for beach recreation, while the boat ramp rehabilitation project would have long-term benefits by enhancing and providing these facilities to all recreational users.

When the range of proposed alternatives in this RP/EIS is analyzed in combination with other past, present, and reasonably foreseeable future actions, there would be short-term, minor, adverse, cumulative impacts on tourism. However, the range of alternatives in the RP/EIS would not contribute substantially to adverse cumulative impacts. The range of alternatives in this RP/EIS, when carried out in conjunction with other projects along the Alabama coast has the potential to result in some long-term, beneficial cumulative impacts from enhancing access to shoreline areas and providing additional recreation and tourism opportunities.

The Final PDARP/PEIS found that implementation of recreational use projects is consistent with the goals of the selected alternative and is not expected to contribute substantially to short-term or long-term, adverse cumulative impacts on socioeconomic resources when analyzed in combination with other past, present, and reasonably foreseeable future actions. This site-specific analysis for tourism and recreation management is consistent with that finding.

5.4 COMPARISON OF ALTERNATIVES

A summary of environmental consequences of the evaluated alternatives is provided in Table 5-43.

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Table 5-43: Summary of Environmental Consequences for the Evaluated Alternatives

Resource Topic	No Action	Gulf State Park Lodge and Associated Public Access Amenities Project	Fort Morgan Pier Rehabilitation	Fort Morgan Peninsula Public Access Improvements	Laguna Cove Little Lagoon Natural Resource Protection	Gulf Highlands Land Acquisition	Dauphin Island Eco-Tourism and Environmental Education Area	Mid-Island Parks and Public Beach Improvements (Parcels A, B, and C)	Mid-Island Parks and Public Beach Improvements (Parcels B and C)
Geology and Substrates	Construction of the Gulf State Park Lodge would continue and expected to result in short-term, minor, adverse impacts, including displacing soil on a large scale. After construction and final grading is completed, bare soils would be revegetated to prevent erosion. There would be no long-term, adverse impacts on soil resources during operation of the Gulf State Park Lodge because no long term, ground-disturbing activities would occur.	Short- and long-term impacts. Adverse, including dune alteration, bedrock drilling, sediment excavation, and erosion. Beneficial including dune enhancement and revegetation.	Short- and long-term impacts. Adverse, including dune alteration, bedrock drilling, sediment excavation, and erosion. Beneficial including dune enhancement and revegetation.	Short- and long-term impacts. Adverse, including dune alteration, bedrock drilling, sediment excavation, and erosion. Beneficial including dune enhancement and revegetation.	Short- and long-term impacts. Adverse, including dune alteration, bedrock drilling, sediment excavation, and erosion. Beneficial including dune enhancement and revegetation.	Short- and long-term impacts. Adverse, including dune alteration, bedrock drilling, sediment excavation, and erosion. Beneficial including dune enhancement and revegetation.	Short- and long-term impacts. Adverse, including dune alteration, bedrock drilling, sediment excavation, and erosion. Beneficial including dune enhancement and revegetation.	Short- and long-term impacts. Adverse, including dune alteration, bedrock drilling, sediment excavation, and erosion. Beneficial including dune enhancement and revegetation.	Short- and long-term impacts. Adverse, including dune alteration, bedrock drilling, sediment excavation, and erosion. Beneficial including dune enhancement and revegetation.
Hydrology	Impacts from runoff during the construction process of Gulf State Park Lodge would be short term and minor. The sites would remain in their current conditions if acquisition occurs with other Gulf restoration funding mechanisms and recreational amenities are not constructed.	Impacts during construction would be short term and minor. Impacts on surface water during the operation of the project would be long term, minor, and adverse.	There would be no short- or long-term impacts.	Short-term impacts from runoff during construction would be adverse, localized, and minor. Long-term impacts would be minor and localized.	Impacts during construction would be short term and minor. Long-term impacts would not occur.	Impacts from runoff during construction would be adverse but short term, localized, and minor. Long-term impacts would be adverse but minor.	Short-term impacts on the hydrology of the site would be adverse and minor. The use of pervious pavers and stormwater BMPs will minimize long-term effects and result in minor, adverse long-term impacts.	With the correct BMP implementation, impacts on hydrology from construction would be short term, localized and minor. The presence of excessively drained sands, combined with the appropriate BMPs, would result in minor and localized long-term impacts.	With the correct BMP implementation, impacts on hydrology from construction would be short term, localized and minor. The presence of excessively drained sands, combined with the appropriate BMPs, would result in minor and localized long-term impacts.
Water Quality	Impacts from runoff during the construction process of Gulf State Park Lodge would be short term and minor. The sites would remain in their current conditions if acquisition occurs with other Gulf restoration funding mechanisms and recreational amenities are not constructed.	Impacts from construction may be adverse, but localized, short term, and minor.	Impacts would be short term, minor and adverse. No long-term impacts would occur.	No short-term impacts would occur. Long-term, minor, and adverse impacts on the neighboring Gulf of Mexico would occur.	Impacts on water quality during construction would be short term and minor. With appropriate measures, long-term impacts on would be minor.	Impacts from runoff during construction would be adverse but short term, localized, and minor. Impacts from the implementation of long-term stormwater BMPs would be long term, minor, and adverse.	Impacts during the construction process would be adverse but short term and minor. Any long-term adverse impacts would be negligible.	An increase in turbidity of the sub-bay of Graveline Bay may occur during the construction process and impacts would be short term and minor. Due to the lack of surface water on the project parcels and the size of the surrounding waters, adverse impacts would be negligible in the long term.	An increase in turbidity of the sub-bay of Graveline Bay may occur during the construction process and impacts would be short term and minor. Due to the lack of surface water on the project parcels and the size of the surrounding waters, adverse impacts would be negligible in the long term.

Resource Topic	No Action	Gulf State Park Lodge and Associated Public Access Amenities Project	Fort Morgan Pier Rehabilitation	Fort Morgan Peninsula Public Access Improvements	Laguna Cove Little Lagoon Natural Resource Protection	Gulf Highlands Land Acquisition	Dauphin Island Eco-Tourism and Environmental Education Area	Mid-Island Parks and Public Beach Improvements (Parcels A, B, and C)	Mid-Island Parks and Public Beach Improvements (Parcels B and C)
Floodplain	Impacts from runoff during the construction process of Gulf State Park Lodge would be short term and minor. The sites would remain in their current conditions if acquisition occurs with other Gulf restoration funding mechanisms and recreational amenities are not constructed.	No adverse impacts on the floodplain or the coastal zone are anticipated.	No short- or long-term impacts would occur.	No short- or long-term impacts would occur.	The structures would be built above the BFE, no changes to the BFE or the 100-year floodplain would occur and there would be no short-term, adverse impacts. No long-term adverse impacts would occur.	No short-term, adverse impacts would occur. Long-term, negligible, adverse impacts would occur.	Construction of the proposed project elements would be in compliance with all required permits and would not result in short-term, adverse impacts. No long-term adverse impacts would occur.	No short- or long-term impacts would occur.	No short- or long-term impacts would occur.
Wetlands	Impacts from runoff during the construction process of Gulf State Park Lodge would be short term and minor. The sites would remain in their current conditions if acquisition occurs with other Gulf restoration funding mechanisms and recreational amenities are not constructed.	Wetlands are being affected by current facility construction, and BMPs, as required by the USACE 404 permit, are being used to minimize impacts. No other impacts would occur from the construction of the public access amenities.	Impacts would be short term and minor. No long-term impacts would occur.	No designated wetlands exist within any of the access point sites; therefore, there would be no short-term impacts.	Adverse but short-term and minor impacts during the construction process would include increased turbidity from piling installation and compressed vegetation from construction equipment. There would be minor, long-term, adverse impacts from the presence of the boardwalk.	Impacts would be avoided and minimized to the maximum extent practicable. Any unavoidable impacts would be offset by appropriate compensatory mitigation, resulting in long-term, no more than minor, adverse impacts on wetlands.	With the appropriate BMPs in place, short-term adverse impacts on wetlands would be minor. Long-term impacts would be avoided and minimized to the maximum extent practicable. Any impacts would be offset by appropriate compensatory mitigation.	The construction of the parking lot on Parcel C would cause minor, increased turbidity to the wetlands. Impacts would be adverse but short term, minor and negligible. Impacts from appropriate runoff BMPs on Parcel C would be long term, but minor.	The construction of the parking lot on Parcel C would cause minor, increased turbidity to the wetlands. Impacts would be adverse but short term, minor and negligible. Impacts from appropriate runoff BMPs on Parcel C would be long term, but minor.
Air Quality and Greenhouse Gas Emissions	Impacts from the construction of the Gulf State Park Lodge would be adverse, but short term, localized, and minor.	Construction of all Baldwin County projects are expected to result in small GHG emissions and impacts from fugitive dust emissions would be adverse, but minor. The increase in vehicle traffic to the sites is expected to have long-term negligible to minor adverse impacts. Operation of the proposed projects would cause long-term impacts, but would not exceed minor and adverse.	Construction of all Baldwin County projects are expected to result in small GHG emissions and impacts from fugitive dust emissions would be adverse, but minor. The increase in vehicle traffic to the sites is expected to have long-term negligible to minor adverse impacts. Operation of the proposed projects would cause long-term impacts, but would not exceed minor and adverse.	Construction of all Baldwin County projects are expected to result in small GHG emissions and impacts from fugitive dust emissions would be adverse, but minor. The increase in vehicle traffic to the sites is expected to have long-term negligible to minor adverse impacts. Operation of the proposed projects would cause long-term impacts, but would not exceed minor and adverse.	Construction of all Baldwin County projects are expected to result in small GHG emissions and impacts from fugitive dust emissions would be adverse, but minor. The increase in vehicle traffic to the sites is expected to have long-term negligible to minor adverse impacts. Operation of the proposed projects would cause long-term impacts, but would not exceed minor and adverse.	Construction of all Baldwin County projects are expected to cause GHG emissions and impacts from fugitive dust emissions would be adverse, but minor. The increase in vehicle traffic to the sites is expected to have long-term negligible to minor adverse impacts. Operation of the proposed projects would cause long-term impacts, but would not exceed minor and adverse.	Long-term impacts to air quality would be minor and adverse. Because of the small scale and use of energy saving measures when applicable, GHG emissions would be small.	Long-term impacts to air quality would be minor and adverse. Because of the small scale and use of energy saving measures when applicable, GHG emissions would be small.	Long-term impacts to air quality would be minor and adverse. Because of the small scale and use of energy saving measures when applicable, GHG emissions would be small.
Noise	Short-term, localized, and minor impacts are occurring during construction of the Gulf State Park Lodge and operation of the project would result in long-term, minor impacts.	Impacts from noise during construction would be no more than short term, minor, and adverse.	Impacts from noise during construction would be no more than short term, minor, and adverse. Impacts from operations would be long term, negligible to minor, and adverse.	Impacts from noise during construction would be no more than short term, minor, and adverse. Impacts from operations would be long term, negligible to minor, and adverse.	Impacts from noise during construction would be no more than short term, minor, and adverse. Impacts from operations would be long term, negligible to minor, and adverse.	Impacts from noise during construction would be no more than short term, minor, and adverse. Impacts from operations would be long term, negligible to minor, and adverse.	Impacts from noise during construction would be no more than short term, minor, and adverse. Impacts from operations would be long term, negligible to minor, and adverse.	Impacts from noise during construction would be no more than short term, minor, and adverse. Impacts from operations would be long term, negligible to minor, and adverse.	Impacts from noise during construction would be no more than short term, minor, and adverse. Impacts from operations would be long term, negligible to minor, and adverse.

Resource Topic	No Action	Gulf State Park Lodge and Associated Public Access Amenities Project	Fort Morgan Pier Rehabilitation	Fort Morgan Peninsula Public Access Improvements	Laguna Cove Little Lagoon Natural Resource Protection	Gulf Highlands Land Acquisition	Dauphin Island Eco-Tourism and Environmental Education Area	Mid-Island Parks and Public Beach Improvements (Parcels A, B, and C)	Mid-Island Parks and Public Beach Improvements (Parcels B and C)
Habitats	If acquisition occurs with other Gulf restoration funding mechanisms and recreational amenities are not constructed, there would be no short-term impacts on habitat because these sites would remain in their current conditions. Construction of the Gulf State Park Lodge would continue and short-term, minor impacts and any long-term, adverse impacts would be negligible.	Impacts from the pedestrian trail and construction would be short term, minor, and adverse. The proposed lodge would have long-term and beneficial impacts on wetland and dune habitats and associated native vegetation from the expansion and enhancement of wetland habitat. Any adverse long-term impacts would be negligible.	Short-term impacts would be minor and adverse. Any potential long-term, adverse impacts are expected to be negligible, and habitats would naturally rehabilitate over time.	Site conditions, combined with the implementation of BMPS at all construction sites would result in short-term, minor, adverse impacts on vegetation. Overall, impacts on habitats in these areas would be long term, minor, and adverse from removal of habitat, with long-term benefits from concentrating public access.	Impacts from construction would be short term, minor and adverse as BMPs would be employed to minimize impacts, and all habitats are expected to return to normal functioning following construction. Acquisition of land would greatly benefit habitats as the parcel had large development plans that will no longer occur, allowing the majority of the site to remain undisturbed, resulting in overall long-term beneficial impacts.	All short-term impacts on vegetation are expected to be minor and adverse. While some long-term, minor, adverse impacts could occur from permanent removal of habitat as a result of development, the preservation of this large and important site would result in overall long-term, beneficial impacts.	There would be long-term beneficial impacts with the acquisition of land and short-term, minor and adverse impacts on habitats from disturbance during construction.	BMPs would minimize impacts and all habitat areas are expected to naturally rehabilitate after construction, impacts from construction to habitats would be short term, minor, and adverse. While some habitat may be lost, the facilities would be established in a way that would allow the remaining habitat to continue to function, resulting in long-term, minor, adverse impacts.	BMPs would minimize impacts and all habitat areas are expected to naturally rehabilitate after construction, impacts from construction to habitats would be short term, minor, and adverse. While some habitat may be lost, the facilities would be established in a way that would allow the remaining habitat to continue to function, resulting in long-term, minor, adverse impacts.
Wildlife Species	If acquisition occurs with other Gulf restoration funding mechanisms and no improvements are implemented, there would be no short-term impacts, but overall beneficial impacts from the preservation of large areas of habitat and areas for wildlife. Construction of the lodge and conference center will continue and will result in short-term, minor impacts.	Construction may result in short-term, minor, adverse impacts on wildlife species inhabiting the proposed project site and nearby vicinity. Temporary disturbance to wildlife during construction from noise and temporary displacement (including less mobile species such as invertebrates, mammals, and migratory birds) may occur. Long-term, adverse impacts on wildlife species, and their habitats, which are known to occur or may potentially occur at the Gulf State Park Lodge and Associated Public Access Amenities Project site are characterized in the Final Phase III ERP/PEIS (Section 11.7.6.7).	Construction may result in short-term, minor, adverse impacts on wildlife species inhabiting the proposed project site and nearby vicinity. Temporary disturbance to wildlife during construction from noise and temporary displacement (including less mobile species such as invertebrates, mammals, and migratory birds) may occur. Overall impacts on wildlife during construction would be short term, minor, and adverse. New or additional displacement of wildlife from utilization of the site is not expected to occur. Any adverse impacts are expected to be long term and minor.	Construction may result in short-term, minor, adverse impacts on wildlife species inhabiting the proposed project site and nearby vicinity. Temporary disturbance to wildlife during construction from noise and temporary displacement (including less mobile species such as invertebrates, mammals, and migratory birds) may occur. Impacts on all other species would be adverse, short term and minor. While some long-term, minor, adverse impacts could occur from species avoiding areas, overall, impacts would be long term and beneficial from reducing the amount of disturbance in these areas.	Construction may result in short-term, minor, adverse impacts on wildlife species inhabiting the proposed project site and nearby vicinity. Temporary disturbance to wildlife during construction from noise and temporary displacement (including less mobile species such as invertebrates, mammals, and migratory birds) may occur. While some minor impacts could occur from species avoiding areas, overall, impacts would be long term and beneficial from placing the majority of the site into conservation and preserving species and their habitat in this area.	Construction may result in short-term, minor, adverse impacts on wildlife species inhabiting the proposed project site and nearby vicinity. Temporary disturbance to wildlife during construction from noise and temporary displacement (including less mobile species such as invertebrates, mammals, and migratory birds) may occur. Construction would not interfere with the overall movement of wildlife species around the project site due to the limited area of disturbance Human use of the site could result in long-term, adverse impacts. Long-term benefits would occur from removing the development potential of this land and preserving it as open space with limited access improvements.	Construction may result in short-term, minor, adverse impacts on wildlife species inhabiting the proposed project site and nearby vicinity. Temporary disturbance to wildlife during construction from noise and temporary displacement (including less mobile species such as invertebrates, mammals, and migratory birds) may occur. While some minor impacts could occur from species avoiding areas, overall, impacts would be long term and beneficial from placing the majority of the site into conservation and preserving species and their habitat in this area.	Construction may result in short-term, minor, adverse impacts on wildlife species inhabiting the proposed project site and nearby vicinity. Temporary disturbance to wildlife during construction from noise and temporary displacement (including less mobile species such as invertebrates, mammals, and migratory birds) may occur. While some minor, adverse impacts could occur from species avoiding areas, overall, impacts would be long term and beneficial from placing the majority of the site into conservation and preserving species and their habitat in this area.	The short-term impacts of this project would be the similar to Mid-Island Parks and Public Beach Improvements (Parcels A, B, and C); however, it would be less adverse because no construction would occur on the beach where Parcel A is located. Short-term impacts would be minor and adverse. The long-term impacts of this project would be the same as those described for Mid-Island Parks and Public Beach Improvements (Parcels A, B, and C).

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Marine and Estuarine Fauna	No short-term impacts would occur. If acquisition occurs with other Gulf restoration funding mechanisms with no or limited associated access infrastructure, there would be long-term benefits from the preservation of large areas of habitat, including habitat for marine species.	No in-water work would be part of this alternative, and no impacts on marine habitats would occur.	The rehabilitation of the pier may have minor, adverse and short-term impacts on marine mammals, such as manatees (discussed under protected species below) and dolphins; nearshore fish, such as redfish, trout, flounder, ground mullet, speckled trout, and Spanish mackerel; and shellfish, such as oysters, shrimp, and crab; and sea turtles. Impacts include bottom sediment disturbance causing an increase in turbidity and underwater noise which would disturb habitat and displace fish. Long-term impacts would revert back to when the pier was in full use.	No short- or long-term impacts would occur.	Construction would potentially cause adverse impact fish in the lagoon, such as speckled trout, redfish, and flounder, as well as shellfish such as shrimp and crab due to bottom sediments being disturbed and underwater noise which would disturb habitat and displace fish. Any adverse impacts would be short term and minor. The fishing pier located on the eastern side of the property could cause minor adverse impacts on species being fished.	No short- or long-term impacts would occur.	Construction of the fishing pier would cause minor adverse impacts on species that inhabit nearshore environments. Species displaced by disturbance are expected to return to the site shortly after the construction period. Any adverse impacts would be short term and minor. The fishing pier would cause adverse impacts on species being fished and as a result of bycatch; however, these adverse effects are expected to be minor due to the abundance of most fish species in the vicinity of the pier and the abundance of other habitat near to the fishing pier that are utilized by fish species.	No short- or long-term impacts would occur.	No short- or long-term impacts would occur.

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Protected Species	Construction of the Gulf State Park Lodge would continue and would result in short- and long-term, minor impacts. If acquisition occurs with other Gulf restoration funding mechanisms, there would be these sites would remain in their current conditions or have limited access infrastructure similar to the alternatives proposed in this RP/EIS, resulting in minor long-term adverse impacts from loss of habitat, but overall beneficial impacts from the preservation of large areas of habitat and areas for protected species.	Short- and long-term, adverse impacts on protected species and their habitats are known to occur or may potentially occur at the Gulf State Park project site. Impacts of additional project elements would be long term, minor, and adverse.	Rehabilitation of the pier would cause temporary disturbances to both terrestrial and marine protected species, due noise and the presence of construction equipment and crews. Due to the small construction footprint, impacts are expected to be short term, adverse and minor. Long-term, adverse impacts would be similar to previous conditions at the site, when the pier was in full use and could include bycatch impacts associated with pier operation.	Construction of proposed project amenities would cause short-term, adverse, but minor impacts on protected species. Potential impacts would include soil compaction, nest disturbance, temporary noise and the presence of construction equipment and crews. The installation of lighting associated with some proposed amenities could adversely impacts nesting sea turtles over the long term. Overall, long-term impacts on protected species would be adverse but minor.	Construction would result in temporary disturbances to protected species due to noise and the presence of construction equipment and crews. This could temporarily displace Alabama beach mice or migratory birds (including piping plover and red knot), if present during construction. Overall, short-term impacts on protected species would be adverse but minor. Long-term impacts are expected to be adverse, but minor due to the small size of the project and the large amount of adjacent habitat.	Construction of the parking lot and boardwalk would result in temporary disturbances to protected species due to noise and the presence of construction equipment and crews. Potential impacts are anticipated to be adverse, but short term and minor. Methods would be used to minimize potential impacts resulting in minor, adverse, short-term impacts. The increase in human presence could cause adverse impacts on protected species such as sea turtles, Alabama beach mice, and birds (including piping plover and red knot) over the long term.	Construction of the proposed amenities would result in adverse, but short-term and minor impacts to protected species due to noise and the presence of construction equipment and crews. This could temporarily displace migratory birds (including piping plover, red knot, and wood stork), if present during construction. Long-term impacts from increased visitation and pedestrian traffic would be adverse but minor.	Impacts to from noise from the presence of construction equipment and crews could temporarily displace migratory birds (including piping plover, red knot, and wood stork) or manatees, if present during construction. These impacts would be adverse, but short term and minor. Construction of dune walkovers on Parcel A would cause short-term, minor, and adverse impacts to the nesting sites for loggerhead and/or Kemp's ridley sea turtles; however, BMPs would be used to minimize potential impacts. Long-term impacts from increased visitation and pedestrian traffic would be adverse but minor. The acquisition of Parcel A would prevent future development, resulting in long-term, beneficial impacts on protected species.	Construction could result in short-term, adverse, and minor impacts to protected species from noise and the presence of construction equipment and crews. This could temporarily displace migratory birds (including piping plover and red knot) or manatees, if present during construction. Long-term impacts would be adverse and minor because of the small footprint and the relatively low quality of habitat on Parcels B and C.

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Socioeconomics and Environmental Justice	Construction of the Gulf State Park Lodge would continue and would include short-term, beneficial impacts from employment generated during construction. Additionally, some of the public amenities associated with the lodge could be constructed and would have similar beneficial impacts. Construction of the Gulf State Park Lodge would continue, and long-term, beneficial socioeconomic impacts as a result of increased visitation, spending, and employment opportunities are expected.	The construction and operations of the Gulf State Park Lodge and Associated Public Access Amenities Project would lead to short and long-term employment opportunities for local residents and businesses and would result in short-term, beneficial socioeconomic impacts for the local communities.	There would not be disproportionately adverse impacts on minority or low-income populations during the construction period, and no effect. Implementation of the alternative could provide short- and long-term employment for local residents, socioeconomic impacts on the community in the short term would be beneficial.	Potential short-term employment benefits would occur for local residents from the construction of the parking lots, restrooms, and dune walkovers. Socioeconomic impacts, including increased visitations to the area, safe-free beach access, and enhanced protection of the walkovers would long term and beneficial to the local community.	The project would not have disproportionately adverse impacts on minority or low-income populations and would benefit local communities through employment opportunities, enhance recreational use, and safe access. Therefore, the short- and long-term socioeconomic benefits would be beneficial.	Potential short-term employment benefits would occur for local residents from the construction of the parking lots, restrooms, and dune walkovers. Socioeconomic impacts, including increased visitations to the area, safe-free beach access, and enhanced protection of the walkovers would long term and beneficial to the local community.	Construction of the proposed alternative would provide construction employment opportunities. Short-term impacts are expected to be beneficial for the local community. Impacts from eco-tourism attractions would have long term and beneficial impacts for the community.	Potential short-term employment benefits would occur for local residents during the construction period. Socioeconomic impacts, including increased visitations to the area, safe-free beach access, and enhanced protection of the walkovers would be long term and beneficial to the local community. Maintenance of the facility would ensure that the recreational experience is sustained and the beneficial impacts on local businesses would continue.	The short- and long-term impacts expected from this alternative are the same as those described for the Mid-island Parks and Public Beach Improvements (Parcels A, B, and C).
Cultural Resources	If acquisition occurs with other Gulf restoration funding mechanisms, there would be no impacts on cultural resources because these sites would remain in their current conditions, and any amenities developed would avoid cultural resources. Construction of the Gulf State Park Lodge would continue, and no short- or long-term impacts would occur.	During the Phase III ERP/EIS, consultation with the State Historic Preservation Office was conducted for this effort. That consultation concluded that it is unlikely that any buried intact archaeological sites, deposits, or artifacts are located in the area, and the effort is not expected to have any effect on historic properties. Additional project elements would likely have no impacts.	If any culturally or historically important resources are identified during project preparations or predevelopment surveys, such areas would be avoided during construction. A complete review of this alternative under Section 106 of the NHPA is ongoing and would be completed prior to any activities that would restrict consideration of measures to avoid, minimize or mitigate any adverse effects on historic properties located within the project area.	If any culturally or historically important resources are identified during project preparations or predevelopment surveys, such areas would be avoided during construction. A complete review of this alternative under Section 106 of the NHPA is ongoing and would be completed prior to any activities that would restrict consideration of measures to avoid, minimize or mitigate any adverse effects on historic properties located within the project area.	If any culturally or historically important resources are identified during project preparations or predevelopment surveys, such areas would be avoided during construction. A complete review of this alternative under Section 106 of the NHPA is ongoing and would be completed prior to any activities that would restrict consideration of measures to avoid, minimize or mitigate any adverse effects on historic properties located within the project area.	If any culturally or historically important resources are identified during project preparations or predevelopment surveys, such areas would be avoided during construction. A complete review of this alternative under Section 106 of the NHPA is ongoing and would be completed prior to any activities that would restrict consideration of measures to avoid, minimize or mitigate any adverse effects on historic properties located within the project area.	If any culturally or historically important resources are identified during project preparations or predevelopment surveys, such areas would be avoided during construction. A complete review of this alternative under Section 106 of the NHPA is ongoing and would be completed prior to any activities that would restrict consideration of measures to avoid, minimize or mitigate any adverse effects on historic properties located within the project area.	If any culturally or historically important resources are identified during project preparations or predevelopment surveys, such areas would be avoided during construction. A complete review of this alternative under Section 106 of the NHPA is ongoing and would be completed prior to any activities that would restrict consideration of measures to avoid, minimize or mitigate any adverse effects on historic properties located within the project area.	If any culturally or historically important resources are identified during project preparations or predevelopment surveys, such areas would be avoided during construction. A complete review of this alternative under Section 106 of the NHPA is ongoing and would be completed prior to any activities that would restrict consideration of measures to avoid, minimize or mitigate any adverse effects on historic properties located within the project area.

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Infrastructure	Construction of the Gulf State Park Lodge and conference center would continue and short-term minor impacts on utilities would still occur. If acquisition occurs with other Gulf restoration funding mechanisms, long-term impacts on traffic and transportation would be minor and adverse because the sites could see an increase in visitation.	It is anticipated that there would be adequate capacity for the new demand on the utilities services and that the conservation measures result in long-term minor adverse impacts. The addition of the tram system would minimize these impacts, possibly reducing the adverse impact to minor.	Because there would be negligible increase in local daily traffic volumes during construction, impacts would be adverse, but short term and minor. Any long-term, adverse impacts on traffic and transportation would be negligible.	Because there would be negligible increase in local daily traffic volumes during construction, impacts would be adverse, but short term and minor. Long-term beneficial impacts would also result from providing formalized parking, which would remove current on street parking that is occurring and improve safety conditions along the roadway.	Because there would be negligible increase in local daily traffic volumes during construction, impacts would be adverse, but short term and minor. There would be localized traffic increase from vehicles accessing the parking and new site amenities. This type of use and traffic already occurs in this areas and it is not expected that the level of traffic would change beyond a minimal level and any long-term adverse impacts on traffic would be minor.	Because there would be negligible increase in local daily traffic volumes during construction, impacts would be adverse, but short term and minor. There would be localized traffic increase from vehicles accessing the parking and beach access. This type of use and traffic already occurs in this areas and it is not expected that the level of traffic would change beyond a minimal level and any long-term impacts adverse to traffic would be minor.	Because there would be negligible increase in local daily traffic volumes during construction, impacts would be adverse, but short term and minor. There would be localized traffic increase from vehicles accessing the parking and beach access. This type of use and traffic already occurs in this areas and it is not expected that the level of traffic would change beyond a minimal level and any long-term impacts adverse to traffic would be minor.	Because there would be negligible increase in local daily traffic volumes during construction, impacts would be adverse, but short term and minor. There would be localized traffic increase from vehicles accessing the parking and beach access. This type of use and traffic already occurs in this areas and it is not expected that the level of traffic would change beyond a minimal level and any long-term adverse impacts on traffic would be minor. Beneficial impacts would also result from providing formalized parking.	Because there would be negligible increase in local daily traffic volumes during construction, impacts would be adverse, but short term and minor. There would be localized traffic increase from vehicles accessing the parking and beach access. This type of use and traffic already occurs in this areas and it is not expected that the level of traffic would change beyond a minimal level and any long-term adverse impacts on traffic would be minor. Beneficial impacts would also result from providing formalized parking.
Land and Marine Management	Construction of the Gulf State Park Lodge and conference center would continue and would result in short-term, minor impacts. Long-term, adverse impacts would be minor because use would change but would be compatible with its surroundings.	Land formerly available for informal use would no longer be available. As a result, construction will result in adverse but short-term and minor impacts. Changes in land use during construction would be temporary and would not require a zoning change or amendment or affect overall use and management beyond the local area.	Some short-term, minor, adverse impacts could result during construction as a result of potential site closures and subsequent reduced access to existing recreational opportunities from the presence of construction equipment, materials staging, and other associated construction activities. The rehabilitation of the pier would improve public access to the site, restore uses previously available, and enhance recreational opportunities, including fishing, wildlife observation, and beach and boating activities. Long-term impacts on land use from the alternative would be beneficial.	Short-term, minor, adverse impacts could occur as a result of construction activities and equipment and materials staging. Impacts would be long term and beneficial as a result of enhanced public access and recreational opportunities, consistency with zoning regulations of the site as outdoor recreation, and consistency with existing site land uses.	Short-term, minor, adverse impacts from construction and equipment and materials for enhancements would occur, similar to those noted above. Enhancement of access to recreation within, and appreciation of, coastal wetlands and uplands would result in long-term, beneficial impacts.	Short-term, minor, adverse impacts from construction and equipment and materials for enhancements would occur. Impacts would be long term, beneficial impacts as a result of increased habitat protection, public access, and recreational opportunities.	Short-term, minor, adverse impacts from construction and equipment and materials for enhancements would occur. Impacts would be long term, beneficial impacts as a result of increased habitat protection, public access, and recreational opportunities.	Short-term, minor, adverse impacts from construction and equipment and materials for enhancements would occur. Long-term and beneficial impacts would occur as a result of increased public access and recreational opportunities and would be consistent with local ordinances and surrounding land uses.	Short-term, minor, adverse impacts from construction and equipment and materials for enhancements would occur. Long-term and beneficial impacts would occur as a result of increased public access and recreational opportunities and would be consistent with local ordinances and surrounding land uses.

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Tourisms and Recreational Use	If acquisition occurs with other Gulf restoration funding mechanisms, there could be either no short-term, beneficial impacts or no adverse impacts on tourism because these sites could either be opened to the public (resulting in a beneficial impact) or acquired and protected in a manner that excludes public use similar to their current condition as private property (resulting in adverse impacts on tourism and recreational use). Construction of the Gulf State Park Lodge and conference center would continue and would result in short-term, minor impacts.	Impacts on visitor use and experience during construction, while potentially adverse, would be localized, short term and minor. Because of the variety of new and enhanced opportunities, it is anticipated long-term benefits to tourist operations in the local area, in addition to Gulf State Park specific tourism would occur.	During rehabilitation of the pier, the public would not be able to access the site but because the site is currently closed, this would not represent a change from existing conditions. These impacts would be short term and minor because the area where the improvements would occur are only on a portion of the site, and other areas of the site would be accessible. Long-term beneficial impacts from the rehabilitation of the currently closed pier and improvements to the existing boat ramp are expected and would provide the public with recreational benefits in the form of increased and enhanced recreational fishing and boating in coastal Alabama.	Impacts on visitor use and experience during construction, while potentially adverse, would be localized, short term and minor. Providing access improvements at 11 sites on the Fort Morgan Peninsula would enhance beach visits and other beach-based recreational activities in this area and would result in long-term benefits to recreational use and tourism.	Impacts on visitor use and experience during construction, while potentially adverse, would be localized, short term and minor. Little Lagoon is culturally valuable for its serene beauty and would provide long-term benefits to recreational use and tourism.	Impacts on visitor use and experience during construction, while potentially adverse, would be localized, short term and minor. Preserving this site and providing access improvements would provide long-term benefits to tourism and recreation in this area.	Impacts on visitor use and experience during construction, while potentially adverse, would be localized, short term and minor. Public access to wetland habitats by constructing a parking area and boardwalks would increase and result in long-term benefits.	Impacts on visitor use and experience during construction, while potentially adverse, would be localized, short term and minor. Increased visitation from provided public parking, restroom/shower facilities, and eco-friendly beach access to Mississippi Sound waters would result in long-term benefits.	Impacts on visitor use and experience during construction, while potentially adverse, would be localized, short term and minor. Increased visitation from provided public parking, restroom/shower facilities, and eco-friendly beach access to Mississippi Sound waters would result in long-term benefits.
Aesthetics and Visual Resources	Visual resources would be negatively affected from the continued deterioration of Fort Morgan fishing pier. Construction of the Gulf State Park Lodge would continue and would result in long-term, minor and adverse impacts by the presence of large structures that could block the view of the beach from the road.	Ongoing construction activities have affected the visual resources of the site with the presence of construction equipment, fences, and partially completed structures, resulting in short-term, minor, adverse impacts. The increase of natural aesthetic of the coastal area would result in long-term, beneficial impacts.	During construction, impacts on visual resources at the proposed alternative site would be short term, minor, and adverse. Even though existing viewsheds would be temporarily affected, impacts would not dominate the view or detract from current user activities or experiences. The pier improvements would incorporate new decking and a sidewalk, which would improve the aesthetics of the existing area. Long-term impacts from the rehabilitation of the pier would be considered minor and beneficial.	During construction, impacts on visual resources at the proposed alternative site would be short term, minor, and adverse. Even though existing viewsheds would be temporarily affected, these impacts would not dominate the view or detract from current user activities or experiences. The proposed facilities would be constructed with appropriate materials and include a muted color scheme that would fit the overall beach feel of the area. Long-term impacts from the proposed alternative would be considered minor and adverse to some visitors and beneficial to others.	During construction, impacts on visual resources at the proposed alternative site would be short term, minor, and adverse. The proposed facilities would be constructed with appropriate materials and include a muted color scheme that would fit the overall beach feel of the area. Long-term impacts from the proposed alternative would be considered minor and adverse to some visitors and beneficial to others.	During construction, impacts on visual resources at the proposed alternative site would be short term, minor, and adverse. Existing views that would change most would be the views from the beach looking north and from the road looking south towards the Gulf. Impacts of the changes in the visual environment may be beneficial because appropriate materials and a muted color scheme would be used. Long-term impacts from the rehabilitation of the pier would be considered minor and beneficial.	During construction, impacts on visual resources at the proposed alternative site would be short term, minor, and adverse. Existing views that would change most would be the views from the beach looking north and from the road looking south towards the Gulf. Impacts of the changes in the visual environment may be beneficial because appropriate materials and a muted color scheme would be used. Long-term impacts from the rehabilitation of the pier would be considered minor and beneficial.	During construction, impacts on visual resources at the proposed alternative site would be short term, minor, and adverse. Existing views that would change most would be the views from the beach looking north and from the road looking south towards the Gulf. Impacts of the changes in the visual environment may be beneficial because appropriate materials and a muted color scheme would be used. Long-term impacts from the rehabilitation of the pier would be considered minor and beneficial.	During construction, impacts on visual resources at the proposed alternative site would be short term, minor, and adverse. Existing views that would change most would be the views from the beach looking north and from the road looking south towards the Gulf. Impacts of the changes in the visual environment may be beneficial because appropriate materials and a muted color scheme would be used. Long-term impacts from the rehabilitation of the pier would be considered minor and beneficial.

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Public Health and Safety	Construction of the Gulf State Park Lodge would continue and there would be no impacts on public health and safety because the site includes no known hazardous materials. Operations would be maintained to minimize soil erosion. As a result, no impacts on shoreline erosion are anticipated.	No additional impacts are expected from the pedestrian trail due to the extent of footprint expansion being minimal in relation to a larger 22-acre site.	Construction is not anticipated to result in adverse impacts on public health and safety as long as identified safety protocols are enforced when such activities are ongoing. There would be no increased risk of exposure to potential hazards from construction. No long-term impacts are expected.	Impacts from construction on public health would be short term, minor, and adverse because construction would not cause soil, groundwater, and/or surface contamination or exceedances in state water quality standards, and erosion of soil material would be minimized. No long-term impacts are expected.	Construction is not anticipated to result in adverse impacts on public health and safety as long as identified safety protocols are enforced when such activities are ongoing. Impacts from construction on public health would be short term, minor, and adverse because construction would not cause soil, groundwater, and/or surface contamination or exceedances in state water quality standards, and erosion of soil material would be minimized. No long-term impacts are expected.	Construction is not anticipated to result in adverse impacts on public health and safety as long as identified safety protocols are enforced when such activities are ongoing. Impacts from construction on public health would be short term, minor, and adverse because construction would not cause soil, groundwater, and/or surface contamination or exceedances in state water quality standards, and erosion of soil material would be minimized. No long-term impacts are expected.	Construction is not anticipated to result in adverse impacts on public health and safety as long as identified safety protocols are enforced when such activities are ongoing. Impacts from construction on public health would be short term, minor, and adverse because construction would not cause soil, groundwater, and/or surface contamination or exceedances in state water quality standards, and erosion of soil material would be minimized. No long-term impacts are expected.	Construction is not anticipated to result in adverse impacts on public health and safety as long as identified safety protocols are enforced when such activities are ongoing. Impacts from construction on public health would be short term, minor, and adverse because construction would not cause soil, groundwater, and/or surface contamination or exceedances in state water quality standards, and erosion of soil material would be minimized. No long-term impacts are expected.	Construction is not anticipated to result in adverse impacts on public health and safety as long as identified safety protocols are enforced when such activities are ongoing. Impacts from construction on public health would be short term, minor, and adverse because construction would not cause soil, groundwater, and/or surface contamination or exceedances in state water quality standards, and erosion of soil material would be minimized. No long-term impacts are expected.

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6.0 COMPLIANCE WITH OTHER LAWS AND REGULATIONS

In addition to the requirements of OPA and NEPA, other laws may apply to the alternatives proposed in the RP/EIS. The AL TIG will ensure compliance with these relevant authorities, which are summarized below and further detailed in Section 6.9 of the Final PDARP/PEIS. Whether and to what extent an authority applies to a future project depends on the specific characteristics of a particular project, among other things. In this section, compliance is only discussed for those alternatives identified in Section 2.1.4 as "preferred." The status of compliance for elements of the Gulf State Park Lodge and Associated Public Access Amenities Project that were addressed in the Final Phase III ERP/PEIS can be found on the Regulatory Compliance website for that document.[45] Where additional compliance requirements may be needed as a result of additional project elements considered in this RP/EIS, they are noted below.

The authorities listed below are the most commonly relevant to AL TIG's restoration actions. An expanded list of federal laws and regulations is included in the Final PDARP/PEIS, Appendix 6.D, Other Laws and EOs of the PDARP/PEIS. This appendix is also provided in this RP/EIS as Appendix I.

Federal environmental compliance responsibilities and procedures will follow the *Trustee Council Standard Operating Procedures for Implementation of the Natural Resource Restoration for the Deepwater Horizon (DWH) Oil Spill*, which are laid out in Section 9.4.6 of that document (DWH Trustees, 2016c). Following these standard operating procedures, the implementing Trustee for each project will ensure that the status of environmental compliance (e.g., completed versus in progress) is tracked through the Restoration Portal. Implementing Trustees will keep a record of compliance documents (e.g., ESA biological opinions, USACE permits) and ensure that they are submitted for inclusion to the Administrative Record.

6.1 FEDERAL LAWS

6.1.1 Endangered Species Act

The purpose of the ESA is to protect and recover threatened and endangered species and the ecosystems upon which they depend. The ESA directs all federal agencies to use their authorities to further these purposes. Section 7(a)(1) requires federal agencies, in consultation with NMFS and USFWS, to carry out programs for conservation of listed species. Although restoration under this RP/EIS is focused on addressing lost recreational shoreline use, actions taken under this RP/EIS may, in certain instances, further the conservation of listed species. This is particularly true for those alternatives that include acquisition of lands currently facing development pressure. As noted in Section 5 of this RP/EIS, acquisition of those lands would remove the development pressure and implement context-sensitive recreational infrastructure. Section 7(a)(2) of the ESA requires every federal agency, in consultation with and with the assistance of the Secretaries of the Interior and Commerce, to ensure that any action it authorizes, funds, or carries out in the United States or upon the high seas is not likely to jeopardize the continued existence of any listed species or result in the destruction or adverse modification of critical habitat. Section 9 of the ESA and regulations issued pursuant to Section 4(d) of the ESA prohibit the take of listed species unless exempted by NMFS or USFWS. To "take" means to harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect listed species. This prohibition applies to federal and nonfederal parties. It is anticipated that at least some of the restoration projects may result

[45] Regulatory compliance status for the Gulf State Park Lodge and Associated Public Access Amenities Project can be found at: http://www.gulfspillrestoration.noaa.gov/environmental-compliance.

in take. An ITS is included in formal consultations and exempts an action agency from Section 9 prohibitions as long as the action agency complies with the reasonable and prudent measures and terms and conditions of the ITS.

Information on threatened and endangered species and critical habitat designations, including those along the Alabama coastline, under NMFS jurisdiction in the Gulf of Mexico is available at http://sero.nmfs.noaa.gov/protected_resources/section_7/threatened_endangered/Documents/gulf_of_mexico.pdf and http://sero.nmfs.noaa.gov/maps_gis_data/protected_resources/critical_habitat/index.html Information on threatened and endangered species and critical habitat designations under USFWS jurisdiction in the Gulf of Mexico is available from the following links: http://ecos.fws.gov/ecp/, http://www.fws.gov/ecological-services/, and http://ecos.fws.gov/crithab/.

To comply with the ESA on the projects selected for implementation, a federal Trustee, on behalf of the implementing Trustee(s) when necessary, will serve as the action agency to initiate ESA consultations and conferences with USFWS and/or NMFS on proposed alternatives that may affect listed and proposed species and their designated or proposed critical habitats. This process is further detailed in the Final PDARP/PEIS (Section 6.9.1.) and in the *DWH Trustee Council Standard Operating Procedures – Appendix F Environmental Compliance Manual* (DWH Trustees, 2016c). For the alternatives proposed under this RP/EIS, the AL TIG is engaged in Section 7 consultation with the appropriate agencies for ESA compliance. All formal and informal consultations required by USFWS or NMFS under the ESA have been initiated. The initiation documents are included in Appendix K.

6.1.2 Magnuson-Stevens Fishery Conservation and Management Act

The Magnuson-Stevens Fishery Conservation and Management Act as amended in 1996 created a requirement for federal agencies to consult with the NOAA NMFS when their actions or activities may adversely affect habitat identified by federal regional fishery management councils or NMFS as EFH. EFH consultation is required if the action may adversely affect EFH. It is important to note that alternatives with a positive net environmental outcome may also require EFH consultation because of temporary or permanent impacts during construction or implementation. For example, EFH consultation would be required if one type of EFH is lost through conversion to another type of EFH during construction of a wetland restoration or habitat improvement project. At its most basic, an EFH consultation consists of a federal agency providing NMFS with an EFH assessment, and NMFS responding with EFH conservation recommendations, followed by the federal agency's written response to those recommendations. Generally, a consultation begins when NMFS receives the federal action agency's EFH Assessment. An EFH Assessment is a critical review of the proposed project and its potential impacts on EFH. As outlined in the regulation, an EFH assessment must include (1) a description of the action, (2) an analysis of the potential adverse effects of the action on EFH and the managed species, (3) the federal agency's conclusions regarding the effects of the action on EFH, and (4) proposed mitigation, if applicable. If appropriate, the assessment should also include the results of an onsite inspection, the views of recognized experts on the habitat or species effects, a literature review, an analysis of alternatives to the proposed action, and any other relevant information. To help inform the EFH assessment process, project proponents can use the NOAA EFH Mapper to view spatial representations of EFH. (The EFH Mapper can be accessed at http://www.habitat.noaa.gov/protection/efh/efhmapper/).

The Trustees coordinated with NMFS' Habitat Conservation Division and determined that all projects preferred for selection in this RP/EIS will have no effect on EFH (Appendix K).

6.1.3 Marine Mammal Protection Act

The MMPA was enacted in response to increasing concerns among scientists and the public that human activities were causing significant declines in some species of marine mammals. The MMPA established a national policy to prevent marine mammal species and population stocks from declining beyond the point where they ceased to be significant functioning elements of the ecosystems of which they are a part.

The USDOC, through NMFS, is charged with protecting whales, dolphins, porpoises, seals, and sea lions. Walrus, manatees, otters, and polar bears are protected by USDOI through USFWS. The MMPA established a moratorium on the taking of marine mammals in U.S. waters. It defines “take” to mean “to hunt harass, capture, or kill” any marine mammal or attempt to do so. The MMPA further defines “harassment” as any act of pursuit, torment, or annoyance that has the potential to injure a marine mammal or marine mammal stock in the wild (Level A harassment) or has the potential to disturb a marine mammal or marine mammal stock in the wild by causing disruption of natural behavioral patterns (Level B harassment).

The MMPA generally prohibits take of marine mammals in U.S. waters by any person and by U.S. citizens in international waters. NMFS can authorize take for the following activities:

- scientific research
- enhancing the survival or recovery of a marine mammal species or stock
- incidental take during commercial fishing operations
- incidental take during non-fishery activities

Some of the alternatives described in this RP/EIS may result in directed or incidental (e.g., entrapment or noise harassment from pile driving) take of marine mammals, directed take (e.g., scientific research and monitoring), is not expected. Incidental takes are those that are unintentional, but not unexpected. Further information on the types of take and compliance required can be found in the Final PDARP/PEIS, Section 6.9.3. For the efforts under this RP/EIS that include in-water work (i.e., Fort Morgan Pier Rehabilitation, Laguna Cove Little Lagoon Natural Resource Protection, and Dauphin Island Eco-Tourism and Environmental Education Area), the AL TIG will continue to coordinate with NMFS Southeast Region’s Protected Resources Division to determine if the projects requires authorization under the MMPA. Appropriate BMPs would be implemented to avoid or minimize potential impacts to marine mammals. These may include the following:

- All in-water work would comply with the USFWS Alabama Standard Manatee Construction Conditions.
- NMFS Measures for Reducing Entrapment Risk to Protected Species would be implemented for projects which could result in adverse impacts to marine mammals.
- Educational signs and outreach materials including NMFS’ “Dolphin Friendly Fishing and Viewing Tip” signs and “Don't Feed Wild Dolphins” would be placed at the beginning/entrance of piers and any flat surfaces at regular intervals along the piers.
- NMFS’ marine mammal and sea turtle pier surface placards would be installed at regular intervals along piers.
- Monofilament fishing line recycling bins would be placed at regular intervals along piers to prevent fishing line entanglements to marine wildlife. Bins would be emptied routinely.

6.1.4 Coastal Zone Management Act

The goal of the CZMA is to encourage states to preserve, protect, develop, and, where possible, restore and enhance the resources of the nation's coastal zone. The CZMA encourages coastal states to develop and implement comprehensive management programs for activities that balance the need for coastal resource protection with the need for economic growth and development in the coastal zone. Coastal management plans developed by a coastal state must be approved by the Secretary of the USDOC. Once a state's plan is approved, Section 307 of the CZMA, called the "federal consistency" provision, gives a state a strong role in federal agency decision making for activities that may affect the coastal uses or resources of that state. The federal consistency provision is a major incentive for states to join the federal Coastal Zone Management Program and is a powerful tool that state programs use to manage coastal activities and resources and to facilitate cooperation and coordination with federal agencies. Additional information on the CZMA can be found in the Final PDARP/PEIS, Section 6.9.4.

Restoration actions proposed to be undertaken or authorized by federal agencies, including federal Trustees acting pursuant to OPA, are subject to review for "federal consistency" under the CZMA. Although the Final PDARP/PEIS does not propose any specific restoration actions or projects, it does outline and describe a programmatic structure that would serve as the DWH Trustees' overarching "blueprint" under which project-specific restoration plans would be developed, proposed, and selected, with substantial and meaningful opportunities for public participation in that process. It includes elements that would establish and guide the development of such plans. It also identifies the responsibilities and principles that the DWH Trustees would apply and follow, individually and collectively, at every level of planning to govern and provide for fulfillment of their duty on behalf of the public to restore, replace, rehabilitate, and acquire natural resources or resource services that were lost, injured, or destroyed as a result of the DWH oil spill.

The federal Trustees evaluated reasonably foreseeable effects of the Final PDARP/PEIS for consistency with the federally approved coastal management programs in Texas, Louisiana, Alabama, Mississippi, and Florida and submitted a consistency determination for the Final PDARP/PEIS for state review coincident with public review of the document on October 6, 2015 (see Final PARP/PEIS, Appendix 6.C.3). Each state reviewed the federal Trustees' consistency determination and each state concurred with that determination (see Final PARP/PEIS, Appendix 6.C.4).

Because all alternatives proposed in this RP/EIS would occur in or near shoreline areas, each alternative has been reviewed for consistency with the CZMA. This compliance was completed for the Gulf State Park Lodge and Associated Public Access Amenities Project, as detailed in the Final Phase III ERP/PEIS, on August 14, 2013. In that document, ADEM provided a non-regulated use permit for the reestablished lodge and interpretive center, indicating that the proposed enhancements would be consistent with provisions of the CZMA. All changes to the Gulf State Park Lodge and Associated Public Access Amenities Project were further reviewed for consistency with the CZMA. Additionally, the federal Trustees submitted a consistency determination to ADEM for the proposed alternatives considered in this restoration plan on December 8, 2016. ADEM provided its concurrence with the Trustee's determination that the proposed activities evaluated in the RP/EIS are consistent with the enforceable policies of the Alabama Coastal Area Management Program on February 2, 2017 (see Appendix K).

6.1.5 National Historic Preservation Act

The NHPA, as amended in 2000 (16 U.S.C. § 470[w]), defines a historic property as "any prehistoric or historic district, site, building, structure, or object included in, or eligible for inclusion on the National Register [of Historic Places]." Historic properties encompass built resources (e.g., bridges, buildings,

and piers), landscapes, archaeological sites, and traditional cultural properties (TCPs). TCPs are historic properties significant for their association with practices or beliefs of a living community that are both fundamental to that community's history and part of the community's cultural identity. These properties may be above ground, below grade, or submerged in waterways, and include resources listed in, or eligible for listing in, the NRHP. Terrestrial cultural resources may include buildings, structures, sites, and objects. Cultural resources offshore may include shipwrecks, archaeological sites, structures, or districts. Archaeological, architectural, and Native American resources are protected by a variety of laws and their implementing regulations.[46]

Although TCPs are typically associated with Native American culture, such historic properties also may be associated with other ethnic groups or communities. TCPs may vary between rural and urban areas and even within the same ethnic group. Research and contact with appropriate groups is part of the identification of TCPs.

The NRHP is the official federal list of historic properties and is maintained by NPS. As of November 2011, more than 10 percent of the properties listed in the NRHP were located in the affected Gulf states (9,083 of the 86,255 properties). The NRHP is dynamic. The list is not comprehensive and does not include all properties that meet the criteria for significance and integrity. Listings are limited only to those historic properties that have been formally documented, nominated, and accepted for inclusion by the Keeper of the NRHP.[47]

All projects tiered from the Final PDARP/PEIS, including the proposed alternatives in this RP/EIS, will be reviewed under Section 106 of the NHPA prior to any project activities that would restrict consideration of measures to avoid, minimize, or mitigate any adverse impacts on historic properties located within a project area. Alternatives will be implemented in accordance with all applicable federal and state laws and regulations, including those laws and regulations concerning the protection of cultural and historic resources. NHPA consultation for the alternatives proposed in this RP/EIS has been initiated. As part of the consultation process, the AL TIG will further evaluate existing information in coordination with the State Historic Preservation Office to determine if proposed activities would have an adverse effect. For the Gulf State Park Lodge, by letter dated April 13, 2015, USDOI concurred that the project, as evaluated in the Final Phase III ERP/PEIS, would have no adverse effect on historic properties. Components of the Gulf State Park Lodge and Associated Public Access Amenities Project that were not included in the previous NHPA consultation will be reviewed under Section 106 of the NHPA.

6.1.6 Coastal Barrier Resources Act

The Coastal Barrier Resources Act (CBRA) established the John H. Chafee Coastal Barrier Resources System, a defined set of geographic units along the Atlantic, Gulf of Mexico, Great Lakes, U.S. Virgin Islands, and Puerto Rico coasts. The CBRA restricts federal expenditures of funds for certain activities

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[46] Federally, these include the NHPA as amended in 2000; the Archeological and Historic Preservation Act of 1974; the Archaeological Resources Protection Act of 1979; the American Indian Religious Freedom Act of 1978; the Native American Graves Protection and Repatriation Act of 1990; the Submerged Lands Act of 1953; the Abandoned Shipwreck Act of 1987; and the Sunken Military Craft Act. The Advisory Council on Historic Preservation further guides treatment of archaeological and architectural resources through the Protection of Historic Properties (36 CFR § 800) regulations. Additional regulations and guidelines for shipwrecks include 10 U.S.C. 113, Title XIV, for the Sunken Military Craft Act and the Guidelines for Archaeological Research Permit Applications on Ship and Aircraft Wrecks under the Jurisdiction of the Department of the Navy.

[47] The NRHP includes historic properties that possess significance and integrity applying the National Register Criteria for Evaluation (36 CFR § 60[a–d]).

located within the Coastal Barrier Resources System unless those activities meet one of the listed exceptions under the CBRA. A federal agency proposing to spend funds within the Coastal Barrier Resources System must consult with USFWS to determine whether the proposed federal expenditure is subject to restrictions and, if so, whether it meets one of the CBRA exceptions. USFWS completed CBRA consultation for the alternatives in this RP/EIS and concluded that the CBRA does not subject any of the alternatives to funding restrictions (see Appendix K).

6.1.7 Migratory Bird Treaty Act and Bald and Golden Eagle Protection Act

The MBTA implements various treaties and conventions among the United States, Canada, Japan, Mexico, and the former Soviet Union for the protection of migratory birds. Under the MBTA, unless permitted by regulations, it is unlawful to pursue, hunt, take, capture, or kill; attempt to take, capture, or kill; possess; offer to sell or sell; barter; purchase; deliver; or cause to be shipped, exported, imported, transported, carried, or received any migratory bird, part, nest, egg, or product, manufactured or not. USFWS regulations broadly define “take” under MBTA to mean “pursue, hunt, shoot, wound, kill, trap, capture, or collect, or attempt to pursue, hunt, shoot, wound, kill, trap, capture, or collect” (50 CFR § 10.12).

The Bald and Golden Eagle Protection Act of 1940 prohibits anyone, without a permit issued by the Secretary of the Interior, from “taking” bald eagles, including their parts, nests, or eggs. The Bald and Golden Eagle Act defines “take” as “pursue, shoot, shoot at, poison, wound, kill, capture, trap, collect, molest, or disturb” (16 U.S.C. § 668[c]). For the purpose of this document, “disturb” means to agitate or bother a bald or golden eagle to a degree that causes, or is likely to cause, based on the best scientific information available, (1) injury to an eagle; (2) a decrease in its productivity by substantially interfering with normal breeding, feeding, or sheltering behavior; or (3) nest abandonment, by substantially interfering with normal breeding, feeding, or sheltering behavior (50 CFR § 22.3). In addition to immediate impacts, this definition also covers impacts that result from human-induced alterations initiated around a previously used nest site during a time when eagles are not present, if, upon the eagle’s return, such alterations agitate or bother an eagle to a degree that interferes with or interrupts normal breeding, feeding, or sheltering habits, and causes, or is likely to cause, a loss of productivity or nest abandonment. Eagles are not as sensitive to human disturbance during migration and wintering as they are while nesting. However, wintering eagles can congregate at specific sites year after year (i.e., established roost sites) for purposes of feeding and sheltering.

USFWS is reviewing each alternative under this RP/EIS to ensure that take, pursuant to the MBTA, is not likely to occur. The review process includes the project sponsor documenting species or groups of birds likely to be present in the project area, and the likely behaviors those birds would be exhibiting on or near the project site (i.e., breeding, nesting, feeding, foraging, resting, or roosting). If migratory birds are present in a project area, avoidance measures will be implemented to ensure that these birds (including parts, nests, eggs, or products) are not wounded or killed during construction or use of the project area. Alternatives that will need to be implemented throughout several seasons will utilize BMPs to discourage migratory birds from using an area during construction. BMPs will be coordinated between USFWS and ADCNR.

The review process will also include the project sponsor documenting the presence or absence of known bald eagle nests or congregation/roosting sites. If nests or congregations are known, projects will be evaluated to determine if activities will be able to maintain a standard buffer distance (based on vegetation cover and nearby similar activities). If a standard buffer distance for project construction and the nest can be maintained, then the buffer distance will become a required best practice for project implementation. If a standard buffer distance cannot be maintained, then the sponsor will need to either alter the project or seek a nonpurposeful take permit. It is likely that any measures taken to protect bald eagles or other migratory birds will also protect golden eagles.

6.1.8 Clean Air Act

The CAA requires USEPA to set NAAQS for pollutants considered harmful to public health and the environment. NAAQS have been set for six common air pollutants (also known as criteria pollutants): particle pollution or particulate matter, ozone, carbon monoxide, sulfur dioxide, nitrogen dioxide, and lead. Particulate matter is defined as fine particulates with a diameter of 10 micrometers or less (PM_{10}), and fine particulates with a diameter of 2.5 micrometers or less ($PM_{2.5}$). When a designated air quality area or airshed in a state exceeds one or more of the NAAQS, that area may be designated as a "nonattainment" area. Areas with levels of pollutants below the health-based standards are designated as "attainment" areas. To determine whether an area meets the NAAQS, air monitoring networks have been established and are used to measure ambient air quality. As noted in the Final PDARP/PEIS, no counties in Alabama are in nonattainment for any criteria pollutant (see Final PDARP/PEIS, Section 6.9.9.2). As noted in Chapter 5, none of the proposed alternatives would result in nonattainment. Additional information on the NAAQS standards and how they relate to the Gulf Coast in general are found in the Final PDARP/PEIS, Section 6.9.9.2. An analysis of air quality and GHG emissions has been conducted for each alternative proposed in this RP/EIS and is provided in Chapter 5.

6.1.9 Clean Water Act; Rivers and Harbors Act; and Marine Protection, Research and Sanctuaries Act

Waters of the United States (as defined by the CWA and implementing regulations) and navigable waters of the United States (regulated by the RHA) are present throughout the Gulf Coast and could be affected by the proposed alternatives. Section 404 of the CWA requires USACE authorization before discharging dredged or fill material into waters of the United States, including jurisdictional wetlands or special aquatic sites. Additionally, Section 10 of the RHA requires USACE authorization prior to any work done in, under, or over navigable waters of the United States or affecting the course, location, condition, or capacity of such waters. Authorization from USACE pursuant to Section 103 of the Marine Protection, Research, and Sanctuaries Act may also be required for the transportation of dredged material for the purpose of dumping it in ocean waters. There may be other provisions of the CWA or RHA that are also applicable to proposed alternatives in this RP/EIS depending on site-specific circumstances. Specifically:

- Section 14 of the RHA, codified in 33 U.S.C. 408 and commonly referred to as "Section 408," authorizes the alteration or occupation or use of a USACE civil works project if the Secretary determines that the activity will not be injurious to the public interest and will not impair the usefulness of the project.
- Under Section 401 of the CWA, projects that entail discharge to wetlands or other waters within federal jurisdiction must obtain state certification of compliance with applicable state water quality standards. Under Section 401, states can review and approve, condition, or deny all federal permits or licenses that might result in a discharge to state waters, including wetlands.

- Section 402 of the CWA establishes the NPDES permit program to regulate point source discharges of pollutants into waters of the United States. A NPDES permit sets specific limits for point sources discharging pollutants into waters of the United States and establishes monitoring and reporting requirements, as well as special conditions, for those permitted discharges. USEPA is charged with administering the permit program, but can authorize states to assume many of the permitting, administrative, and enforcement responsibilities. Alabama is authorized to issue NPDES permits through ADEM.

For the proposed alternatives in this RP/EIS with activities that might be subject to the provisions above, the AL TIG will coordinate with the appropriate USACE District and/or state office responsible for authorizing such activities to help identify whether a permit is needed and, if so, what type. This early coordination will help facilitate information sharing and communication, thus maximizing available efficiencies in the permitting process. Early coordination also allows for advance discussion of measures to avoid and minimize potential impacts and helps inform implementing DWH Trustees on additional factors that are considered in the permit decision-making process.

USACE authorizations are expected to be required for the Fort Morgan Pier Rehabilitation, Laguna Cove Little Lagoon Natural Resource Protection, and Dauphin Island Eco-Tourism and Environmental Education Area alternatives and will be obtained prior to project implementation.

With respect to the Gulf State Park Lodge and Associated Public Access Amenities Project, current compliance reviews indicate that reconstruction of the lodge and conference center would involve filling 0.18 acre of palustrine emergent wetlands. Filling activities require authorization from USACE and a Water Quality Certification from ADEM to satisfy Sections 404 and 401, respectively, of the CWA. Both were previously obtained (USACE CWA 404 Nationwide Permit 18 verification letter dated September 17, 2013, and ADEM CWA 401 Water Quality Certification for the Nationwide Permits letter dated March 12, 2012). During final design of the lodge and conference center, it was determined that relocation of the 0.18 acre low quality emergent wetland could be achieved under a Nationwide Permit 27 from USACE (USACE CWA 404 Nationwide Permit 27 verification letter dated February 6, 2016). This alternative will provide a larger wetland with natural upland habitat buffers, more desirable native plant species, and improved wetland functionality. The restored wetland will provide 0.24 acre of emergent wetlands on the lodge site. The previous plan was to fill a portion of the 0.18 acre emergent wetland and mitigate impacts adjacent to the remaining wetland; however, because of the location of the wetland, the remaining wetland would be surrounded by the lodge and conference center footprint and infrastructure. By shifting the restored wetland to the east, it will become part of the wildlife corridor and provide better wildlife utilization. While no additional wetland fill is expected under this alternative, the project will be reviewed to ensure no additional permits or modifications to existing permits are required with regard to wetland impacts. For all other alternatives, it is anticipated that the filling of waters or wetlands would be avoided through project design. Should that not be possible, impacts would be minimized to the maximum extent practicable, further consultation with USACE and other applicable agencies would occur, and the appropriate mitigation would be implemented.

6.1.10 Archaeological Resource Protection Act

The purpose of the Archaeological Resource Protection Act is to secure, for the present and future benefit of the American people, the protection of archaeological resources and sites that are on public and Indian lands. The act fosters increased cooperation and exchange of information between governmental authorities, the professional archaeological community, and private individuals having collections of archaeological resources and data that were obtained before October 31, 1979. The act requires any person seeking to excavate or remove archaeological resources from public and Indian

lands to obtain a permit from the appropriate federal land manager before conducting those activities. The AL TIG will comply with the Archaeological Resource Protection Act's requirements for all alternatives proposed in this RP/EIS that would occur on public lands and Indian lands.

6.1.11 Land and Water Conservation Fund

The Land and Water Conservation Fund provides financial assistance to states for planning; acquisition of land, water, or interests in land or water; or development for the purpose of outdoor recreation (54 U.S.C. § 200305(a)). No property acquired or developed with assistance under this statute may be converted to other than public outdoor recreation use without the approval of the Secretary of the Interior (54 U.S.C. § 200305(f)(3)).

The Gulf State Park Lodge and Associated Public Access Amenities Project is located at Gulf State Park. Certain areas of Gulf State Park have received funding from the Land and Water Conservation Fund for development or acquisition. On October 29, 2015, ADCNR formally requested approval from the Land and Water Conservation Fund State Liaison Officer, the Director of the Alabama Department of Economic and Community Affairs, pursuant to the authority granted to the Alabama Department of Economic and Community Affairs by a January 16, 2014, Guidance Memo issued by NPS, to rebuild the Gulf State Park Lodge and associated conference center. On December 23, 2015, the Director of the Alabama Department of Economic and Community Affairs approved the proposed rebuilding of the Gulf State Park Lodge and associated conference center. Additional documentation supporting this decision was provided to NPS on January 29, 2016, and NPS is currently reviewing the Gulf State Park Lodge and Associated Public Access Amenities Project pursuant to the Land and Water Conservation Fund.

6.1.12 Additional Executive Orders

The EOs are also identified here. Compliance with these orders will occur for the alternatives proposed in this RP/EIS.

EO 11988: Floodplain Management

EO 11988 requires federal agencies to avoid, to the extent possible, the long- and short-term, adverse impacts associated with the occupancy and modification of floodplains and avoid direct and indirect support of floodplain development wherever there is a practicable alternative. Any potential short- and long-term impacts on floodplains are evaluated in Chapter 5 of this RP/EIS.

EO 11990: Protection of Wetlands

EO 11990 is intended to minimize the destruction, loss, or degradation of wetlands and to preserve and enhance the natural and beneficial values of wetlands. To meet these objectives, the order requires federal agencies, in planning their actions, to consider alternatives to wetland sites and limit potential damage if an activity affecting a wetland cannot be avoided. Any potential short- and long-term impacts on wetlands are evaluated in Chapter 5 of this RP/EIS.

EO 12898: Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations

EO 12898 requires federal agencies to identify and address disproportionately high and adverse human health or environmental effects of programs, policies, and activities on minority or low-income populations. Environmental justice review should be incorporated into the NEPA process and, where disproportionate adverse effects on minority and low-income populations are identified, address those

impacts. Chapter 5 evaluates the potential environmental justice impacts and finds that none of the proposed projects would have environmental justice concerns.

EO 13112: Invasive Species

EO 13112 applies to all federal agencies whose actions may affect the status of invasive species. The EO requires agencies to identify such actions and, to the extent practicable and permitted by law, requires them to take actions specified in the EO to address the problem, consistent with their authorities and budgetary resources. It also requires that federal agencies not authorize, fund, or carry out actions that they believe are likely to cause or promote the introduction or spread of invasive species in the United States or elsewhere unless, pursuant to guidelines that it has prescribed, the agency has determined and made public its determination that the benefits of such actions clearly outweigh the potential harm caused by invasive species; the benefits of such actions clearly outweigh the potential harm caused by invasive species; and that all feasible and prudent measures to minimize risk of harm will be taken in conjunction with the actions.

Any potential short- and long-term impacts from invasive species are evaluated in Chapter 5 of this RP/EIS, and BMPs are provided to reduce the risk of species being introduced during construction and operation of the proposed alternatives in this RP/EIS.

EO 13175: Consultation and Coordination with Indian Tribal Governments

EO 13175 reaffirms the federal government's commitment to a government-to-government relationship with Indian tribes and directs federal agencies to establish procedures to consult and collaborate with tribal governments when new agency regulations would have tribal implications. Tribal consultation would occur for all alternatives proposed under this RP/EIS.

EO 13186: Responsibilities of Federal Agencies to Protect Migratory Birds

EO 13186 directs executive departments and agencies to take certain actions to further implement the MBTA. Compliance with the MBTA is described above in more detail in Section 6.1.7. Additionally, any potential short- and long-term impacts on migratory birds are evaluated in Chapter 5 of this RP/EIS.

EO 13693: Planning for Federal Sustainability in the Next Decade

EO 13693 directs federal leadership in energy, environmental, water, fleet, buildings, and acquisition management to continue to drive national GHG reductions and support preparations for the impacts of climate change. Any potential short- and long-term impacts from GHGs are evaluated in Chapter 5 of this RP/EIS. Further, where alternatives include energy conservation measures, these are noted in Chapter 2 under the alternative descriptions.

6.2 COMPLIANCE WITH STATE AND LOCAL LAWS AND OTHER FEDERAL REGULATIONS

The AL TIG will ensure compliance with all applicable state and local laws and other applicable federal laws and regulations relevant to the State of Alabama. Additional laws and regulations are described below.

6.2.1 Alabama Department of Environmental Management Division 8 Coastal Program Rules

The ADEM Division 8 Coastal Program rules require a permit or other authorization be obtained prior to construction of any new structure or substantial improvement to an existing structure on a property intersected by or seaward of the ADEM construction control line. ADEM defines a control line as, "a line running parallel to the shoreline at a point 40 linear feet inland of the most inland point of the crestline; except BTL (business, tourist, and lodging) and BCR (business, central resort) zones of the City of Gulf Shores as defined on July 16, 1984, by the zoning maps of the City of Gulf Shores, wherein the construction control line means a line running parallel to the crestline at a point five linear feet inland of the most inland point of the crestline" (ADEM, 2016d).

A person or agency proposing to construct or improve infrastructure within the coastal area requires a state agency permit to monitor federally regulated activities for consistency. After receiving a permit application, ADEM will begin its review process and initiate appropriate interagency coordination. Prior to any activities, all alternatives proposed in this RP/EIS will be reviewed under Division 8 of the Coastal Area Management Program to ensure the avoidance, minimization, or mitigation of any adverse impacts on coastal properties located within a project area. Alternatives will be implemented in accordance with all applicable federal and state laws and regulations, including those laws and regulations concerning coastal resources. The Gulf State Park Lodge and Conference Center received a non-regulated use permit from ADEM on August 14, 2013. All elements of the Gulf State Park Lodge and Associated Public Access Amenities Project will be reviewed with ADEM to ensure they fit within this permit or if a permit modification is required.

6.2.2 Alabama Department of Environmental Management Division 6 Volume 1 Water Quality Program (NPDES)

The purpose of this water quality program is to conserve State of Alabama waters and protect, maintain, and improve the quality of water for public supplies, the propagation of wildlife, fish and aquatic life, and for domestic, agricultural, industrial, recreation and other beneficial uses. Additionally, its purpose is to prevent, abate, and control new or existing pollution.

Alabama's Division 6 Volume 1 Water Quality Program, effective September 29, 2015, "prescribes regulations for development and implementation of water quality standards and water body use classifications for all waters of the State; prescribes conditions relevant to the issuance of permits to include effluent limitations for each discharge for which a permit is issued; and, such other rules as necessary to enforce water quality standards" (ADEM, 2016c). ADEM staff review the use classifications included in the standards as the need arises, and the entire package receives formal review at least once every three years.

Proposals to construct or improve infrastructure that may affect water quality standards or bodies of water require tests or analytical procedures to be completed to determine compliance with the methods specified in 40 CFR 136.3. All projects from the proposed alternatives in this RP/EIS will be reviewed under Division 6 of the Water Quality Program prior to any activities that could affect water quality. Alternatives will be implemented in accordance with all applicable federal and state laws and regulations, including those concerning water quality.

6.2.3 Alabama Regulations on Game and Fish and Fur Bearing Animals Published Annually (Ala. Adm. Code R. 220-1-1 et seq.)

Alabama Regulations Relating to Game, Fish, Furbearers and Other Wildlife implement various restrictions on times, places, manner, and means for hunting seasons. It is unlawful to hunt or fish without proper permits unless the individual is home from active military duty. According to the Alabama Division of Wildlife and Freshwater Fisheries, it is unlawful to "take, capture, kill, or attempt to take, capture or kill; or possess, sell, trade for anything of monetary value, or offer to sell or trade for anything of monetary value, without a scientific collection permit or written permit from the Commissioner, Department of Conservation and Natural Resources, which shall specifically state what the permittee may do with regard to said species" (ADCNR, 2016c).

ADCNR reviewed each alternative in the RP/EIS to ensure that regulations regarding game and fish and fur bearing animals were followed. Because none of the alternatives impact or would impact hunting, this regulation was not applicable to the alternatives evaluated.

7.0 MONITORING AND ADAPTIVE MANAGEMENT PLAN

According to the NRDA regulations for OPA (15 CFR § 990.55), a RP should include "a description of monitoring for documenting restoration effectiveness, including performance criteria that will be used to determine the success of restoration or need for interim corrective action." Given the unprecedented temporal, spatial, and funding scales associated with this RP, the AL TIG recognizes the need for a robust monitoring and adaptive management framework to measure the beneficial impacts of restoration and support restoration decision making. In order to increase the likelihood of successful restoration, the AL TIG will conduct the monitoring and evaluation needed to inform decision making for current alternatives and refine the selection, design, and implementation of future restoration. This monitoring and adaptive management framework may be more robust for elements of the RP with higher degrees of uncertainty or where large amounts of restoration are planned within a given geographic area and/or for the benefit of a particular resource.

A monitoring plan for each project was developed and is included in Appendix C of this final RP/EIS. The restoration objective of this RP/EIS is to restore a portion of the lost recreational use in Alabama caused by the DWH oil spill by enhancing shoreline recreational opportunities in Alabama. This would be accomplished by improving the public's accessibility and enjoyment of natural resources through the various alternatives proposed. Monitoring and adaptive management plans will include measurable objectives with associated performance standards to track progress toward restoration goals, methodologies and parameters for data collection, identification of key uncertainties, and tracking of compliance with appropriate regulations.

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8.0 ADDITIONAL CONSIDERATIONS IN PLANNING

8.1 RELATIONSHIP BETWEEN SHORT-TERM USE OF THE HUMAN ENVIRONMENT AND LONG-TERM PRODUCTIVITY

Section 102(2)(c)(iv) of NEPA requires that an EIS "discuss…the relationship between local short-term uses of man's environment and the maintenance and enhancement of long-term productivity." This section describes how the alternatives would affect the short-term uses of the human environment and how that would affect the maintenance or enhancement of long-term productivity.

As described in Chapter 1, the purpose of the proposed alternatives is to restore extensive and complex injuries to natural resources and services resulting from the DWH oil spill, specifically addressing lost recreational shoreline use. To meet this purpose, the AL TIG has proposed alternatives intended to improve certain aspects of the human environment and thus maintain and enhance the long-term productivity of a number of natural resources while providing recreational access. Chapter 5 describes the kinds of short- and long-term, adverse impacts and/or benefits that would be expected for the different alternatives proposed to restore recreational use.

For the restoration approach "providing recreational opportunities," including the alternatives evaluated in this RP/EIS, short-term, adverse impacts generally include those impacts associated with construction or implementation of restoration activities such as ground disturbance, possible soil erosion, and impacts on water quality, impacts on wildlife in the area from temporary disturbance, and air and noise emissions during construction. There would be long-term impacts from a loss of soil productivity at sites where facilities would be placed on previously undisturbed areas. Alternatives where this would occur include the Mid-Island Parks and Public Beach Improvements, Gulf Highlands Land Acquisition and Improvements, Dauphin Island Eco-Tourism and Environmental Education Area, and portions of the Fort Morgan Peninsula Public Access Improvements. However, the area of disturbance would be minimal compared to the area of the sites, and any loss of productivity would be minimal. For the Gulf State Park Lodge and Associated Public Access Amenities Project site, the majority of development would occur in the footprint of the previous lodge, which is a previously disturbed area due to the presence of the footings of the previous lodge and conference center. Where development occurs, soils at the site and habitat previously available at the site would be lost. The Fort Morgan Pier Rehabilitation would occur in the existing footprint of the pier, and new disturbance would be minimal. However, most of these impacts be expected to be temporary at all of the proposed alternative sites and would be mitigated with BMPs where applicable (i.e., to address potential erosion) and, on the whole, these restoration approaches are intended to enhance long-term productivity of natural resources. For example, lands acquired for recreational use would also have benefits related to habitat and land conservation. In the case of this RP/EIS, land at Laguna Cove Little Lagoon Natural Resource Protection, Mid-Island Parks and Public Beach Improvements, and Gulf Highlands Land Acquisition and Improvements are currently facing land development pressures. Acquisition of these lands would remove these lands from potential development and protect habitat, while providing recreational access in a controlled manner. In addition, these projects would provide educational displays that would further promote stewardship of the coastal environments in those areas and protect the resources by directing public access away from sensitive areas. Projects on lands already publicly owned (by the state and county) such as Fort Morgan Peninsula Public Access Improvements, Fort Morgan Pier Rehabilitation, and the Gulf State Park Lodge and Associated Public Access Amenities Project, would take areas already being informally accessed by the public and provide enhanced public access to these areas through parking, dune walkovers, restrooms and showers, and by providing environmental

programs and interpretive material regarding the coastal environment (in the case of Gulf State Park Lodge and Associated Public Access Amenities Project, Dauphin Island Eco-Tourism and Environmental Education Area, and Fort Morgan Peninsula Public Access Improvements). The additional amenities at these sites would serve to both provide and control access at these sites and to likely adjacent areas (including for some projects areas with Alabama beach mouse and loggerhead turtle critical habitat) and would be constructed in a manner that would be sensitive to the coastal environment. All of these project elements would enhance the long-term productivity/sustainability of the resources along the Alabama coast. Additionally, for those alternatives that would adversely affect wetlands and their long-term productivity, such as Dauphin Island Eco-Tourism and Environmental Education Area and the Gulf State Park Lodge and Associated Public Access Amenities Project, mitigating the loss of wetlands by creating and managing new wetlands would help offset and preserve the long-term productivity of wetland habitat along the Alabama coastline. Those alternatives that include rehabilitation or construction of piers could have adverse impacts from incidental catch of sea turtles or other non-targeted species.

Restoration approaches focused on shoreline recreational use, such as those in this RP/EIS, intend to provide and enhance recreational opportunities that would increase access to, and the recreational use of, resources. Depending on how those uses are managed, these restoration approaches could result in both short-term and long-term impacts on habitats and resources as described above. However, those impacts are not expected to degrade long-term productivity.

8.2 IRREVERSIBLE AND IRRETRIEVABLE COMMITMENT OF RESOURCES

Section 102(2)(c)(v) of NEPA requires that an EIS “discuss…any irreversible and irretrievable commitment of resources which would be involved in the proposed action should it be implemented” (40 CFR § 1502.16). However, NEPA and the CEQ regulations do not define “irreversible and irretrievable.” For purposes of this analysis, a commitment of a resource includes such things as agency funding or staff necessary to undertake an alternative (see Final PDARP/PEIS, Section 6.11).

An irreversible commitment of resources applies primarily to the effects of using nonrenewable resources, such as minerals or cultural resources, or to those factors such as soil productivity that are renewable only over long periods. It could also apply to the loss of an experience as an indirect effect of a “permanent” change in the nature or character of the land.

An irretrievable commitment of resources is defined as the loss of production, harvest, or use of natural resources. Natural resources lost, harvested, or used are irretrievable, but the action is not irreversible. If the use changes, it is possible to resume production. An example of such a commitment would be the loss of use in an area that was previously accessible, even informally, as a result of establishing formalized access areas. If the decision were reversed, though lost in the interim, access would be available again.

Implementation of any of the alternatives would require an irreversible and irretrievable commitment of resources, including staff time for planning and development, and the associated funding necessary to go through consultation, coordination, and decision-making processes. Other resource use that would be irreversible and irretrievable would be the use of energy through the combustion of fossil fuels and material resources for construction. However, the level of commitment would vary based on the alternative. Alternatives that have a longer construction process, such as the Gulf State Park Lodge and Associated Public Access Amenities Project, would have a larger commitment of irreversible resources related to fossil fuels than alternatives that have a shorter construction timeframe, such as the Fort Morgan Peninsula Public Access Improvements.

All alternatives would be implemented to avoid for or mitigate impacts on cultural resources and to minimize any loss of productivity of soils in the area. Alternative elements that include boardwalks that span wetland areas would be designed to meet ADEM standards and be as high as they are wide, while at the same time meeting all accessibility standards, to minimize impacts on the productivity of wetlands. Although some alternatives would include the development of infrastructure, such as the Gulf State Park Lodge and Associated Public Access Amenities Project, this infrastructure could be removed from a site and is not an irreversible action.

A change in how the coastline is accessed is considered to be an irretrievable commitment of resources that could occur under the alternatives and is evaluated in the RP/EIS. At some alternative sites, such as the Gulf State Park Lodge and Associated Public Access Amenities, Fort Morgan Peninsula Public Access Improvements, and Mid-Island Parks and Public Beach Improvements project sites, the public has historically accessed these sites in an informal manner, which includes no limitations on where they can walk to access the beach and, in some cases, where they park. Formalizing access at these sites would result in designated walkovers and parking areas and would remove the open access currently occurring at these sites. This could have beneficial impacts on adjacent lands that are currently being accessed informally, once the formal access is provided. While the purpose of the proposed alternatives is to provide access, some areas of the alternative sites would limit public access as result of new infrastructure (e.g., Gulf State Park Lodge and Associated Public Access Amenities Project) or from providing designated access points (e.g., Gulf Highlands Land Acquisition and Improvements), which would be a irretrievable impact. Other irretrievable impacts would include the development of property currently undeveloped, along the coast and the resulting loss in habitat at those sites. In some instances (e.g., Laguna Cove Little Lagoon Natural Resource Protection, Mid-Island Parks and Public Beach Improvements, and Gulf Highlands Land Acquisition and Improvements), the sites are currently facing land development pressures, with development of high density uses already proposed on some parcels, such as at the Gulf Highlands Land Acquisition and Improvements site. While the proposed access improvements would involve some development on these undeveloped parcels, the size and scale of the development would be minimal and the majority of the habitat on the site would be preserved compared to the plans for development if these properties were not taken out of private ownership. The Gulf State Park Lodge and Associated Public Access Amenities Project would remove habitat from productivity; however, this habitat was already disturbed and any displacement or loss that would occur is expected to be minimal. For all alternatives, context sensitive design would be used to be sensitive to the coastal environment, including being designed to best withstand hurricanes. Where possible, such as in the case of Gulf State Park Lodge and Associated Public Access Amenities Project, facilities would be designed to meet LEED design standards. In other alternatives, such as Laguna Cove Little Lagoon Natural Resource Protection and Mid-Island Parks and Beach Improvements, parking lots would be surfaced with permeable surfaces to reduce run off and erosion and minimize potential impacts on coastal resources. Any alternative that proposes additional parking areas is expected to use a pervious surface of some type. Additionally, alternatives in the vicinity of potential turtle nesting areas, including Gulf Highlands Land Acquisition and Improvements, the Gulf State Park Lodge and Associated Public Access Amenities Project, Fort Morgan Peninsula Public Access Improvements, and Mid-Island Parks and Public Beach Improvements would include turtle-friendly lighting as to not disturb nesting habitat. Where alternatives take currently undeveloped land and propose development through the provision of amenities, these amenities (such as dune walkovers and boardwalks) would serve the purpose of directing visitation to one area and away from sensitive resources. Further, many alternatives, such as the Fort Morgan Peninsula Public Access Improvements, the Gulf State Park Lodge and Associated Public Access Amenities Project, Gulf Highlands Land Acquisition and Improvements, and Dauphin Island Eco-Tourism and Environmental Education Area would include informational and educational signage to

inform the public about the importance of the resources and reinforce use guideline in the area that protect resources.

8.3 UNAVOIDABLE ADVERSE IMPACTS

Section 102(2)(c)(ii) of NEPA requires that an EIS include information on "any adverse environmental effects which cannot be avoided should the proposed action be implemented." Unavoidable adverse impacts are the effects on the human environment that would remain after mitigation measures and BMPs have been implemented. They do not include temporary or permanent impacts that would be mitigated. While these impacts do not have to be avoided by the planning agency, they must be disclosed, considered, and mitigated where possible (40 CFR § 1500.2[e]). For the alternatives described above, mitigation measures and BMPs are identified as options that can be used to avoid, reduce, minimize, or mitigate these impacts, where applicable, during implementation. They vary based on site-specific conditions and are not required mitigation as part of the action alternatives. Therefore, the mitigation measures and BMPs applicable to each alternative are specifically identified in the discussion of impacts (see Chapter 5). Unavoidable adverse impacts associated with conversion of habitat and built infrastructure are considered and evaluated for relevant action alternatives where reasonably foreseeable. Many examples of BMPs are identified in Appendix 6.A of the Final PDARP/PEIS, which is also included in Appendix J of this RP/EIS.

Unavoidable impacts could occur to wildlife and special-status species along the Alabama coast, including potential disturbance from human uses because the proposed alternatives would provide additional access to coastal resources. However, these potential impacts would be mitigated through the provision of boardwalks and dune walkovers to direct foot traffic and limit disturbance at access sites. Further educational signage would inform the public of the resource and provide guidance on how the public can access the resource while minimizing impacts. Other measures, such as the installation of turtle-friendly lighting, would also be used to minimize impacts on special-status species from the implementation of these recreational use projects.

Unavoidable impacts on wildlife from additional sound would result from increasing access to areas where visitation is currently low or non-existent. For example, while the public currently uses the ROWs included in the Fort Morgan Peninsula Public Access Improvements, providing established parking and other amenities could increase use in these areas and increase noise and change the visual environment of the area. The Gulf State Park Lodge and Associated Public Access Amenities Project would change the sound and visual landscape of the area; however, this project would reestablish a former use at this site and be consistent with those past conditions. In addition, unavoidable impacts on soils would occur where parking lots and other facilities are constructed on undeveloped parcels.

State and local agencies who manage the various sites evaluated in this RP/EIS would incur staffing and other costs related to the maintenance of these sites. Some of these costs could be offset by nominal access fees, as described in Chapter 3. Some sites are currently in private ownership and, once transferred to public ownership, these sites would result in an additional effort for the public agencies beyond what is current occurring. For those sites already in public ownership, additional amenities such as restrooms, would require additional maintenance.

8.4 CONSIDERATION OF INCOMPLETE OR UNAVAILABLE INFORMATION

When an agency is evaluating reasonably foreseeable significant adverse effects on the human environment in an EIS and there is incomplete or unavailable information, the agency shall always make clear that such information is lacking.

> (a) If the incomplete information relevant to reasonably foreseeable significant adverse impacts is essential to a reasoned choice among alternatives and the overall costs of obtaining it are not exorbitant, the agency shall include the information in the environmental impact statement.
>
> (b) If the information relevant to reasonably foreseeable significant adverse impacts cannot be obtained because the overall costs of obtaining it are exorbitant or the means to obtain it are not known, the agency shall include within the environmental impact statement:
>
> 1. A statement that such information is incomplete or unavailable;
> 2. A statement of the relevance of the incomplete or unavailable information to evaluating reasonably foreseeable significant adverse impacts on the human environment;
> 3. A summary of existing credible scientific evidence which is relevant to evaluating the reasonably foreseeable significant adverse impacts on the human environment; and
> 4. The agency's evaluation of such impacts based upon theoretical approaches or research methods generally accepted in the scientific community. For the purposes of this section, “reasonably foreseeable” includes impacts which have catastrophic consequences, even if their probability of occurrence is low, provided that the analysis of the impacts is supported by credible scientific evidence, is not based on pure conjecture, and is within the rule of reason (40 CFR 1508.22).

Where there is incomplete or unavailable information in this RP/EIS, it has been noted throughout the document. The following are areas where there is incomplete or unavailable information:

- The extent of cultural resources on each alternative site is not known as this time. Consultation with the State Historic Preservation Office has commenced to gather data on each site and to get a better understanding of cultural resources at the project sites. Once this coordination is complete, if needed, additional surveys will occur on the sites to ensure that any impacts on cultural resources from the proposed improvements are avoided or minimized.
- As noted in Section 1.5.1, other restoration programs are occurring throughout the Gulf states. Two alternatives proposed in this RP/EIS are also currently being proposed for funding under the NFWF GEBF program—Gulf Highlands Land Acquisition and Improvements and Mid-Island Parks and Public Beach Improvements (only Parcel A is under NFWF consideration). While these alternatives have been approved for funding, the funding has yet to be finalized and therefore these alternatives have been retained in the final RP/EIS.
- As noted above, each alternative under consideration will comply with all applicable authorities. During the consultation process, actions may be identified that would need to be taken to minimize impacts on resources, including threatened and endangered species. While these actions are not known at this time, consultation is ongoing and updates on the status of this consultation have been incorporated in this RP/EIS (see Section 6.0 for further detail).

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9.0 RESPONSE TO PUBLIC COMMENTS

Public comments received on the draft RP/EIS were reviewed and categorized into "concerns" that group like comments together for a response. Each concern below is numbered and has an associated response.

9.1 ALTERNATIVES: GENERAL DESIGN ELEMENTS OF RESTORATION PROJECTS

CONCERN STATEMENT 1: Commenters stated support for the RP/EIS.

Response: The AL TIG acknowledges and appreciates this support.

CONCERN STATEMENT 2: Projects selected for implementation should be implemented with minimal impacts and a do no harm approach. Where impacts would occur, mitigation should be identified, planned for and funded.

Response: The AL TIG agrees that projects should be implemented with mitigation measures in place to avoid or minimize any resulting adverse impacts. Avoiding, minimizing, or mitigating potential adverse impacts is not only contemplated by the OPA NRDA regulations, it is central to the restoration goals outlined in the RP/EIS. In Chapter 3 of the RP/EIS, the AL TIG evaluates potential adverse impacts associated with project implementation under the OPA NRDA regulations to determine whether projects would prevent future injury as a result of the spill and avoid collateral injury as a result of implementing the project (15 CFR 990.54(a)(4)). The AL TIG also evaluates potential adverse impacts that would result from project implementation and identifies mitigation measures to address those impacts in Chapter 5, pursuant to NEPA. Sustainable design elements have been incorporated into the proposed projects to minimize impacts, and, where appropriate, BMPs would be implemented to reduce the potential for collateral injury. These design elements and BMPs are detailed in the project descriptions provided in Section 2.2 of the RP/EIS (such as use of permeable surfaces for parking lots or other sustainable design features) as well as in Section 5. Additionally, the AL TIG notes that any project selected for implementation would comply with all applicable laws and regulations for avoiding and minimizing adverse impacts on cultural resources, as described in Chapter 6.

To the extent that impacts cannot be avoided, the AL TIG will adhere to regulatory requirements for compensatory mitigation. Mitigation measures are described in detail throughout Chapter 5, Environmental Consequences, and the process for compliance with applicable laws and regulations is detailed in Chapter 6 of the RP/EIS. These requirements will be used to further develop the projects for implementation. A general timeline for each proposed project is provided in Chapter 2, generally showing that the E&D phase, which would include necessary compliance, would last a few months to one year, depending on the project. Any required compensatory mitigation would be determined during the design phase. Finally, the AL TIG would not begin construction on any restoration projects until compliance has been completed, including, as applicable, identification of required mitigation.

While projects may have short-term, minor to moderate, adverse impacts, overall the proposed projects are expected to result in long-term benefits.

CONCERN STATEMENT 3: Restoration should be coordinated, synergistic, and have multiple benefits.

Response: Consistent with the Final PDARP/PEIS, the AL TIG acknowledges and agrees that a comprehensive integrated ecosystem restoration portfolio is the best option for restoring the

injuries that occurred as a result of the DWH incident (DWH Trustees, 2016a). The AL TIG would work towards ecosystem restoration, through this restoration plan and future plans, by selecting projects that would restore each of its Restoration Types identified in the Final PDARP/PEIS and Consent Decree, including coastal and nearshore habitats, improve water quality in priority watersheds, protect and restore living coastal and marine resources, and enhance recreational use opportunities. By making investments across resource groupings and supporting habitats, the DWH Trustees, including the AL TIG, would ensure that the public is appropriately compensated for the resources and services injured by the spill. The Restoration Types identified in the Final PDARP/PEIS work independently and together to achieve necessary benefits to injured resources and services at the ecosystem level. To this end, several of the specific projects in this RP /EIS will have multiple benefits. For example, land acquisition at Little Lagoon Laguna Cove would provide recreational opportunities and protect habitat from potential development. Chapter 3 of the RP/EIS details what benefits would be provided under each project and notes where multiple benefits would occur.

In addition, the *Trustee Council Standard Operating Procedures for Implementation of the Natural Resource Restoration for the Deepwater Horizon (DWH) Oil Spill* call for continued coordination within the NRDA process, including monitoring and adaptive management, and across other DWH restoration programs (DWH Trustees, 2016c). This ensures that restoration would be coordinated and synergistic not only across the TIGs, but across the Gulf.

CONCERN STATEMENT 4: All costs for a project, including additional phases, should be known before approval of a project.

Response: As part of project development, the AL TIG considered the total costs of the proposed projects. As detailed in Chapter 2 of the RP/EIS, the AL TIG considered costs for planning, engineering, design, implementation, operation, maintenance, and monitoring, where applicable. Funding allocated to planning, engineering, and design of the Bayfront Park Restoration and Improvement Project is necessary at this time to determine the overall scope of the project, including options for shoreline access and protection. Therefore, the full Bayfront Park Restoration and Improvement Project costs for implementation, operation and maintenance, and monitoring are not yet known. Based on the AL TIG's experience, the amount of funding allocated for the planning phase of this project is reasonable for the scope of the project selected in this restoration plan. Once the project design is finalized, the AL TIG would provide the full scope and cost of the project in a future restoration plan and NEPA analysis, if the project is proposed for implementation.

CONCERN STATEMENT 5: Projects should incorporate sustainability in infrastructure including solar energy, LEED certification, pedestrian accessibility, and permeable pavement.

Response: As available and appropriate and as described in the RP/EIS, the AL TIG incorporated sustainable features throughout the project alternatives. For example, where parking lots are proposed for construction, they would be designed to include pervious materials to both reduce stormwater runoff and minimize impacts on the landscape. Further, the AL TIG would continue to look for opportunities to incorporate sustainable infrastructure in all projects, where feasible and when budgets and project design allows.

The project descriptions provided in Chapter 2 of the RP/EIS detail the sustainable design features that have been incorporated for each proposed project. The sustainable elements suggested by the commenter can also be seen throughout the Gulf State Park Lodge and Associated Public Access Amenities Project. For this project, all buildings have been designed to

a LEED Gold standard, and pedestrian accessibility has been incorporated into the project (e.g., the tram system and bicycle sharing components), which allow for access throughout the park without a personal motor vehicle.

9.2 ALTERNATIVES: FORT MORGAN PIER REHABILITATION - GENERAL

CONCERN STATEMENT 6: Sea turtle-friendly lighting should be included in the Fort Morgan Pier Rehabilitation alternative.

Response: The AL TIG agrees that sea turtle-friendly lighting should be included in the Fort Morgan Pier Rehabilitation alternative. The Fort Morgan Peninsula Public Access Improvements (Section 2.2.1.3) and Mid-Island Parks and Public Beach Improvements alternatives (Section 2.2.2.3 and 2.2.2.4) describe the use of sea turtle-friendly lighting. Additionally, the AL TIG would consult with appropriate regulatory agencies to ensure that all restoration projects that require lighting to be installed in areas that are visible from the beach would use sea turtle-friendly lighting. The AL TIG has revised several alternative descriptions in Chapter 2 to reflect that sea turtle-friendly lighting would be used to address potential impacts on sea turtles.

CONCERN STATEMENT 7: Please clarify the costs for the Fort Morgan Pier Rehabilitation alternative; they appear higher than original estimates.

Response: The cost estimates provided in the RP/EIS reflect the AL TIG's current understanding of the funding needed to implement each alternative. The AL TIG is not aware of the specific reference to which the commenter is referring but is aware that various news articles have provided a range of cost estimates (for one example, see Alabama Newscenter, March 3, 2016, available at: http://alabamanewscenter.com/2016/03/03/alabamas-fort-morgan-pier-once-a-communitys-focal-point-must-be-replaced/). The AL TIG did not create the cost estimates referenced in this article; the estimates come from the individuals being quoted in the article. The AL TIG based the cost estimates provided in the RP/EIS on best available information to complete the alternative as currently designed.

9.3 ALTERNATIVES: FORT MORGAN PIER REHABILITATION - SUPPORT

CONCERN STATEMENT 8: Commenters offered support for the Fort Morgan Pier Rehabilitation alternative.

Response: The AL TIG acknowledges and appreciates this support.

9.4 ALTERNATIVES: GULF HIGHLANDS LAND ACQUISITION AND IMPROVEMENTS - SUPPORT

CONCERN STATEMENT 9: Commenters offered support for the Gulf Highlands Land Acquisition and Improvements alternative.

Response: The AL TIG acknowledges and appreciates this support. As noted in Section 2.2.4 of the RP/EIS, the AL TIG did not identify the Gulf Highlands Land Acquisition and Improvements alternative as a preferred alternative because the NFWF GEBF awarded ADCNR the funds to complete this land acquisition. More information about this project is provided at: http://www.nfwf.org/gulf/Documents/al-gulf-highlands-16.pdf.

9.5 AL16000—ALTERNATIVES: LAGUNA COVE LITTLE LAGOON NATURAL RESOURCE PROTECTION - GENERAL

CONCERN STATEMENT 10: Additional parking on the south side of Highway 182 should be added to the Laguna Cove Little Lagoon Natural Resource Protection alternative to provide Gulf-side beach access.

Response: The AL TIG appreciates the suggestion for additional Gulf-side beach access at the Laguna Cove Little Lagoon Natural Resource Protection site. The AL TIG's proposal is designed to increase access to Little Lagoon, provide shoreline recreational opportunities, and preserve the property from future residential or commercial development, rather than provide Gulf-side beach access. Additional parking at Laguna Cove Little Lagoon for Gulf-side beach users is therefore not included in this alternative.

CONCERN STATEMENT 11: The affected environment for infrastructure at Little Lagoon should clarify where sewer and water lines are currently located.

Response: The location of the sewer lines in relation to the Laguna Cover Little Lagoon Natural Resource Protection site is described in Table 4-25. The statement reads "Gulf Shores Utilities runs sewer and water lines along State Highway 182 until the eastern end of the road. Baldwin County Sewer System, the private sewer company, runs lines parallel to the town's sewer lines along State Highway 182. These lines are on the southern side of State Highway 182 and therefore do not directly border the site." However, the description of "eastern" is incorrect because the lines stop at the western end of State Highway 182. The AL TIG corrected this description in the final RP/EIS.

CONCERN STATEMENT 12: Clarification was requested regarding the terminology of "drag-stripping" red fish as used in the Draft RP/EIS.

Response: "Drag-stripping" redfish is a common term describing larger, redfish sought after by sport fishing enthusiasts. For consistency, the term "drag-stripping" was removed from the Laguna Cove Little Lagoon Natural Resource Protection description and analysis.

9.6 ALTERNATIVES: LAGUNA COVE LITTLE LAGOON NATURAL RESOURCE PROTECTION - SUPPORT

CONCERN STATEMENT 13: Commenters expressed support for the Laguna Cove Little Lagoon Natural Resources Protection alternative.

Response: The AL TIG acknowledges and appreciates this support.

9.7 ALTERNATIVES: BAYFRONT PARK RESTORATION AND IMPROVEMENT PROJECT - GENERAL

CONCERN STATEMENT 14: Commenters questioned the need for additional studies at Bayfront Park as well as the need for the project under NRDA since the park already exists and new access opportunities would not be created.

Response: The E&D at Bayfront Park was selected to better understand the conditions at the site and what type of restoration actions would be most successful in providing enhanced recreational opportunities and shoreline recreational access. The $1,000,000 allocated to the E&D phase represents the AL TIG's best estimate of the cost for E&D studies at this site. Any funds out of the estimated $1,000,000 allocated to E&D that are unused during the project

would remain available to the AL TIG for future recreational use restoration, either at the Bayfront Park site or for other projects included in future restoration plans.

While the commenters correctly note that a park already exists at the site, the proposed project would go beyond analyzing the addition of amenities to the existing park. As noted in Section 2.2.2.1 of the Draft RP/EIS, the project would also evaluate constructing a living shoreline and/or sandy beach area. These elements would provide multiple benefits, not only for recreation, but for shoreline protection and habitat restoration.

9.8 ALTERNATIVES: BAYFRONT PARK RESTORATION AND IMPROVEMENT PROJECT - SUPPORT

CONCERN STATEMENT 15: Commenters expressed support for the Bayfront Park and Restoration and Improvement alternative.

Response: The AL TIG acknowledges and appreciates this support.

9.9 ALTERNATIVES: DAUPHIN ISLAND ECO-TOURISM AND ENVIRONMENTAL EDUCATION AREA - GENERAL

CONCERN STATEMENT 16: Design features of the Dauphin Island Eco-Tourism and Environmental Education Area alternative, such as the pier and the parking lot, should be reconsidered. The pier should be reconsidered based on low water depth in the vicinity of the pier. Specifications of the parking lot should be reconsidered to reduce the number of parking spots based on potential traffic issues. Commenters also questioned the pier's resiliency in the case of a hurricane.

Response: For each alternative, conceptual drawings were provided to illustrate proposed infrastructure at each site. In the case of the Dauphin Island Eco-Tourism and Environmental Education Area alternative, the location of the pier in the drawings is located in approximately 2 to 3 feet of water (at mean low tide), which allows for fishing as a use. However, as the project progresses to the design and engineering phase, water depths in the area would be further evaluated using bathymetry data from USACE to determine the optimal location for the pier. Design would occur in coordination with ongoing consultation to ensure any change in location within the already noted site would not have impacts different from those stated in the final RP/EIS. If the AL TIG determines that additional environmental review is needed to evaluate any changes, a determination would be made during the E&D phase, and additional review would be conducted as needed. With regard to the impacts of a hurricane on the structure, all structures built in a coastal environment are subject to this factor, and resiliency to hurricanes would be included in project designs. For the design of the parking lot, parking needs and traffic effects would be further assessed during the design phase, and the number of spaces may be reduced if deemed appropriate.

9.10 ALTERNATIVES: DAUPHIN ISLAND ECO-TOURISM AND ENVIRONMENTAL EDUCATION AREA - SUPPORT

CONCERN STATEMENT 17: Commenters expressed support for the Dauphin Island Eco-Tourism and Environmental Education Area alternative, including the land acquisition component.

Response: The AL TIG acknowledges and appreciates this support.

9.11 ALTERNATIVES: DAUPHIN ISLAND ECO-TOURISM AND ENVIRONMENTAL EDUCATION AREA - OPPOSE

CONCERN STATEMENT 18: Commenters recommended that the Dauphin Island Eco-Tourism and Environmental Education alternative site should be purchased for preservation rather than recreational development.

Response: As noted under Concern #3, many of the alternatives considered in this plan would have multiple benefits. While recreational infrastructure is proposed for portions of this site, it would be incorporated in a manner that would minimize adverse impacts. The alternative would provide benefits over the long term by preserving other portions of the site and providing educational opportunities to better understand the environment at the site. This alternative would also protect sensitive habitats such as salt marsh and shallow water embayments that are currently at risk of development. As stated in Section 3.7.2 of the RP/EIS, this alternative would create additional and enhanced public recreational access to shoreline natural resources on Dauphin Island and create needed public access to the bayside of the island, where access is more limited than for the Gulf-facing beaches. Additionally, the proposed fishing pier at the site would replace opportunities lost at a pier at the nearby public beach that, because of changes in beach morphology, is now landlocked and no longer provides fishing opportunities. The boardwalk, gazebos, and restrooms would further enhance the recreational value of the site. The proposed infrastructure is expected to serve the public for at least several decades. The land acquisition component of the alternative would provide wetland habitat protection benefits by preventing future development of the site. The provision of educational signage is expected to increase environmental awareness and promote environmental stewardship. The acquisition of this property would include an appropriate land protection instrument (i.e., deed restriction) to ensure that the purpose of compensating for lost recreational use is maintained for the life of the project.

For these reasons, the AL TIG selected the Dauphin Island Eco-Tourism and Environmental Education Area alternative as a preferred alternative in the RP/EIS.

9.12 ALTERNATIVES: MID-ISLAND PARKS AND PUBLIC BEACH IMPROVEMENTS (PARCELS A, B, AND C) - GENERAL

CONCERN STATEMENT 19: Commenters recommended that Parcel A should not be developed because of potential impacts on natural resources at that site (birds, sea turtles, beach mice, snakes, etc.).

Response: As described in Section 2.2.4 of the RP/EIS, the AL TIG did not include Parcel A in the preferred Mid-Islands Parks and Public Beach Improvements alternative because the NFWF GEBF program already approved funding for this acquisition. More information about this project is provided at: http://www.nfwf.org/gulf/Documents/al-dauphin-island-16.pdf.

9.13 ALTERNATIVES: MID-ISLAND PARKS AND PUBLIC BEACH IMPROVEMENTS (PARCELS A, B, AND C) - SUPPORT

CONCERN STATEMENT 20: Commenters expressed support for acquisition of Parcel A for the Dauphin Island Mid-Island Parks and Public Beach Improvements alternative and suggested additional educational elements could be added.

Response: The AL TIG acknowledges and appreciates this support. The AL TIG did not include Parcel A in the preferred Mid-Islands Parks and Public Beach Improvements alternative because

the NFWF GEBF program already approved funding for this acquisition. More information about this project is provided at: http://www.nfwf.org/gulf/Documents/al-dauphin-island-16.pdf. Because amenities are planned for Parcels B and C, the AL TIG may consider appropriate educational elements on these sites.

CONCERN STATEMENT 21: Commenters expressed general opposition to the Mid-Island Parks and Public Beach Improvements alternative.

Response: The AL TIG acknowledges this opposition.

9.14 ALTERNATIVES: MID-ISLAND PARKS AND PUBLIC BEACH IMPROVEMENTS (PARCELS B AND C) - GENERAL

CONCERN STATEMENT 22: Commenters suggested that a project should not be developed at Dauphin Island Mid-Island because of the potential increase in traffic and creation of parking issues.

Response: Many of the concerns about traffic and parking at the Mid-Island Parks site were related to the installation of a boat ramp on Parcel C. Chapter 2 of the final RP/EIS has been modified to explain that a boat ramp is not part of the alternative proposed for selection by the AL TIG, and that deed restrictions would be put in place to limit development of the parcels to the types of passive recreational uses described in the plan. Any other uses, such as a boat ramp or other in-water infrastructure, will require future review and analysis, including public comment, if they are considered in the future. Additional elements that ensure pedestrian, bicycle, and traffic safety, such as signage, road stripping, and traffic calming measures, would be included in further project design, if the project is selected. The alternative has also been modified from the time of the draft RP/EIS to potentially reduce the number of parking spots proposed on Parcels B and C.

CONCERN STATEMENT 23: Commenters suggested that development of the Dauphin Island Mid-Island Parks parcels could result in issues of stormwater runoff, especially during the rainy season.

Response: The Mid-Islands Parks and Public Beach Improvements Parcels B and C alternative would be implemented to minimize stormwater runoff associated with any new infrastructure, including the use of pervious surfaces for parking lots, as described in Section 2.2.2.3 of the final RP/EIS. BMPs related to stormwater management would also be used during the construction and operation project phases. Details related to reduction of stormwater runoff at this site have been added to Section 2.2.2.4 of the final RP/EIS. All stormwater infrastructure and requirements will be consistent with applicable state and federal laws.

CONCERN STATEMENT 24: Commenters suggested that there are potential safety concerns with the Mid-Island Parks and Public Beach Improvement alternative. Pedestrian and bike safety is a specific concern due to the proximity of a bike trail located adjacent to these areas, and from pedestrians crossing the road between the beach and the restrooms and parking areas.

Response: Commenters raised valid concerns related to additional traffic and safety. As this project is developed, appropriate signage and infrastructure would be developed to minimize the potential for vehicle and pedestrian or bike conflicts. The description provided in Section 2.2.2.4 of the RP/EIS has been clarified to include information on providing for pedestrian safety, among other concerns. The new text reads, “The parking area would be constructed of a permeable surface, and native vegetation plantings would be used throughout. Appropriate

stormwater management measures would be included in the parking areas. Parking on Parcels B and C would provide parking needed to access Parcel A. Pedestrian connectivity between Parcels A and B would be established through appropriate measures, such as pavement markings, pedestrian crossing signs, and/or traffic calming devices. Design of the parking area would also consider local transportation patterns and optimize the locations of ingress/egress to work with the existing traffic flow."

CONCERN STATEMENT 25: Commenters expressed concern about establishment of a boat ramp on Parcel C, stating that it would increase traffic, create safety issues, decrease property values, interfere with swimming in the area, bring noise and dust to the area, and result in dredging that would impact natural resources.

Response: Chapter 2 of the final RP/EIS has been modified to explain that a boat ramp is not part of the alternative proposed for selection by the AL TIG, and that deed restrictions would be put in place to limit development of the parcels to the types of passive recreational uses described in the plan. Any other uses, such as a boat ramp or other in-water infrastructure, will require future review and analysis, including public comment, if they are considered in the future. Additionally, Chapter 5 of the RP/EIS, Cumulative Impacts, has been modified to remove the boat ramp on Parcel C as a possible future amenity that would be constructed by another party.

CONCERN STATEMENT 26: Commenters suggested that a boat ramp is not needed as part of the Mid-Island Parks and Public Beach Improvements alternative and would have adverse impacts on the community including quality of life. Some commenters noted that a kayak launch is more appropriate for this site.

Response: Chapter 2 of the final RP/EIS has been modified to explain that a boat ramp is not part of the alternative proposed for selection by the AL TIG, and that deed restrictions would be put in place to limit development of the parcels to the types of passive recreational uses described in the plan. The description in Chapter 2 has been further modified to allow Dauphin Island to develop certain types of passive recreational amenities on Parcel C, such as a land-based boardwalk, gazebo, or benches, and to use the existing sandy beach area on the parcel as a primitive launch for non-motorized watercraft, including kayaks. Any other types of uses, such as a boat ramp, will require future review and analysis, including public comment, if they are considered in the future. Additionally, the cumulative impacts analysis in Chapter 5 of the RP/EIS has been modified to remove the boat ramp as a possible future amenity that would be constructed by another party on Parcel C.

CONCERN STATEMENT 27: Commenters suggested that the amount of parking proposed seems greater than what is needed, and that the number and location of parking spaces should be reconsidered.

Response: Parking spaces on Parcels B and C are necessary to allow for adequate parking for beach access through and on Parcel A (currently being acquired with funds from the NFWF GEBF program) and would relieve some of the parking issues currently experienced at other publicly accessible beach access points on Dauphin Island. The draft RP/EIS proposed 100 parking spaces on Parcel B and 100 parking spaces on Parcel C. Chapter 2 of the RP/EIS has been revised to provide a range of parking spaces that may be constructed on these parcels once detailed project design is conducted. This range would include no more than 80–100 spaces on each parcel, which is potentially less than the number proposed in the draft RP/EIS. The number of

parking spaces may decrease further, once factors such as optimal traffic flow, stormwater BMPs, and other design considerations are factored into the design of the project.

CONCERN STATEMENT 28: Commenters suggested that implementation of the Mid-Island Parks and Public Beach Improvements alternative would lower property values and have other economic impacts.

Response: Many of these comments were related to the operation and use of a boat ramp on Parcel C. As noted above, the RP/EIS has been clarified to explain that the AL TIG did not propose and is not proposing any boat ramp development on Parcel C as part of this alternative. Rather, the parking proposed on Parcels B and C of the Mid-Island Parks and Public Beach Improvements alternative is generally proposed to facilitate beach access on and through Parcel A, which is currently being acquired with funds from the NFWF GEBF program. Dedicated parking for this area would help reduce street parking and provide access to shoreline resources consistent with the purpose and need of this plan.

CONCERN STATEMENT 29: Commenters suggested that there would be natural resource impacts from the Mid-Island Parks and Public Beach Improvements alternative that are not accounted for in the analysis, including impacts on shorebirds.

Response: Many of these comments were related to the operation and use of a boat ramp on Parcel C and possible dredging at that site. As noted above, Chapter 2 has been revised to explain that the AL TIG is not proposing any boat ramp development on Parcel C. Parcel A would be purchased with funds from the NFWF GEBF program and remain undeveloped. Development at Parcels B and C would (1) provide parking to access the beach on Parcel A, and (2) allow for certain types of passive recreational use at those parcels. This development would take into consideration the natural environment, using native plantings and other features to minimize impacts on shorebirds in the area. As noted in Table 5-13 of the RP/EIS, while human presence on the site would cause disturbance, the access improvements and passive recreational amenities would be implemented for the purpose of allowing recreational access to and enjoyment of the Alabama coast, which necessarily results in increased use, in a controlled manner. Additionally, bird species may avoid areas where improvements are located, and the rest of the acquired parcels would be preserved from development and provide habitat in an area that would otherwise be available for development.

CONCERN STATEMENT 30: Commenters suggested that the funds allocated to the Mid Island Parks and Public Beach Improvement alternative should be used for other purposes, such as compensation for local residents and hurricane recovery.

Response: Suggestions to use the funds proposed to be allocated under the RP/EIS for other uses, such as to compensate local residents or for hurricane recovery, are outside the scope of NRDA under OPA as described in Appendix 5C.4.1 of the Final PDARP/PEIS. Nonetheless, the AL TIG hopes that the restoration of natural resources and resource services impacted by the oil spill will help restore the way of life and livelihood of affected residents. The AL TIG members' roles as Natural Resource Trustees are to address injuries to the natural resources and the services they provide, including recreational use. Individual and commercial claims are handled separately from this process.

CONCERN STATEMENT 31: The map used for the Mid-Island Parks and Public Beach Improvements alternative is not up to date.

Response: The AL TIG used the best available base layers for mapping purposes. While the base map may not show current development, this map was not used as a basis to show the extent of development, but rather to show the general location of the proposed improvements.

CONCERN STATEMENT 32: The correct zoning does not exist at the Mid-Island Parks and Public Beach Improvements sites for the proposed use.

Response: As noted by commenters, current zoning of the sites is residential. Specifically, for Parcel B, the two lots bordering Bienville Boulevard are zoned as Resort Commercial District (RC), and the third parcel (which borders Cadillac Avenue to the south) is zoned Multi-Family Residential (RM-2), which allows up to six dwelling units. On Parcel C, the southernmost lot is zoned Multi-Family residential (RM-2) and the northernmost lot on Parcel C (abutting Bayou Heron) is zoned Multi-Family Residential (RM-3), which allows up to 10 dwelling units. For all of these three zoning districts, "Public Parks and Recreational Areas" is an allowable use and as part of the zoning process. However, the "Public Parks and Recreational Areas" use falls under the category of “Uses Requiring Review” (Ordinance 96, Sections 4, 5 and 6, South Alabama Regional Planning Commission, 2014). At the appropriate time, the Dauphin Island’s Planning Commission would post notice of a Public Hearing to receive comments on the request to create these “Public Parks and Recreational Areas” (Collier, 2017). This review would ensure that the end product, which is an allowed use, fits in with the surrounding neighborhood/area (Collier, 2017). The final RP/EIS in Section 4.4.4.2 (Affected Environment) and Section 5.2.4.4 (Environmental Consequences) have been updated to provide this information regarding the Dauphin Island Planning Commission process that would be required, if this project is selected. If so, ADCNR would work with the City of Dauphin Island to undertake the review process and move forward with a park use at this site. The AL TIG would not distribute the NRDA funds to support the Mid-Island Parks and Public Beach Improvements alternative until the City of Dauphin Island demonstrates that the Planning Commission’s review process is successful and complete.

9.15 ALTERNATIVES: RANGE OF RESTORATION ALTERNATIVES

CONCERN STATEMENT 33: Some commenters provided suggestions for additional projects, many of which are already included in the project portals. A specific suggestion to prioritize land acquisition projects was also emphasized in comments.

Response: The AL TIG conducted a robust screening process for the RP/EIS, as noted in Section 2.1 of the document. All of the specific projects suggested by the commenters were reviewed as part of this screening process. As documented in Table 2-2 of the RP/EIS, Project No. 79 was considered largely duplicative with the Dauphin Island Eco-Tourism and Environmental Education Area alternative. Project No. 82 was identified as having been previously funded (see Table 2-3 of the RP/EIS). Project No. 199 is included for E&D work in the set of preferred alternatives. The remaining projects were all reviewed but screened out during the initial Step 1 eligibility screen depicted in Figure 2-1 of the RP/EIS and described in the accompanying text. The specific reason for not carrying forward each of these projects is documented in Appendix D of the RP/EIS.

Some of the projects noted by commenters may be more appropriate for a future restoration planning effort. Thus, they may be considered for detailed evaluation at that time. The range of alternatives evaluated in the RP/EIS does include three land acquisition projects that would provide recreational use benefits, as noted in Chapter 2.

CONCERN STATEMENT 34: Comments were received on the screening methodology for projects. While some commenters noted that the process was laid out in a clear manner, others suggested that the methodology to develop the range of alternatives is not clear and that it appears to eliminate projects without needed rationale. Suggestions were made to make the methodology more clear to the public.

Response: The AL TIG conducted a robust screening process for the RP/EIS, as noted in Section 2.1 of the document. As part of this process, and after an initial screening that considered a project's eligibility to meet the plan's purpose and need, projects that were not selected for evaluation in the RP/EIS were noted in Tables 2-2, 2-3, and 2-4. Those tables include detailed explanations of why projects were not carried forward. In addition, to assist in clarifying how the AL TIG's extensive screening process was conducted, Chapter 2 provides text, figures, and tables that contain the same information in varying formats. An additional table was added as Appendix D to illustrate how all projects in the screening process were considered.

CONCERN STATEMENT 35: Commenters suggested that the range of alternatives should focus on ecological restoration.

Response: Section 1.4 describes the purpose and need for the RP/EIS, which is to implement restoration projects to restore losses of recreational shoreline use in the Alabama Restoration Area. The AL TIG acknowledges that ecological restoration projects, such as land acquisition and preservation, may restore lost shoreline recreational use by improving ecological services that support the recreational use of natural resources in shoreline areas, such as swimming, sunbathing, surfing, walking, kayaking, and fishing from the shore. Accordingly, as part of the screening process described in Section 2.1.1, the AL TIG considered restoration projects that were (1) ecological projects with substantial recreational benefits, and (2) projects that were primarily ecological. As described in Section 2.1.2, the AL TIG looked closely at the primarily ecological projects to determine (1) if they would provide substantial ecological service uplift in a manner that benefits recreation, or (2) whether there might be minor modifications to the project that would allow it to provide meaningful recreational benefits in order to meet the purpose and need of implementing projects to restore losses of recreational shoreline use in the Alabama Restoration Area. In many cases, the AL TIG chose not to carry these types of projects forward because it became apparent that the modifications to the proposals that would improve recreational use (e.g., adding parking or other amenities) were inconsistent with the original project's ecological restoration goals. Additionally, the AL TIG did not carry forward projects that would have uncertain recreational use benefits or recreational use benefits of limited magnitude. Nonetheless, several projects included as preferred alternatives in the RP/EIS would provide substantial ecological benefits by protecting sensitive nearshore and coastal habitats through land acquisition and targeted recreational use development (e.g., the Laguna Cove Little Lagoon Natural Resources Protection and Dauphin Island Eco-Tourism and Environmental Education Area alternatives).

9.16 ALTERNATIVES: GULF STATE PARK LODGE AND ASSOCIATED PUBLIC ACCESS AMENITIES PROJECT - GENERAL

CONCERN STATEMENT 36: Some commenters suggested that the Gulf State Park Lodge and Associated Public Access Amenities Project does not have a nexus to the DWH oil spill (i.e., lodge did not exist at time of the oil spill).

Response: The Gulf State Park Lodge and Associated Public Access Amenities Project has a strong nexus to the lost recreational use injury caused by the DWH oil spill. As described in

Section 1.3.4, the DWH Trustees for the DWH oil spill assessed injuries to natural resources and their services. The DWH Trustees determined that recreational use services provided by natural resources along the Alabama shoreline were lost as a result of the oil spill. Specifically, the DWH Trustees determined that most of the recreational use injury occurred along the barrier island and ocean-facing beaches of Alabama (i.e., Dauphin Island, Fort Morgan, Orange Beach, and Gulf Shores). The AL TIG prepared this RP/EIS to evaluate restoration projects that would provide compensatory restoration of lost recreational shoreline use in Alabama. For purposes of the screening process discussed in Section 2.1, the AL TIG determined that all recreational use projects located in or very close to the barrier island and ocean-facing beaches of Alabama, which would result in the restoration of those recreational use services lost as a result of the spill (i.e., swimming, sunbathing, surfing, walking, kayaking, and fishing from the shore or shoreline structures such as piers), have a strong nexus to the spill since restoration would occur in the locations where shoreline visits were lost or impaired. The AL TIG evaluates the nexus of the Gulf State Park Lodge and Associated Public Access Amenities Project to the spill in Section 3.1 and concludes that the project would restore lost recreational shoreline use by increasing visitation and enhancing the quality of recreational visits to the Alabama shoreline in the park. Comments suggested that this project does not have a nexus to the spill because the original lodge was destroyed by a hurricane and was demolished prior to the oil spill. Comments also suggested that the AL TIG may not select the Gulf State Park Lodge and Associated Public Access Amenities Project because the lodge is not a natural resource that may be restored under OPA. While the AL TIG agrees that the original lodge was destroyed by a hurricane prior to the spill and that the proposed lodge is not a natural resource, the AL TIG does not believe that either characteristic disqualifies the project from consideration under OPA because the ultimate purpose of the project is not to replicate or restore the specific infrastructure, but to restore the public's access to and enjoyment (i.e., lost use) of the Alabama shoreline. The AL TIG also notes that it is not unusual that restoring injured natural resources and their services, whether ecological or recreational, may involve building structures to restore injured natural resources and services. For example, all other projects in this plan, with the exception of the Fort Morgan Pier Rehabilitation Project and the Bayfront Park Restoration and Improvement Project (analyzed for E&D only), include an infrastructure component that did not exist prior to the DWH oil spill. As is the case with this project, those projects are designed to increase access and the quality of visits to natural resources and resource services, not to restore specific infrastructure.

CONCERN STATEMENT 37: Commenters expressed support for the Gulf State Park Lodge and Associated Public Access Amenities Project, with some saying there is a demonstrated need.

Response: The AL TIG acknowledges and appreciates this support.

CONCERN STATEMENT 38: Some commenters suggested that other funds exist that could be used for the Gulf State Park Lodge and Associated Public Access Amenities Project. They suggest that NRDA funds do not need to be used for this project.

Response: The AL TIG agrees that other funds exist that could potentially be used to fund the Gulf State Park Lodge and Associated Public Access Amenities Project. However, for the reasons explained in the RP/EIS, the AL TIG has determined that funding the Gulf State Park Lodge and Associated Public Access Amenities Project would be an appropriate use of NRDA funds and would effectively restore lost recreational shoreline use in Alabama. The AL TIG also notes that funds conceptually exist for many ecological or recreational restoration projects, but potential alternative funding sources do not disqualify a restoration project from consideration or

implementation under OPA. The AL TIG evaluated the use of NRDA funds to fund this project and determined that it would be an appropriate use of NRDA funds because it has a nexus to the injury and benefits the types of uses injured as a result of the spill. In making this determination, the AL TIG considered the potential availability of other funds, as is described in the No Action Alternative in Section 2.2.3 (see Appendix F).

Specifically, as stated in the RP/EIS, if other funds were used to complete the construction of the Gulf State Park Lodge, it is unknown whether the public access amenities included in this project would be built and, if they would, which amenities would be built and to what extent those amenities would be generally available to the public. Additionally, although operations and maintenance would still occur for the Phase III elements at the park, the extent to which these operations and maintenance would be supported or enhanced (i.e., through more frequent maintenance and upgrades, by offering more educational programs for the public) is unknown. A likely option for alternative funding would be for the State of Alabama to seek private funding for the completion of the lodge. However, it is outside the scope of the AL TIG's responsibilities to speculate as to the details of what such a scenario would look like. Still, any private funding for the project would likely result in a sharing of revenue with the private party, which would reduce, if not eliminate, the funding available for the public access amenities proposed in this plan or the for the operations and maintenance support of those amenities and the Phase III elements.

It should also be noted that a portion of the lodge element that is funded in part through the Gulf State Park Lodge and Associated Public Access Amenities Project is being funded through other DWH funding sources, as is the construction of the conference center facility at Gulf State Park. Specifically, the lodge and conference center facility is being funded with (1) $50 million from the State of Alabama's $1 billion economic damages settlement with BP, and (2) $5 million in BP grant funding received by the State of Alabama, which it has designated for the overall project. Overall, the AL TIG considers the Gulf State Park development (including the NRDA component) a good example of the leveraging of DWH funding sources, and an updated description of the funding sources with supporting documentation has been added to the final RP/EIS in Section 2.2.1 and as Appendix F.

CONCERN STATEMENT 39: Commenters suggested that, based on statements made by public figures and because the lodge is currently under construction, it appears that the decision to carry forward the Gulf State Park Lodge and Associated Public Access Amenities Project has been pre-determined, before completion of this planning process.

Response: While the lodge is currently under construction, the AL TIG has not made a decision to fund the Gulf State Park Lodge and Associated Public Access Amenities Project. As noted in response to Concern #38, and described in the Projected Annual Operating Costs for GSP Project Elements Supported by Lodge Revenues (Appendix E to the RP/EIS), construction of a lodge and conference center at Gulf State Park is part of a larger effort by ADCNR to transform the park into an international model for environmentally and economically sustainable recreational use, according to the Gulf State Park Master Plan. ADCNR proposes to fund this park-wide project using three funding streams resulting from the DWH oil spill: (1) the State's economic damages settlement, (2) BP grant money received by the State, and (3) natural resource damages funds managed by the AL TIG. To this end, the State of Alabama allocated $50,000,000 in economic damages and $5,000,000 in BP grant funds for work at Gulf State Park in 2015.

The allocation of NRDA funds toward partial construction of a lodge at Gulf State Park was originally considered, subject to independent Trustee review, and selected and funded as part of

the Gulf State Park Enhancement Project, which was approved in the Phase III ERP/EIS. The Gulf State Park Enhancement Project was the subject of the lawsuit Gulf Restoration Network v. Jewell, Case 1:15-cv-00191-CB-C (S.D. Ala.). In a February 16, 2016 order, the Court enjoined (or prohibited) the DWH Trustees' use of those recreational use funds allocated to partially construct a lodge at Gulf State Park (approximately $58.5 million). The Court required additional analysis under NEPA and the OPA before NRDA funds might be expended on a lodge or conference center in the park. A portion of the Phase III Early Restoration funds ($2.2M) was expended on engineering and development and permitting of the lodge prior to the Court's injunction, as is described in the RP/EIS in Section 2.2.1.

The construction currently taking place on the lodge site is being funded by non-NRDA sources (See Response #38), as was acknowledged by the AL TIG in the description of the No Action Alternative in this RP/EIS (See Section 2.2.3) and in the project description (See Section 2.2.1.1). Specifically, ADCNR is funding the current construction of the lodge and conference center with the economic damages allocated to the park-wide project. As of February 28, 2017, ADCNR had spent $16,282,531.51 of the $50,000,000 in economic damages to support partial lodge and conference center construction. Since the court's order in Gulf Restoration Network v. Jewell et al., no NRDA funds have been spent on the lodge and conference center (See Appendix F).

If the AL TIG decides to select the Gulf State Park and Associated Public Access Amenities Project, the decision would be made in a ROD issued no earlier than 30 days after the release of this final RP/EIS. No NRDA funds will be used to implement the project, including partial construction of the lodge component, until (1) this ROD has been issued, and (2) pursuant to the terms of an order lifting the current stay on the use of NRDA funds in Gulf Restoration Network v. Jewell et al. Moreover, if the AL TIG decides to the fund the project, ADCNR would not use any of the NRDA funds to reimburse the State for the economic damages, or any other funds, already spent by the State on the lodge or conference center. If the AL TIG selects not to fund the Gulf State Park and Associated Public Access Amenities Project, any lodge construction would be funded without using NRDA funds provided by the AL TIG, and likely through private third-party financing.

With respect to the AL TIG's decision whether to fund the Gulf State Park Lodge and Associated Public Access Amenities Project consistent with this RP/EIS, the state and federal natural resource trustees participated collaboratively in the AL TIG with a decision-making structure that is described in the Final PDARP/PEIS. Regardless of statements made by public officials related to the on-going development at Gulf State Park, each AL TIG Trustee has the responsibility to (1) independently review and evaluate projects proposed for funding by the TIG, and (2) agree or disagree whether the analysis in an RP/EIS is sufficient to support their approval of a draft or final RP/EIS or ROD. In this instance, each AL TIG Trustee exercised this independent review and decision-making responsibility. Each AL TIG Trustee, both collaboratively and independently, looked broadly at potential projects to compensate for lost recreational shoreline use in Alabama, conducted a robust screening process to establish a reasonable range of alternatives (Section 2.1), evaluated each of these projects using the OPA evaluation criteria (Chapter 3), and analyzed the potential impacts of each project under NEPA (Chapter 5). After this evaluation and analysis, each Trustee independently approved the release of both the Draft and final RP/EIS, which propose partial funding of lodge construction at Gulf State Park as a component of the Gulf State Park Lodge and Associated Public Access Amenities Project. Similarly, each Trustee would need to independently review and approve of a ROD to officially select and fund the project. As stated in Chapter 3 of the RP/EIS, the Trustees propose selection of the Gulf State

Park Lodge and Associated Public Access Amenities Project as a preferred alternative because it would result in significant public restoration benefits in the form of increased and enhanced access to the natural resources at Gulf State Park, which include a unique stretch of predominately undeveloped beaches that represent 7 percent of Alabama's Gulf-facing shoreline.

Consistent with past cases involving NEPA implementation, the AL TIG took a "hard look" at the Gulf State Park Lodge and Associated Public Access Amenities Project in the development of the RP/EIS. In addition, the RP/EIS considered and disclosed the potential impacts from the complete construction of the lodge and conference center as a connected action.

In summary, based on the analysis conducted in this RP/EIS, and consistent with the Phase III ERP/EIS, the AL TIG conducted a thorough and thoughtful evaluation of the Gulf State Park Lodge and Associated Public Access Amenities Project, which includes partially funding the lodge component. Moreover, the Trustees have considered all public input during the comment period.

CONCERN STATEMENT 40: Some commenters suggested that the analysis for the Gulf State Park Lodge and Associated Public Access Amenities Project is not sufficient. Commenters suggested that the AL TIG did not take a "hard look" under NEPA, and that the comparison of alternatives for the Gulf State Park Lodge and Associated Public Access Amenities Project under OPA and NEPA was not sufficient and a full range of alternatives was not considered.

Response: The AL TIG evaluated the Gulf State Park Lodge and Associated Public Access Amenities Project in the RP/EIS as required by OPA and NEPA. This restoration plan and EIS represent a thorough analysis of (i.e., an objective "hard look" at) the range of alternatives and potential environmental consequences of the proposed recreational use restoration alternatives under both OPA and NEPA. Further, and as discussed in response to Concern #39, the AL TIG worked both collaboratively and independently to conduct the evaluation and analysis included in the RP/EIS.

NEPA requires that an EIS include a reasonable range of alternatives, including the alternative of no action (40 CFR § 1502). OPA similarly requires that a restoration plan must consider a reasonable range of alternatives, including a natural recovery alternative, before selecting a preferred alternative (15 CFR § 990.53). The AL TIG clearly explains how it developed and selected the reasonable range of restoration alternatives considered in the RP/EIS. Specifically, the screening process developed by the AL TIG is described in Chapter 2. Between July and December 2016, the AL TIG screened 474 potential projects from the DWH Trustee and Alabama project submission portals. These portals include all restoration project proposals submitted for the Alabama Restoration Area, by the public and the AL TIG trustees, including those submittals received in response to the AL TIG's scoping invitation for this RP/EIS. After an initial OPA eligibility screen, which included whether or not the project met the AL TIG's stated purpose and need of addressing the loss of recreational shoreline uses in Alabama, the AL TIG was left with 48 projects. The Trustees then removed duplicate projects, resulting in a list of 33 projects. Eight of these 33 projects were then removed from the list because they had already received funding. Of the remaining 25 projects, 8 were carried forward for additional analysis (which later became 9 because the AL TIG analyzed the Mid-Island Parks and Public Beach Improvements alternative both with and without Parcel A, which at the time was being considered for funding under the GEBF NFWF program). The AL TIG's reasons for not carrying forward each of the remaining projects are outlined in Table 2-4 in the RP/EIS. As described in response to Concern #35, in addition to projects for which recreation was the major objective, the AL TIG considered

restoration projects that were (1) ecological projects with substantial recreational benefits, and (2) projects that were primarily ecological as part of the screening process described in Section 2.1.1.

The RP/EIS contains a robust analysis of each of the nine project alternatives, including a "no action" alternative, under both OPA and NEPA. First, the AL TIG Trustees evaluated each restoration alternative under the OPA NRDA restoration planning criteria in 15 CFR 990.54 (see Chapter 3). Chapter 3 also contains the AL TIG's evaluation of the natural recovery alternative in Section 3.10. The Trustees then evaluated each project alternative under NEPA. The AL TIG first identified the affected environment for the restoration alternatives in Chapter 4. Chapter 5 then presents the AL TIG's evaluation of the environmental consequences of each restoration alternative as required by NEPA, including the AL TIG's consideration of the cumulative impacts and indirect effects of each alternative on the environment. In Table 5-42, the AL TIG summarizes and compares the environmental consequences of each restoration alternative. Finally, the Trustees reviewed each restoration alternative for compliance with relevant federal and state laws in Chapter 6.

Only after conducting these analyses did the AL TIG conclude that the preferred alternatives best met the OPA evaluation criteria, the Trustees' goals and objectives for the "Restore and Enhance Lost Recreational Use" Restoration Type, and the specific purpose and need for this RP/EIS.

CONCERN STATEMENT 41: Some commenters suggested that the Gulf State Park Lodge and Associated Public Access Amenities Project creates barriers to public access, including barriers to access for disabled visitors.

Response: As stated in the RP/EIS, the purpose of this project is to compensate the public for the loss of shoreline recreational opportunities in Alabama resulting from the DWH oil spill. The Gulf State Park Lodge and Associated Public Access Amenities Project is designed to provide and enhance access to the natural resources at Gulf State Park. Thus, the project would expand, rather than limit, the public's access to and use of Alabama's shoreline resources. As stated in the RP/EIS, the lodge itself, including the overnight rooms, would restore for lost recreational use by allowing visitors to stay at the beach and conveniently use the Gulf State Park's unique beaches. The proposed access and enhancement amenities would also restore for lost recreational use by connecting lodge guests to the remainder of the park. Equally important, and relevant here, all visitors to Gulf State Park, whether they stay overnight at the lodge or not, would enjoy the same (free) access to the park's beaches and various public access amenities as any overnight guest. These amenities include the interpretive lobby, public education programs established at the lodge, public restrooms and showers, beach access at the lodge, bicycle share stations/program, the meeting space viewing area at the lodge, and the park tram system. As a result, it is expected that people would come to use the lodge and its associated access amenities, including the lodge's common areas, without staying overnight. The lodge component of the project will also provide maintenance funding for these free public access amenities, as well as those restoration elements funded during Phase III of Early Restoration. As a result, the project not only provides on-site access improvements, but public access enhancements throughout the park.

As noted in Section 3.1.2 of the RP/EIS (under the heading "The effect of each alternative on public health and safety"), project design elements include paved surface areas to provide suitable cover for disabled access. All elements are also designed for consistency with ADA standards, specific design details have been refined to increase the individual mobility of users

of the lodge and public access amenities, and the number of ADA-compliant guest rooms exceeds the minimum requirement by nearly 20 percent.

Related to the parking lot adjacent to the Gulf State Park pier, one commenter expressed concern that the transition from free to paid parking would limit access to the park by those who cannot afford the cost. There would likely be a nominal fee for parking at Gulf State Park pier at some point in the future, similar to the current cost for beachfront parking at the park. However, the specific cost, if any, for this parking has not yet been determined. Non-beachfront parking throughout the rest of the park would remain free. For this reason, the Gulf State Park and Associated Public Access Amenities Project includes the development, operation, and maintenance of a number of amenities, such as the tram system, which are focused on providing public access to the lodge and the park's Gulf-facing beaches from the free parking areas without a fee. The project is therefore specifically designed to connect day-use visitors, as well as overnight guests from other areas at the park, to the lodge, the Gulf State Park pier, and the park's beaches at no cost.

Finally, one commenter expressed specific concern over the potential price of the rooms at the Gulf State Park Lodge. The cost of staying in one of the lodge rooms would be priced at market rates. (See Pinkowski & Company, 2014, page 53). Regardless, other areas of the lodge (interpretive lobby, beach access, restrooms and showers, and viewing porches) would remain open and free to the public as described in the RP/EIS.

CONCERN STATEMENT 42: Commenters suggested that the comparison of alternatives for the Gulf State Park Lodge and Associated Public Access Amenities Project was not sufficient and the full range of alternatives was not considered.

Response: The RP/EIS contains a robust analysis of a reasonable range of restoration alternatives that would restore lost recreational shoreline use in Alabama. As described in Chapter 3, the AL TIG evaluated each restoration alternative under the OPA NRDA restoration planning criteria (15 CFR 990.54). Chapter 5 presents the AL TIG's evaluation of the environmental consequences of each restoration alternative as required by NEPA. In Table 5-42, the AL TIG summarizes and compares the environmental consequences of each restoration alternative.

CONCERN STATEMENT 43: Some commenters suggested that if no other projects are determined to be suitable for restoration of lost recreational use, the Trustees should pick the no action alternative rather than the Gulf State Park Lodge and Associated Public Access Amenities Project.

Response: The AL TIG evaluates the no action alternative as required by NEPA in Section 2.2.4 of the RP/EIS. The AL TIG also evaluates a natural recovery alternative under OPA in Section 3.10. Based on these analyses, the AL TIG has determined that the no action and natural recovery alternatives would not meet the purpose and need for the restoration actions evaluated in the RP/EIS, which is to implement compensatory restoration projects that would provide the public with additional recreational shoreline use services in a manner consistent with the Final PDARP/PEIS. The AL TIG evaluates the Gulf State Park Lodge and Associated Public Access Amenities Project as described in Section 3.1 and Chapter 5 and has determined that the project meets the purpose and need for the restoration actions evaluated in the RP/EIS. As currently proposed, the Gulf State Park Lodge and Associated Public Access Amenities Project does not pose a significant impact to the human and natural environment and provides for long-term, tangible enhancements and benefits to shoreline recreational use in the State of Alabama.

CONCERN STATEMENT 44: Commenters noted that the RP/EIS does not provide an analysis of the Gulf State Park Lodge revenues that will be allocated to support operations and maintenance of the Public Access Amenities portion of the Gulf State Park Lodge and Associated Public Access Amenities Project and the Phase III elements at Gulf State Park.

Response: The AL TIG describes how revenues from the Gulf State Park Lodge would be allocated to support operations and maintenance of the public amenities portion of the project, as well as of the Phase III ERP/EIS elements at the park, in Section 2.2.1.1 of the RP/EIS. The Gulf State Park Lodge Facilities Market Feasibility Study prepared for ADCNR by Pinkowski & Company (2014) contains an analysis of Gulf State Park Lodge revenues and is attached to the Draft and final RP/EIS as Appendix G. For example, the lodge rooms are expected to generate $5,775,896 in cash available for debt service the first year of operation (see Pinkowski & Company, 2014, page 58). The total anticipated annual expenses for operations and maintenance of the Phase III elements [interpretive center, learning campus, trails, dune restoration, and environmental protection] and public access amenities at the lodge are $5,801,502. See Annual Operating Costs for GSP Project Elements Chart (Appendix E). This amount includes the maintenance expenses, management fees, capital reserves, and insurance reserves necessary to operate the aforementioned project components.

CONCERN STATEMENT 45: Commenters noted that the visitation numbers provided by the Trustees were different than those provided in the Phase III ERP/EIS, that they do not support the statement that the Gulf State Park Lodge and Associated Public Access Amenities Project will increase recreational shoreline use access, and that the RP/EIS does not provide a factual basis for the assertion that the lodge will make up for any lost user days, or even that it will enhance the visitor experience. Other projects would better serve this need.

Response: As stated in the RP/EIS, the scale of the recreational benefits of the Gulf State Park Lodge and Associated Public Access Amenities Project depends on the alternative's anticipated utilization. At the time of the Final Phase III ERP/EIS, the Gulf State Park Lodge Facilities Market Feasibility Study prepared for ADCNR by Pinkowski & Company (2014) had not been completed for Trustee consideration. Therefore, the Trustees relied on best professional judgement to approximate the 120,000 user nights stated in that plan. Once the market feasibility study was available, the AL TIG has considered it as part of this RP/EIS, including to support the AL TIG's estimate of 84,135 user-nights per year. Hence, the difference between the Phase III ERP/EIS estimates and the estimates in the current plan.

To estimate the user-nights benefit provided by the lodge rooms, the AL TIG looked to the Pinkowski & Company study (2014), which anticipates an average 66 percent overnight occupancy rate over the first five years for the lodge rooms. The AL TIG conservatively estimated single occupancy of the rooms, which yielded the anticipated 84,315 user-nights per year. The actual user-nights would, however, be expected to be higher, when considering there is a likelihood of multiple occupants per room for many rooms (e.g., with double occupancy for each room the user-night number would increase to 168,630 user-nights per year). Although estimated in the plan as user-nights, the majority of these lodge guests would be anticipated to come to the lodge to visit the park beaches, use the associated public access amenities, and otherwise interact with trust resources. Thus, these user-nights may be included in any estimate of user days. For example, lodge guests may visit other areas in the park, which would be connected to the lodge via the public access amenities proposed in the plan, such as the tram system and the bike sharing stations/program. In addition to lodge guests, the Gulf State Park Lodge and Associated Public Access Amenities Project is expected to produce user-day benefits

in the form of day-use visitors to the lodge and the park's Gulf-facing beaches. As described in Sections 1.5.1.1, 2.2.1.1, and 3.1.1 in the RP/EIS, the Gulf State Park Lodge is modeled after existing National Park System lodges. The lobby and other public spaces in and around the lodge would serve as focal points for environmental education, with exhibits and programs addressing coastal Alabama ecosystems and sustainable development practices in the coastal zone. In addition, the lobby and other public spaces would provide amenities (such as restrooms, showers, and shaded/air-conditioned common spaces) that would facilitate extended daily access to the park beaches. As a result, the project is expected both to provide access to (and thus bring people to) the park and it beaches, and to enhance these visitors' experience of the natural resources and services of the park and its beaches, by providing a more comfortable and improved experience. Although the AL TIG did not quantify these numbers of day-users, or their enhanced experience, the expectations (1) that members of the public will visit the lodge to use the common areas and new amenities, but not stay in the lodge rooms, (2) that some of these day-users would access the lodge and associated amenities via the Gulf State Park tram system, the bike sharing stations/program and the parking lot at the adjacent Gulf State Park pier, and (3) that some of these day-users would not come to the park beaches absent the amenities provided at the lodge all factored into the AL TIG's decision-making process, as is explained in the RP/EIS.

CONCERN STATEMENT 46: Some commenters suggested that impacts from the Gulf State Park Lodge and Associated Public Access Amenities Project would cause harm from increased human use, such as impacts from traffic and disturbance to wildlife, including potential need for increased maintenance due to increased use of roadways and impacts from foot traffic in environmentally sensitive areas. For these reasons, they stated that the project would not restore natural resources for the public.

Response: The Alabama TIG evaluated the environmental impacts and restoration benefits of the Gulf State Park Lodge and Associated Public Access Amenities Project in the draft and final RP/EIS and concluded that the project would result in mostly short-term, minor impacts while restoring lost recreational shoreline use in Alabama. The Alabama TIG is not proposing the project to restore natural resources and agrees with the comment that the project would not restore natural resources. Instead, the Alabama TIG is proposing the project to restore a service provided by natural resources, i.e., the lost shoreline recreational use of natural resources along Alabama's coast caused by the DWH oil spill.

The environmental impacts of the Gulf State Park Lodge and Associated Public Access Amenities Project are analyzed in Chapter 5 of the RP/EIS, including the incorporation by reference of the analysis conducted as part of the Phase III ERP/EIS. Based on this analysis the AL TIG Trustees concluded that the project would result in mostly short-term, minor impacts. Specifically, in Section 5.2.3, the RP/EIS discusses impacts on the biological environment and notes that new amenities would be in areas that are mostly disturbed or on paved surfaces and would not affect habitats beyond a minor level. Where amenities are near habitats, they would be designed to keep foot traffic away from these resources. Additionally, impacts on and from transportation are detailed in Section 5.2.4.3. In the final RP/EIS, text has been added to this section to address potential impacts on road maintenance resulting from increased traffic. See Chapter 5 for the additional details on the impacts for this project.

The restoration benefits of the Gulf State Park Lodge and Associated Public Access Amenities Project were also analyzed in Chapter 3 of the RP/EIS. There, the AL TIG concluded that the project (1) would have significant restoration benefits, including those provided by public access

amenities, such as the tram system and the bike sharing stations/program, which are focused on decreasing automobile use within and around the park, (2) was consistent with the goals of the Final PDARP/PEIS, and (3) would meet the purpose and need of the RP/EIS of implementing restoration projects to restore losses of recreational shoreline use in the Alabama Restoration Area.

CONCERN STATEMENT 47: Some commenters suggested that an alternative should be considered that evaluates the construction of the public access amenities only, and does not include the lodge component of the Gulf State Park Lodge and Associated Public Access Amenities Project.

Response: As explained in response to Concern #40, the AL TIG evaluated the Gulf State Park Lodge and Associated Public Access Amenities Project in the RP/EIS, including a robust analysis of a reasonable range of alternatives, as required by OPA and NEPA. The response to Concern #40 is incorporated herein.

NEPA requires that an EIS include a reasonable range of alternatives, including the alternative of no action (40 CFR § 1502). OPA similarly requires that a restoration plan must consider a reasonable range of alternatives, including a natural recovery alternative, before selecting a preferred alternative (15 CFR § 990.53). In Chapter 2, the AL TIG clearly explains how it developed and selected the reasonable range of restoration alternatives considered in the RP/EIS. Between July and December 2016, the AL TIG screened 474 potential projects from the DWH Trustee and Alabama project submission portals, which included recreational use restoration opportunities across Alabama's shoreline. The screening process consisted of an initial OPA eligibility screen, which included whether or not the project met the TIG's stated purpose and need of implementing restoration projects that compensate the public for lost recreational shoreline uses in Alabama, and the removal of duplicate projects and those that had already received funding. This left the TIG with 25 projects, 8 of which were carried forward for additional analysis as the reasonable range (which later became 9 since the AL TIG analyzed the Mid-Island Parks and Public Beach Improvements alternative both with and without Parcel A, which at the time was being considered for funding under the GEBF NFWF program). The TIG's reasons for not carrying the remaining 17 projects forward are outlined in Table 2-4 in the RP/EIS.

As described in response to Concerns #35 and #40, and in Section 2.1.1 of the RP/EIS, the projects considered by the TIG for inclusion in the reasonable range of alternatives included restoration projects that were ecological projects with substantial recreational benefits and projects that were primarily ecological, as well as those for which recreation was the major objective. In addition, as part of the screening process, the AL TIG conducted some project development aimed at tailoring the project proposals to best meet the OPA evaluation criteria in 15 CFR § 990.54, the DWH Trustees' goals and objectives for the "Restore and Enhance Lost Recreational Use" Restoration Type in the Final PDARP/PEIS, and the specific purpose and need for this RP/EIS. For example, the AL TIG developed the Laguna Cove Little Lagoon Natural Resource Protection alternative based on a number of proposals submitted in response to scoping, each of which proposed a variation of a restoration project located in the Laguna Cove area. Similarly, the TIG refined the Gulf State Park Lodge and Associated Public Access Amenities Project, looking to the Gulf State Park Master Plan, as well as the professional judgment and expertise of the Trustees, to develop additional opportunities to provide access to and the enhancement of the public's use of the park's unique natural resources, including its beaches.

Based upon this screening process, and associated project development, the AL TIG identified the reasonable range of alternatives, which it then evaluated in the draft and final RP/EIS. The AL TIG has determined that the restoration alternatives included in the RP/EIS represent a reasonable range of alternatives that best meet the purpose and need for the RP/EIS. During the project development and identification associated with the screening process, the AL TIG could have developed and identified an almost infinite number of potential permutations for the Gulf State Park Lodge and Associated Public Access Amenities Project or for the other projects included in this RP/EIS. For example, the Alabama TIG could have identified and evaluated (1) funding the public access amenities component of the project without the Lodge, (2) funding only the lodge for $1 million, $5 million, $25 million, etc., and (3) funding some portion of the public access amenities for many different amounts in addition to funding the Lodge for many different amounts. Similarly, the Alabama TIG could have identified and evaluated many permutations of any of the other alternatives proposed in the draft and final RP/EIS, such as funding the acquisition of various combinations of parcels and the construction of different amounts of parking spaces for the proposed Mid-Island Parks and Public Beach Improvements alternative (e.g., Parcel B with 10, 15, or 30 parking spaces; Parcel B and C with different combinations of parking spaces). However, under NEPA and OPA, the AL TIG is required to evaluate a reasonable range of restoration alternatives, not the scope of speculative, potential, or even feasible alternatives. Accordingly, the AL TIG decided that the alternatives proposed in the RP/EIS represent a reasonable range of restoration alternatives for the purpose of restoring and enhancing lost recreational shoreline use in Alabama consistent with OPA and NEPA.

CONCERN STATEMENT 48: Commenters suggested that implementation of the Gulf State Park and Associated Public Access Amenities Project should include LEED certification and generate power provided back to the City of Gulf Shores.

Response: As noted in Chapter 2 of the RP/EIS, the project was designed the with goal of certification under the LEED Gold and SITES Platinum programs, and to be a pilot project for the Fortified Commercial program, which is a rating system focused on the resiliency of structures and improving their ability to withstand severe storm events. While renewable energy would be incorporated into the design, it is not expected that a surplus of energy would be available to provide to the City of Gulf Shores.

CONCERN STATEMENT 49: Commenters asked for clarification on how the conference center will be funded.

Response: The AL TIG is not funding and is not proposing to fund the conference center at Gulf State Park. Instead, as described in response to Concern #38 and in Section 2.2.1 of the RP/EIS, the conference center is being funded by a portion of the $50 million in economic damages settlement money and a portion of the $5 million in BP grant funds that Alabama received following the DWH oil spill, and which the state has allocated for work at Gulf State Park pursuant to the Gulf State Park Master Plan.

CONCERN STATEMENT 50: Commenters suggested that implementation of the Gulf State Park Lodge and Associated Public Access Amenities Project could result in impacts to a variety of resources such as wildlife, beach habitat and traffic. Those comments sought clarification on how these impacts will be addressed.

Response: The concerns of "do no harm" have been a guiding principle in the design process of this project, as noted in the RP/EIS. The site for the lodge is a preexisting building site and, therefore, the natural resources within the footprint were already impacted from past

construction activities. The Gulf State Park Master Plan identified areas of disturbed and undisturbed land inside park boundaries, and the development team has followed that diagram to avoid new impacts on the lodge site and throughout the park. As part of this process, the design team designated approximately 7.5 acres at the lodge site as not appropriate for development because of its value as dune habitat. This area is defined on three sides by the project boundaries and on the north by a 200 foot setback line from the Coastal Construction Line. This setback was determined through a scientific analysis of the dune environment that located the natural locations of dunes inside a healthy dune system. (Sasaki, 2016, Appendix A). The area is crossed only by dune walkovers that serve the important purpose of protecting the regrowth of the dune ecology and minimizing impacts on the Alabama Beach Mouse habitat while providing access to shoreline resources for recreation.

The potential and perceived increase in automobile traffic has been considered and a traffic impact study was completed as a result. The study concluded that the lodge could have a moderate impact on traffic but the tram system, which has been added as a component of this project specifically designed to decrease traffic within and around the park, would likely reduce that impact to minor.

Overall, the environmental impacts of the Gulf State Park Lodge and Associated Public Access Amenities Project are analyzed in Chapter 5 of the RP/EIS, which incorporates by reference the analysis conducted as part of the Phase III ERP/EIS. Based on this analysis, the AL TIG has concluded that the project would result in mostly short-term, minor impacts. See Concern #46 and Chapter 5 of the RP/EIS for additional detail.

CONCERN STATEMENT 51: Commenters expressed general opposition to the Gulf State Park Lodge and Associated Public Access Amenities Project.

Response: The AL TIG acknowledges this opposition.

CONCERN STATEMENT 52: Commenters suggested that the RP/EIS treats the lodge and conference center as primarily a means to generate revenue and the Trustees should examine other means to create revenues that do not involve the lodge and conference center.

Response: The AL TIG is not funding and is not proposing to fund the conference center at Gulf State Park. See responses to Concerns #38 and #49. While the lodge rooms at Gulf State Park are expected to generate revenue, revenue generation is not the reason the AL TIG selected the Gulf State Park Lodge and Associated Public Access Amenities Project as a preferred alternative. The AL TIG selected this project as a preferred alternative based on its ability to compensate for lost recreational use services as set forth in Chapter 3. It is not uncommon for recreational use restoration projects to generate revenue, and such revenue is typically used for the operation and maintenance of the project. For example, in this plan, other projects are also expected to generate revenue, and those revenues would be directed to support the operations and maintenance requirements at each site. As stated in Chapters 2 and 3 in the RP/EIS and explained in response to Concern #44, revenues generated from lodge rooms partially funded through this project would provide for the operation and maintenance of the associated public access amenities proposed in the RP/EIS, as well as those NRDA-funded projects at Gulf State Park selected during Phase III ERP/EIS. In fact, based on current projections, more than 100 percent of the lodge rooms' net revenue would be used to operate and maintain these NRDA-funded restoration elements at the park. See the Gulf State Park Lodge Facilities Market Feasibility Study (2014) and Projected Annual Operating Costs for GSP Project Elements Supported by Lodge Revenues (Appendix E). As described above in response to Concerns #42

and #47, after screening and additional project development, the AL TIG Trustees determined that the Gulf State Park Lodge and Associated Public Access Amenities Project, as proposed in the RP/EIS, best meets the purpose and need described in the RP/EIS and would provide significant public restoration benefits, both through the development of the lodge rooms and associated public access amenities, and as a result of its support for the operations and maintenance of the NRDA-funded components throughout Gulf State Park.

For its revenue projections, ADCNR has relied on the Gulf State Park Lodge Facilities Market Feasibility Study prepared by Pinkowski & Company (2014), which is attached to the draft and final RP/EIS as Appendix G. With any construction project of the scale of the park-wide Gulf State Park Project undertaken by ADCNR, including the lodge and conference center component, there is some uncertainty with respect to revenue and operations and maintenance projections. It is therefore standard to rely on professional estimates regarding these projections and project feasibility. ADCNR has obtained these professional estimates and the AL TIG is appropriately relying on this information as part of its decision-making process.

CONCERN STATEMENT 53: Some commenters noted that there is no contract with an operator of the lodge and the Gulf State Park Lodge and Associated Public Access Amenities Project is an investment to create a revenue stream, and as such, other alternatives to create a revenue stream should be considered.

Response: At the time of the public release of the draft RP/EIS, selection of an operator had not commenced. On February 13, 2017, ADCNR issued a Request for Qualifications for the lodge operator, in accordance with the construction schedule. Maintenance of the lodge and public access amenities will be part of the agreement with the operator. Please see www.mygulfstatepark.com for more details.

Concern Statement 54: The AL TIG is treating the lodge and conference center as an investment, and a way to create a revenue stream. If that is the intent, the Trustees must examine alternatives to create a revenue stream.

Response: The AL TIG is not funding and is not proposing to fund the conference center at Gulf State Park. See responses to Concerns #38 and #49. Further, the AL TIG is not treating the lodge rooms at Gulf State Park as an investment. Instead, the RP/EIS and the responses to these concerns explain that revenue generated by the Gulf State Park lodge rooms would be used to fund the operations and maintenance of the public access amenities funded through this project, as well as the components of the Gulf State Park Enhancement Project funded during Phase III of Early Restoration that the AL TIG is currently implementing. As explained in response to Concerns #40 and #47, the AL TIG has determined that the restoration alternatives included in the RP/EIS represent a reasonable range of alternatives to meet the purpose and need of this RP/EIS, which is to implement restoration projects that would compensate the public for lost shoreline recreational use in Alabama in a manner consistent with the Final PDARP/PEIS. Additionally, as noted in Chapter 3 of the RP/EIS and in these responses to public comments, the AL TIG has determined that the Gulf State Park Lodge and Associated Public Access Amenities Project would provide significant public restoration benefits in the form of increased access to and the enhancement of the public's enjoyment of Alabama's shoreline natural resources.

CONCERN STATEMENT 55: Some commenters suggested that the project is a means to compensate for economic, not natural resource, impacts.

Response: The Gulf State Park Lodge and Associated Public Access Amenities Project is designed to compensate for lost recreational shoreline use as described in Chapter 3. It is possible that a

recreational use restoration project of this magnitude could also have a positive economic impact, but such impacts are outside of the scope of the AL TIG's analysis under OPA. The AL TIG has determined the Gulf State Park Lodge and Associated Public Access Amenities Project would help compensate the public for losses to their use and enjoyment of natural resources as a result of the DWH oil spill (See responses to Concerns #39, #52, and #54).

CONCERN STATEMENT 56: Commenters suggested that several projects and suites of projects were provided during the public comment process and that those projects could provide the same or broader benefits.

Response: The AL TIG appreciates project suggestions and will analyze additional projects for restoration in future restoration plans. For this plan, the Trustees conducted a thorough screening of the projects in the restoration project portals (Section 2.1), which included the projects and suites of projects submitted by the commenters and has determined that the suite of projects proposed in this RP represents the best projects for accomplishing the restoration goals and objectives set forth in the Final PDARP/PEIS and the purpose and need of the RP/EIS (See also responses to Concerns #36, #39, #40, and #47).

CONCERN STATEMENT 57: Commenters suggested that there is a need for a comparative analysis regarding the Gulf State Park project and such analysis should establish clear, data-driven metrics for evaluating project proposals.

Response: As described in Chapter 3, each of the alternatives analyzed in the plan was compared against the same OPA criteria in a consistent manner pursuant to the OPA NRDA regulations (15 CFR 990.54). These criteria were (1) the cost to carry out the alternative; (2) the extent to which each alternative is expected to meet the AL TIG's goals and objectives in returning the injured natural resources and services to baseline and/or compensating for interim losses; (3) the likelihood of success of each alternative; (4) the extent to which each alternative will prevent future injury as a result of the incident and avoid collateral injury as a result of implementing the alternative; (5) the extent to which each alternative benefits more than one natural resource and/or service; and (6) the effect of each alternative on public health and safety. (See 40 CFR § 990.54(a)). The ALTIG evaluated each alternative under these criteria to determine how well the alternative met the criteria. Please see Chapter 3 for the AL TIG's full analysis of each project.

9.17 COMMUNICATION AND COORDINATION

CONCERN STATEMENT 58: Some commenters suggested that the public process for review of these projects needed to be more transparent. Specific concerns included a lack of information to affected residents, not enough time to review the document and requesting an extension of the comment period, and holding a meeting in Dauphin Island at the same time as a Town Hall meeting.

Response: The AL TIG understands that providing opportunities for public review and comment is an important part of restoration planning under OPA and NEPA. The AL TIG has made extensive efforts to make this document accessible and transparent to the public, including notifying the public of the AL TIG's intent to prepare an environmental impact statement and requesting project ideas from the public both in the *Federal Register* and on the Trustee Council website, providing frequently asked questions on the Trustee Council website, producing project fact sheets and holding public meetings summarizing the document in the communities where projects are proposed, distributing hard copies of the draft RP/EIS to five repositories throughout Mobile and Baldwin counties, and providing the public with an opportunity to

comment on the draft RP/EIS both electronically and in writing and at two public meetings. The AL TIG considered extending the public comment period and ultimately declined to extend the comment period in light of the public interest in efficiently continuing the restoration planning process while complying with the public review and comment requirements of OPA and NEPA.

CONCERN STATEMENT 50: Commenters suggested that coordination should continue between other DWH and Gulf of Mexico restoration programs, including updates on the progress of restoration at public meetings.

Response: The AL TIG agrees that coordination should continue between DWH and Gulf of Mexico restoration programs. Consistent with Section 7.3.3 of the Final PDARP/PEIS, which includes a discussion of future coordination specifically with other DWH restoration programs, the AL TIG considered concurrent project selection processes underway by NFWF GEBF. The AL TIG would continue to coordinate and consider the status of other Gulf restoration programs in future restoration planning. This coordination of restoration across the Gulf of Mexico would promote successful implementation of the AL TIG's restoration activities as guided by the Final PDARP/PEIS and would optimize ecosystem recovery within the Gulf.

CONCERN STATEMENT 60: Commenters suggested that the final RP/EIS should clarify how public scoping comments were considered in the plan.

Response: Section 1.7.1 of the RP/EIS describes how the AL TIG considered public scoping comments as part of this restoration planning process. In addition, Section 1.8 summarizes the public comments received on the draft RP/EIS and the AL TIG's responses to those comments.

9.18 EDITORIAL

CONCERN STATEMENT 61: One commenter provided editorial suggestions to the document to correct the name of a referenced county in table 5-6.

Response: The county name in Table 5-6 has been corrected in the final RP/EIS.

9.19 PURPOSE AND NEED: PLANNING PROCESS AND POLICY

CONCERN STATEMENT 62: Commenters suggested that scientific information generated from restoration projects should be publicly available.

Response: As noted in Chapter 8 of the February 2016 Final PDARP/PEIS, the Trustees have allocated $37 million to establish, populate, manage, and maintain a Gulf-wide environmental data management system. This system will be publicly accessible per the Consent Decree (page 23). The Trustees have strived throughout the damage assessment process to make data publicly available as soon as feasible. Sometimes data must be processed for quality prior to publication, and/or agreements must be established with other parties and scientists cooperatively collecting data.

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10.0 LIST OF REPOSITORIES

Dauphin Island Sea Laboratory Admin Building, 101 Bienville Boulevard, Dauphin Island, Alabama 36528

Thomas B. Norton Public Library, 221 West 19th Avenue, Gulf Shores, Alabama 36542

Alabama Department of Conservation and Natural Resources, State Lands Division, Coastal Section Office, 31115 5 Rivers Boulevard, Spanish Fort, Alabama 36527

Weeks Bay National Estuarine Research Reserve, 11300 US Highway 98, Fairhope, Alabama 36532

Mobile Public Library, West Regional Library, 5555 Grelot Road, Mobile, Alabama 36609

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11.0 LIST OF PREPARERS, AGENCIES, AND PERSONS CONSULTED

Agency/Firm	Name	Position
ADCNR	William H. Brantley, Jr.	State Lands Manager
ADCNR	Amy Hunter	Science Coordinator ADCNR State Lands Division
ADCNR	Carl Ferraro	Biologist
State of Alabama/Rosen Harwood	Jane Calamusa	Attorney
State of Alabama Rosen Harwood	Robin Pate	Attorney
State of Alabama/Rosen Harwood	Nicole Hampton	Attorney
State of Alabama/Louis Berger	Lori Fox	Senior Planner
State of Alabama/Louis Berger	Joe Dalrymple	Environmental Scientist
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NOAA	Corinna Mc Mackin	Attorney-Advisor
NOAA	Dan Van Nostrand	Marine Habitat Resource Specialist
NOAA/Earth Resources Technology	Laurel Jennings	Program Planning and Evaluation Specialist
NOAA	Ramona Schreiber	Marine Habitat Resource Specialist
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APPENDICES

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APPENDIX A

PUBLIC SCOPING COMMENT ANALYSIS REPORT

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ALABAMA TRUSTEE IMPLEMENTATION GROUP

RESTORATION PLAN I/ENVIRONMENTAL IMPACT STATEMENT

DRAFT PUBLIC SCOPING COMMENT ANALYSIS REPORT

SEPTEMBER 2016

INTRODUCTION AND GUIDE

INTRODUCTION

The Federal and state natural resource trustees for the Alabama Trustee Implementation Group (Alabama TIG) for the Deepwater Horizon (DWH) oil spill intend to prepare an Environmental Impact Statement (EIS) under the National Environmental Policy Act (NEPA). The EIS will evaluate the environmental consequences of a range of restoration projects that the Alabama TIG will propose in a Restoration Plan (RP) developed pursuant to the Oil Pollution Act (OPA) to compensate the public for lost recreational use opportunities in Alabama caused by the DWH oil spill in the Gulf of Mexico. Restoration planning to compensate the public for lost recreational opportunities in Alabama is expected to be phased. The initial restoration planning activities were initiated in 2016.

On July 6, 2016 a "Notice of Intent to Prepare an Environmental Impact Statement and Conduct Restoration Planning to Provide and Enhance Recreational Use in Alabama and To Conduct Scoping" was published in the Federal Register (81 FR 44007) to begin this planning process. Public scoping is the early involvement of the interested and affected public in the environmental analysis process. The public scoping process helps ensure that people have been given an opportunity to comment and contribute early in the decision-making process.

The public was asked to provide their thoughts on projects to restore recreational uses and submit public comments between July 6 and August 5, 2016 through a variety of means including electronically through the Department of Interior's Planning, Environment, and Public Comment (PEPC) online system, by email, or by letter. In total, 49 correspondences were received during the comment period. This report provides an analysis of the comments within these correspondences.

THE COMMENT ANALYSIS PROCESS

Comment analysis is a process used to compile and correlate similar public comments into a format that can be used by decision makers of the Alabama TIG. Comment analysis assists the team in organizing, clarifying, and addressing technical information pursuant to NEPA regulations. It also aids in identifying the topics and issues to be evaluated and considered throughout the planning process.

The process includes five main components:

- developing a coding structure
- employing a comment database for comment management

- reading and coding of public comments
- interpreting and analyzing the comments to identify issues and themes
- preparing a comment summary

A coding structure was developed to help sort comments into logical groups by topics and issues. The coding structure was derived from an analysis of the range of topics discussed during internal TIG scoping, past restoration efforts, and the comments themselves. The coding structure was designed to capture all comment content rather than to restrict or exclude any ideas. A unique code was created for individual topics and issues presented by the public.

The Department of Interior PEPC database was used for management of the comments. The database stores the full text of all correspondence and allows each comment to be coded by topic and issue. Outputs from the database include the total number of correspondences and comments received, sorting and reporting of comments by a particular topic or issue, and demographic information for the sources of the comments.

Public comments were read by representatives of all AL TIG trustees. After reading through all comments, comments were coded in a consistent and uniform way.

Analysis of the public comments involved the assignment of the codes to statements made by the public in their PEPC submissions, letters, and email messages. All comments were read and analyzed, including those of a technical nature; opinions, feelings, and preferences of one project type over another; and comments of a personal or philosophical nature.

Although the analysis process attempts to capture the full range of public comments, this content analysis report should be viewed in context. For example, comments from people who chose to respond do not necessarily represent the sentiments of the entire public. Furthermore, this was not a vote-counting process, and the emphasis was on the content of the comment rather than the number of times a comment was received.

DEFINITION OF TERMS

Primary terms used in the document are defined below.

Correspondence: A correspondence is the entire document received from a commenter. It can be in the form of a PEPC submission, letter, or email.

Comment: A comment is a portion of the text within a correspondence that addresses a single subject. It could include such information as an expression of support or opposition to a specific project or project type, issues that should be considered in the EIS process, or other elements the public felt should be considered in the process.

Code: An alphanumeric grouping centered on a common subject. The codes were developed during the scoping process and were used to track major subjects.

Comment Text: Under each code, all comments categorized under that code are listed. The comment text has been taken directly from the text of the public's comments and further clarify each code. Comment text has not been edited for content or grammar.

GUIDE TO THIS DOCUMENT

This report is organized as follows:

Content Analysis - This is the basic report produced from PEPC that provides information on the numbers and types of comments received. Table 1 provides a summary of the number of correspondence that contained each code. Table 2 details what form the comments were received (web form, letter or email). Table 3 provides a breakdown of the number of correspondence submitted by organization type, including unaffiliated individuals. Table 4 provides a breakdown of the number of correspondence revised by the commenter's state of residence.

Public Scoping Comment Summary - This report provides a list of all comments received during the scoping process, organized by codes. Below each code is the text of all comments that were categorized under that code. Some comment text appears under multiple codes in the following pages because the same text has been coded more than one time in order to capture slight differences in thought or opinion of the author.

Content Analysis

Table A.1: Summary of Public Comment Distribution

Code	Description	Number of Correspondences That Contain a Particular Code*	% of total comments
PR500	Project Recommendation: New/additional lodging	28	33%
PR400	Project Recommendation: Improved/expanded coastal experiences	9	11%
PR100	Project Recommendation: Land Acquisition	8	9%
MT1000	Miscellaneous Topics: General Comments	5	6%
PS200	Project Selection: Multiple/dual purpose projects	5	6%
IA100	Impact Analysis: Adequacy of environmental analysis	4	5%
PR200	Project Recommendation: Water Quality	4	5%
NX100	Nexus to injury	3	4%
PR300	Project Recommendation: Recreational fisheries	3	4%
IA300	Impact Analysis: Long-term project monitoring and financing	2	2%
EJ100	Environmental justice-related concerns	2	2%
PR700	Project Recommendation: Living Shorelines	2	2%
PE100	Public engagement in the plan development process	2	2%
IA500	Impact Analysis: Adequacy against NRDA criteria	2	2%
PS500	Project Selection: Streamlining the Process	1	1%
IA400	Impact Analysis: Distribution of restoration across ecosystem setting/affected area	1	1%
PS100	Project Selection: Project Metrics/utilizing comparable measures across alternatives	1	1%
PS300	Project Selection: Importance of leveraging opportunities	1	1%
PR800	Project Recommendation: Educational Opportunities	1	1%
PR4000	Project Recommendation: Artificial Reefs	1	1%
	Total	85	100%

*Note: Total correspondences is higher than the total (49) as each correspondence can contain multiple comments and therefore shows up under multiple codes

Table A.2: Correspondence Distribution by Method of Submission

Type	# of Correspondences
Web Form	41
Letter	6
E-mail	2

Table A.3: Correspondence by Organization Type

Organization Type	# of Correspondences
Conservation/Preservation	6
County Government	1
Unaffiliated Individual	42

Table A.4: Number of Correspondences by State

State	# of Correspondences
Alabama	42
Mississippi	2
Louisiana	2
Indiana	1
Massachusetts	1
Georgia	1

Public Scoping Comment Summary

EJ100 Environmental justice-related concerns (Substantive)

Comment Text: D. Public Participation & Environmental Justice Trustees must evaluate the environmental justice implications of their decisions for low-income areas and communities of color, as required under Executive Order 12898.7 Alabama and its coastal areas are made up of diverse communities. This includes Native Tribes, historic communities of color, coastal fishing communities, and other frontline communities that were directly impacted by the BP oil disaster, and will be directly impacted by any restoration projects that are chosen by the Trustees. Better processes and structures for public participation and input must be made available to these communities, as they have been marginalized throughout this process. This is evidenced by, but are not limited to, the Trustee's failure to provide their own translators at public meetings or translated materials for non-English speaking populations in a timely manner, as well as failing to host meetings in a wider variety of communities close to more isolated disadvantaged populations affected by the spill, which would provide a greater opportunity for attendance by those effected populations. While requests for written comment during scoping, and providing online portals for project submissions, are forms of public engagement, these methods do not typically meet the needs of frontline communities. The Trustees must adopt more participatory and inclusive practices, such as workshops and in-person meetings, to ensure that underserved constituents have an opportunity for their voice to be heard in all phases. In evaluating proposed projects, the Trustees also should consider the needs of local residents, particularly from historically marginalized groups. For instance, a recreational loss of use project is found to potentially benefit the local economy, this is an important consideration for the Trustees. However, if a project restricts access to natural resources associated with the project, such as with parking fees or lodging rates, this may exclude low- income families who traditionally have accessed the area. The potential for job creation hinges on the use of local labor and contractors when implementing ecological and recreational projects. To ensure a benefit to the local population, implementing Trustees should be required to give preference to the local workforce, implement robust training programs and partner with local nonprofit workforce intermediaries to identify local hiring pool.8 The Spill recovery should assist, and not further marginalize, frontline communities.

Organization: Gulf Restoration Network

Comment Text: It is also of utmost importance to examine potential direct and indirect adverse impacts on underserved communities. Any actions that increase recreational access but require high user fees should be scrutinized as required by Executive Order 128981. While we understand and value the importance of benefits to the local economy we strongly believe that those projects that allow access to the widest possible user groups and projects that provide economic benefit are not mutually exclusive. In actuality, by utilizing well-planned conscientious analysis of all alternatives available to the Trustees, many projects can be identified that meet both of these objectives.

Organization: Mobile Baykeepers

IA100 Impact Analysis: Adequacy of environmental analysis (Substantive)

Comment Text: The close proximity of a NRDA Early Restoration Phase I dune restoration project16 at the base of the primary dunes in front of the proposed lodge and conference center would almost certainly be impacted by pedestrian traffic associated with these new facilities. Therefore, the lodge and conference center would directly conflict with another NRDA Early Restoration project, violating the Framework Agreement project selection criterion that projects selected "are not inconsistent with the anticipated long-term restoration needs and anticipated final restoration plan."17 In this case, the long-term restoration needs of dunes injured by the BP oil disaster would be undermined by the lodge and conference center, both during construction and by human use upon completion. All phases of restoration need to be evaluated comprehensively to avoid conflicting restoration goals. Building the proposed facility is unrelated to recreational services lost as a result of Deepwater Horizon injuries. The previously existing lodge and conference center “which was quite different from the proposed project” was destroyed in 2004 and had not been rebuilt at the time of the BP oil disaster; thus there is no rationale for restoring those uses per se. More importantly, the recreational uses provided by building this facility are not the same or similar to the types of recreational uses lost due to the BP oil disaster. In other words, building the lodge and conference center does not "restor[e], rehabilitat[e], replace[], or acqui[re] the equivalent, of"18 beach use, fishing or boating lost due to the BP oil disaster. This is the definition that must be satisfied for justification under NRDA, and any project that does not satisfy it is not appropriate under the law. â€¢ Further, the lodge and conference center would not make the public whole due to cost barriers that would likely restrict access to relatively affluent users.19 The project description states Gulf State Park is used primarily as a "retreat and recreational area."20 Most of the proposed facility21 will be available only to guests paying commercial rates, which will be substantial for high-quality lodging at a beach-front location. Hence, this project does not help make the public whole. Instead, the cost barrier will likely limit “not enhance” use by large segments of the public. Moreover, even though the proposed lodge and conference center will occupy a smaller footprint than the original facility, the presence of this facility and the associated guests at the lodge and attendees at conferences may actually reduce public beach visitation and the quality of those visits. Auburn University acknowledges this point in its FAQs: "A smaller footprint means more of the beach will be given back to the citizens and visitors of the park"22 because the rebuilt facility will occupy less space than the previous one. If the proposed facility were not taking away public uses, there would be nothing to "give back" by virtue of selecting a facility with a smaller footprint.

Organization: Ocean Conservancy

Comment Text: A Commitment to Do No Harm NWF believes that NRD monies should have a positive, lasting benefit for Alabamas coastal and marine resources. Given the unique nature of these funds, this is a particularly important consideration for the Provide and Enhance Recreational Opportunities Restoration Type, since it could fund projects that involve infrastructure. NWF reiterates our aforementioned recommendations that any infrastructure-type projects related to recreational use provide measurable ecological benefits and are designed and implemented in a manner that respects the coasts natural assets. To that end, we urge the Alabama TIG to avoid projects that will have direct or indirect adverse environmental impacts, namely degrading or negatively impacting the coasts natural resources and/or reducing the impact of, or conflicting with, completed or planned ecological restoration investments. The very nature of NRD funds is to remedy harm from the DWH and as such,

IA100 Impact Analysis: Adequacy of environmental analysis (Substantive)

these monies should not be used in an environmentally damaging manner. Projects or programs being considered by the Alabama TIG should identify any potentially damaging impacts to environmental resources as early in the project development phase as possible. In the rare case where minor and/or short-term adverse impacts may occur up-front, projects should set aside funds for compensatory mitigation and identify a detailed plan and timeline.

Organization: National Wildlife Federation

Comment Text: Cumulative and Indirect Environmental Impacts As required by NEPA,2 Mobile Baykeeper desires that the Trustees evaluate all cumulative direct and indirect environmental impacts, risks, and threats that may result from activities undertaken during and after restoration projects. This includes impacts caused directly by individual projects (e.g. increased urban stormwater pollution caused by developing and increasing impervious surfaces in an area), and those indirect impacts that a project could be reasonably expected to have (e.g. increased stress on critical habitats and wildlife caused by increases in number and concentration of human and automobile traffic). While we believe there is great value to moving projects forward quickly, there can be no loss of a comprehensive and inclusive review process that ensures the community and the agencies charged with protecting our natural resources understand every possible impact from every undertaking.

Organization: Mobile Baykeepers

Comment Text: C. Cumulative and Indirect Impacts The TIG is required under NEPA to consider cumulative and indirect impacts of potential projects.4 All effects and impacts must be accounted for, including ecological, aesthetic, historic, cultural, or social - whether direct, indirect, or cumulative.5 The indirect impacts caused by increased human use, such as automobile and foot traffic, may result in increased threats to environmentally sensitive areas (e.g. critical habitat for endangered species). Trustees should conduct a comprehensive analysis of cumulative impacts for individual projects, as well as a full examination of indirect impacts that the proposed recreational use projects could potentially cause, such as: • Increased auto traffic in and around project areas, such as state parks, potentially causing maintenance problems from increased use of roadways; •Increased threats to wildlife (including endangered species) and habitat from human traffic in environmentally sensitive areas; and, • Increased pressures on fishing populations that could be associated with new boat ramps and/or fishing piers, particularly for those species currently considered overfished or undergoing overfishing.6 The Trustees must evaluate whether any potential recreational use project would conflict with other restoration projects also proposed for the same area. For example, major construction projects that are ongoing, or slated to occur, in the areas of selected RESTORE, NRDA or NFWF restoration developments should be included in the analysis of cumulative impacts. Similarly, the TIG should strive, to the extent possible, to analyze the cumulative positive and negative impacts of all recreational use projects that are selected or reasonably foreseeable. All impacts must be fully explored, and potential measures for mitigation identified, to ensure that those impacts are avoided or mitigated prior to project selection and approval.

Organization: Gulf Restoration Network

IA100 Impact Analysis: Adequacy of environmental analysis (Substantive)

Comment Text: 3. Recreational use projects intended to increase public access to resources may have unintended consequences, and cumulative effects should be considered and tracked. The Trustees must consider how recreational use projects intended to increase public access to resources may have unintended consequences. For example, recreational use projects designed to provide new access points could concentrate negative anthropogenic impacts to the natural resources. The Trustees should consider whether using damage assessment monies to upgrade or construct new boat ramps at the proposed site or at future sites in the Deepwater Horizon impact area will result in negative cumulative effects. Trustees must consider the potential for adverse cumulative effects as they determine whether such projects are consistent with long-term habitat, wildlife and fisheries restoration goals. New and enhanced infrastructure designed to increase access to fishery resources, such as boat ramps, piers and artificial reefs, might also increase pressure on marine fish populations, in particular those that have been identified as overfished or undergoing overfishing. The Trustees should consider the potential for these cumulative impacts and, in their selection of alternatives, should actively seek to reduce harm to sensitive habitats or species. The cumulative environmental or socioeconomic impacts of artificial reefs (positive or negative) (see attachment: Guidance on the Suitability of Artificial Reefs) may increase over time as new reefs are added to the area, so assessing the cumulative ecological impacts of adding multiple reefs may be needed. The potential for an overall increase in fishing effort exists as new access points are created. It is not clear from boat ramp or fishing pier proposals whether the Trustees are considering the implications of increased access points and potentially increased angler traffic on existing fisheries monitoring programs. The Trustees should explain how these increases should be factored into current sampling programs and costs of, for example, the Marine Recreational Information Program. In addition, improvements in data collection can help better track fish populations and opportunities for fishery resource management (see Appendix: Alternative Restoration Approaches).

Organization: Ocean Conservancy

IA300 Impact Analysis: Long-term project monitoring and financing (Substantive)

Comment Text: E. Long- -term Monitoring and Recovery As projects are chosen and implemented, it is imperative that long- term monitoring of the recovery process is included at both the program and project level. Standardized information regarding monitoring is needed for all projects. In the Early Restoration process, Alabama included comprehensive descriptions of monitoring costs and activities for their Living Shoreline projects; this outline provides a good model for other projects. By way of negative contrast, the Trustees attempted to subsidize the Gulf State Park Enhancement Project in Early Restoration without ensuring that the project would be fully funded and would produce its intended effects.9 The sustainability of each project must be included in criteria for project selection. Our Gulf Coast region is an area slated for significant impacts from climate change, and it is imperative that the Trustees provide an adequate analysis of the resilience and cost- effectiveness of newly built structures in light of changing environmental conditions associated with climate change. The TIG should address project-specific measures to mitigate unavoidable climate- related impacts. To not address these critical

IA300 Impact Analysis: Long-term project monitoring and financing (Substantive)

issues would set projects up for failure, potentially waste limited financial resources, and violate the public trust the Trustees are required to protect.

Organization: Gulf Restoration Network

Comment Text: Long-term Monitoring and Sustainability Mobile Baykeeper strongly desires to see all projects and alternatives include plans for long-term monitoring and financial sustainability. Long term monitoring is crucial to determining success of these projects and we feel it would be irresponsible to include any project that does not include a monitoring component. Further any project that does not identify long-term costs and how these costs will be sustained after funding from NRDA ends should not be included in the next plan. Each project selected should include clear explanations of how funds will be provided to cover operation and maintenance costs over the life of the project.

Organization: Mobile Baykeepers

IA400 Impact Analysis: Distribution of restoration across ecosystem setting/affected area (Substantive)

Comment Text: Examination of All Reasonable Alternatives We strongly recommend that the Trustees distribute funding intended to restore lost recreational use between the many worthwhile projects. With diverse communities spread across Mobile and Baldwin Counties there are a plethora of opportunities to restore lost recreational use. It would be a disservice to the residents of the entire area to spend a large portion of funds available for the restoration of lost recreational use on a single project such as the construction of the Gulf State Park Lodge and Conference Center. Instead of utilizing the funds in a way that impacts only some communities in a limited geographic scope Mobile Baykeeper desires to see the funds utilized in the most equitable and beneficial manner that also provides for a substantial comprehensive effect to the greater Alabama Gulf Coast.

Organization: Mobile Baykeepers

IA500 Impact Analysis: Adequacy against NRDA criteria (Substantive)

Comment Text: The close proximity of a NRDA Early Restoration Phase I dune restoration project16 at the base of the primary dunes in front of the proposed lodge and conference center would almost certainly be impacted by pedestrian traffic associated with these new facilities. Therefore, the lodge and conference center would directly conflict with another NRDA Early Restoration project, violating the Framework Agreement project selection criterion that projects selected "are not inconsistent with the anticipated long-term restoration needs and anticipated final restoration plan."17 In this case, the long-term restoration needs of dunes injured by the BP oil disaster would be undermined by the lodge and conference center, both during construction and by human use upon completion. All phases of restoration need to be evaluated comprehensively to avoid conflicting restoration goals. Building the

IA500 Impact Analysis: Adequacy against NRDA criteria (Substantive)

proposed facility is unrelated to recreational services lost as a result of Deepwater Horizon injuries. The previously existing lodge and conference center “which was quite different from the proposed project” was destroyed in 2004 and had not been rebuilt at the time of the BP oil disaster; thus there is no rationale for restoring those uses per se. More importantly, the recreational uses provided by building this facility are not the same or similar to the types of recreational uses lost due to the BP oil disaster. In other words, building the lodge and conference center does not "restor[e], rehabilitat[e], replace[], or acqui[re] the equivalent, of"18 beach use, fishing or boating lost due to the BP oil disaster. This is the definition that must be satisfied for justification under NRDA, and any project that does not satisfy it is not appropriate under the law. â€¢ Further, the lodge and conference center would not make the public whole due to cost barriers that would likely restrict access to relatively affluent users.19 The project description states Gulf State Park is used primarily as a "retreat and recreational area."20 Most of the proposed facility21 will be available only to guests paying commercial rates, which will be substantial for high-quality lodging at a beach-front location. Hence, this project does not help make the public whole. Instead, the cost barrier will likely limit “not enhance” use by large segments of the public. Moreover, even though the proposed lodge and conference center will occupy a smaller footprint than the original facility, the presence of this facility and the associated guests at the lodge and attendees at conferences may actually reduce public beach visitation and the quality of those visits. Auburn University acknowledges this point in its FAQs: "A smaller footprint means more of the beach will be given back to the citizens and visitors of the park"22 because the rebuilt facility will occupy less space than the previous one. If the proposed facility were not taking away public uses, there would be nothing to "give back" by virtue of selecting a facility with a smaller footprint.

Organization: Ocean Conservancy

Comment Text: In reality, unlike many urgent restoration projects waiting in the que for NRDA funds, the lodge/ conference center does not meet the OPA statutory criteria for numerous reasons. First, the lodge/ conference center project amounts to the construction of a new building, from the ground up, that did not exist at the time of the oil spill. The lodge itself is not a "natural resource" or a service of a natural resource as clearly defined in the statute. A building is not air, water or biota.

Organization: The Southern Environmental Law Center

NX100 Nexus to injury (Substantive)

Comment Text: Second, the lodge project does not, by definition, involve "restoring" any natural resource, or anything at all for that matter. An interpretation that building a new structure somehow meets the definition of restoring a natural resource strains credibility and falls wholly outside the parameters of the OPA statutory language and its remedial purpose. A hotel and conference center that did not exist at the time of the spill cannot be "restored."

Organization: The Southern Environmental Law Center

NX100 Nexus to injury (Substantive)

Comment Text: Third, there is no nexus between the spill and injury which would be remedied by construction of the lodge. The law requires a tangible "injury" to a resource that existed at the time of the spill, and a direct and demonstrable pathway or nexus between the spill and the injury. See, e.g., 15 C.F.R. Â§ 990.51; United States v. Hyundai Merchant Marine Co., No. A94-0391-CV (HRH), 1997 U.S. Dist. LEXIS 10530, at 36-*40. (D. Alaska Mar. 31, 1997), aff'd United States v. Hyundai Merchant Marine Co., 172 F.3d 1187 (9th Cir. 1999). No such injury or pathway exists here. The lodge was damaged by a hurricane in 2004 - - there is no connection to the DWH. Hotel construction projects should be considered outside the scope of restoration projects under NRDA, generally, because they lack a real nexus to the spill, and will not directly benefit the citizens impacted by the spill. The lodge/ convention center project fails to satisfy the first step of the Restoration Planning phase of the NRDA process because there is no injury relating to the project which is cognizable under the OPA. See 15 C.F.R. 990.53(a)(1) ("If the information on injury determination and quantification [which includes a determination of whether a pathway exists from the incident to the natural resources injury being restored] under § 990.51 and 990.52 of this part and its relevance to restoration justify restoration, trustees may proceed with the Restoration Planning Phase. Otherwise, trustees may not take additional action under this part."). In the GRN case, the trustees sought to defend the lodge/convention center by arguing that the OPA injury requirement was satisfied by record evidence which allegedly showed a number of lost "user days" of the shoreline adjacent to the state park due to oiling and beach closures related directly to the spill. However, the Trustees failed to consider, as required by OPA, the actual connection between the lodge project's benefits (increased user days) and the loss of services resulting from injury to natural resources (loss of user days of a different type as a result of beach oiling and closures). See 15 C.F.R. § 990.51; 15 C.F.R. § 990.55(b)(2). Indeed, the trustees have never articulated any rational connection between injuries to the beach or coastline - - the natural resources involved in the equation - - and repayment for those injuries in the form of building a hotel and conference center. Those structures are not required for access to the beach, by any stretch of the imagination. Additionally, as the plaintiff in the GRN case pointed out, the record evidence was woefully insufficient to prove that a new hotel and conference center would actually increase access to the beach to make up for lost user days, or bring thousands of "new" visitors to the shoreline. As it stands, there is still no competent evidence to substantiate those self-serving claims.

Organization: The Southern Environmental Law Center

Comment Text: The state of Alabama does not have to use NRDA monies to build the lodge/ convention center. For example, on April 4, 2016, the Department of Justice reached a settlement with BP concerning DWH for approximately $ 20 billion. That settlement resolved the government's claims under the Clean Water Act and OPA, and it also settled economic damages claims for the five Gulf States. This money will flow to the states through NRDA, the Restore Act and via economic damages paid to the Gulf States by BP. Alabama's share of just the economic damage portion of this money is approximately $ 1 billion. Press Release, Governor Bentley, Attorney General Strange Announce Landmark Agreement in BP Oil Spill Case, Office of Alabama Governor Robert Bentley (July 2, 2015). This $ 1 billion will go to the state, with no federal strings attached, and will be under the control of the Alabama legislature. Mike Cason, Alabama to receive $2.3 Billion in BP Oil Spill Settlement, AL.com, July 2, 2015. If the governor finds that the lodge/ conference center is important enough to the state, he has the option of

NX100 Nexus to injury (Substantive)

convincing the elected representatives of the state for this money. It is also our understanding that some significant portion of this money may have already been "earmarked" for this lodge/ convention center. If the state wants to build the lodge/ conference center, and it passes environmental analysis and scrutiny, it can and should do so with its economic loss funds. Those funds are free to be used at the legislature's discretion, unlike NRDA funds, which are required by federal law to be used to "restore" natural resources actually and directly damaged by the DWH spill. It is also an option for the governor's office to use other means, such as other appropriations from the legislature, to build the lodge/ conference center.

Organization: The Southern Environmental Law Center

Comment Text: Provide Services of Same Type and Quality as Those Injured The relevant regulations under NRDA place limits on how the restoration money received from the settlement may be used on future restoration projects. Trustees must consider compensatory restoration actions that provide services of the same type and quality, and of comparable value as those injured. Therefore, any actions the Trustees decide to move forward with must comply with this requirement. We believe that projects pursued solely on the basis of economic gain do not meet the standards set forth under NRDA. Any projects selected must have a rationale or proof of nexus to the injury sustained, which in this case is damage to the recreational use and natural resources of the impacted area. Without this connection, the Trustees may not proceed with that proposal unless those issues are properly addressed.

Organization: Mobile Baykeepers

Comment Text: Loss of access to the beach was a top impact for Alabama. Building a project that would enable some to access the beach, but limit access for others would not satisfy that injury.

Organization: Mobile Baykeepers

Comment Text: A. Clear and Consistent Metrics and Supporting Data for Alternatives The Trustees must conduct a comprehensive review of project alternatives under NEPA and OPA, an obligation affirmed by the court in GRN v. Jewell, et al., 1:15 - 191 (S.D.Ala.). Under NEPA, that review of alternatives must "present environmental impacts of the proposal and the alternatives in comparative form, thus sharply defining the issues and providing a clear basis for choice among options by the decision- -â€maker and the public."2 The Trustees must not only rigorously explore alternative projects but also establish clear, data-driven metrics for evaluating project proposals comparatively. Theoretical discussions that merely indicate probable injury and assertions are insufficient. For example, in Early Restoration, the Trustees invoked metrics, like improvements in "user days" and "new visits," but failed to offer any recent data supporting their analysis.3 To comply with NEPA and OPA, the Trustees must clearly define the loss of use injury Alabama suffered, the scale of that injury, and how and to what extent each alternative project or set of projects would compensate for the identified injury.

Organization: Gulf Restoration Network

NX100 Nexus to injury (Substantive)

Comment Text: NRDA regulations require that compensatory restoration "provide services of the same type and quality and of comparable value as those injured."13 If actions of the same type, quality and value are not available, then the Trustees should employ "actions that provide natural resources and services of comparable type and quality as those provided by the injured natural resources."14 According to the Trustees' explanation in Early Restoration, "[t]he spill led to large numbers lost and degraded beach trips over the course of many months as well as lost fishing trips and oyster harvesting due to closure of waters"15 and "[t]he State currently anticipates that the ongoing analyses will show the oiling of Alabama's coast caused losses in beach use, fishing and boating that number in the millions of user-days."16 This explanation provides a valid rationale for projects to replace loss of use. Projects, such as trail improvements and extensions, overlooks, interpretive kiosks and signage, and purchasing private land for public use, can be reasonably anticipated to "provide services of the same type and quality and of comparable value as those injured."17 The Trustee's description of injuries provides no rationale or proof of nexus to injury for the construction of a lodge and conference center. There is no claim ”even assuming lodging or convention activity could be connected at all to Spill natural resources injuries” that area lodging was permanently reduced by the Spill. Although there was a 13% decline in taxable lodging rental income in 2010, this was not due to lack of lodging. In fact, 2011 rentals "soared to $281 million, 37 percent over the previous year and about a 20 percent increase over 2009."18 In a 2011 economic travel impact study, the collective total of visitors in Baldwin and Mobile County increased by 476,000 in 2011 from 2010, including a 12% increase in traveler expenditures during that time.19 Had shortage of lodging been a market challenge, the annual rental increases would not have escalated as quickly post-spill. A press release recently issued by the Governor of Alabama touted the fact that tourism to Alabama's Gulf beach communities is at all- time record levels and poised for a sixth straight record-breaking year in 2016.20 Four hundred thousand (400,000) more visitors came to Baldwin County in 2015 than in the year before.21 Clearly, the region is having no trouble attracting and accommodating new visitors in the wake of the Spill without publicly financed hotel and convention facilities. Rather, it is evident that the hotel and convention center is meant to compensate for economic, not natural resource, concerns,22 and is unrelated to the recreational services lost due the oil disaster. The Governor of Alabama has candidly explained that a major purpose of the project will be to generate revenue that will go to other less-visited parks, including in areas of the state completely unaffected by the Spill.23 The conclusion that the project is economically motivated is bolstered by the Coastal Recovery Commission of Alabama's project description, released in 2011, which stated that the project would not qualify as oil spill mitigation.24 Far from addressing BP Oil Spill natural resource injuries, the hotel and convention facility appears calculated to address a different, unrelated injury entirely: the budget shortfall suffered by the State of Alabama and its parks system. Building a hotel and conference center simply does not restore beach use, fishing or boating lost due to the BP oil disaster. The project thus fails to meet the basic requirements for a loss of use project. The TIG should reject it as a candidate for Alabama's recreational use NRDA funds.

Organization: Gulf Restoration Network

PE100 Public engagement in the plan development process (Substantive)

Comment Text: D. Public Participation & Environmental Justice Trustees must evaluate the environmental justice implications of their decisions for low-income areas and communities of color, as required under Executive Order 12898.7 Alabama and its coastal areas are made up of diverse communities. This includes Native Tribes, historic communities of color, coastal fishing communities, and other frontline communities that were directly impacted by the BP oil disaster, and will be directly impacted by any restoration projects that are chosen by the Trustees. Better processes and structures for public participation and input must be made available to these communities, as they have been marginalized throughout this process. This is evidenced by, but are not limited to, the Trustee's failure to provide their own translators at public meetings or translated materials for non-English speaking populations in a timely manner, as well as failing to host meetings in a wider variety of communities close to more isolated disadvantaged populations affected by the spill, which would provide a greater opportunity for attendance by those effected populations. While requests for written comment during scoping, and providing online portals for project submissions, are forms of public engagement, these methods do not typically meet the needs of frontline communities. The Trustees must adopt more participatory and inclusive practices, such as workshops and in-person meetings, to ensure that underserved constituents have an opportunity for their voice to be heard in all phases. In evaluating proposed projects, the Trustees also should consider the needs of local residents, particularly from historically marginalized groups. For instance, a recreational loss of use project is found to potentially benefit the local economy, this is an important consideration for the Trustees. However, if a project restricts access to natural resources associated with the project, such as with parking fees or lodging rates, this may exclude low-income families who traditionally have accessed the area. The potential for job creation hinges on the use of local labor and contractors when implementing ecological and recreational projects. To ensure a benefit to the local population, implementing Trustees should be required to give preference to the local workforce, implement robust training programs and partner with local nonprofit workforce intermediaries to identify local hiring pool.8 The Spill recovery should assist, and not further marginalize, frontline communities.

Organization: Gulf Restoration Network

Comment Text: Public Participation and Socioeconomic Impacts It is important in this process, that inclusive methods of public participation be utilized so that all stakeholders have the opportunity to be engaged and influence planning. Mobile Baykeeper appreciates the opportunity to provide written comments and acknowledges the value of the online portals for project submission; however, it is not likely many of the underserved individuals most severely impacted by the BP/Deepwater Horizon Oil Disaster have access to these methods of communication. Therefore, we suggest that the Trustees use additional practices to increase inclusivity. These processes could include stakeholder workshops, scoping meetings, and direct correspondence with community action groups that represent these areas.

Organization: Mobile Baykeepers

PR100 Project Recommendation: Land Acquisition (Substantive)

Comment Text: Projects for Recreational Loss of Use Mobile Baykeeper most strongly supports land acquisition projects because they would directly replace the injury caused by the BP Deepwater Horizon Oil Disaster. Adding lands that have a reasonable potential to be removed from public access for private development would be the highest priority lands to acquire. Land Acquisition that enables public access to areas rarely accessible would be second priority followed by lands that have the highest value for conservation - birding, wetlands, endangered or threatened species, etc. Projects that require build-out, major additions of impermeable paving, and/or limit full access to every socioeconomic background should not be supported on any project list. While adding a parking lot and/or a bathroom facility could be the best way to provide true access to area waterways, those should only be done with using Low Impact Design and the highest green building standards.

Organization: Mobile Baykeepers

Comment Text: The Friends of Bon Secour National Wildlife Refuge have partnered with The Conservation Fund in support of the acquisition of key tracts within the proposed boundary of the refuge. These tracts would permanently protect lands identified by the U. S. Fish and Wildlife Service (USFWS) as the highest priority for acquisition and long-term management. It will add two separate tracts within the approved acquisition boundary, which are currently under agreement for purchase by The Conservation Fund, totaling approximately 488 acres of sensitive coastal lands to the Little Point Clear Unit at this refuge. These lands include significant frontage along St. Andrews Bay, Bon Secour Bay and greater than 200 acres of salt and freshwater wetlands, as well as numerous tidal sloughs, and adjacent upland areas. This acreage shares several property borders with the Bon Secour NWR (USFWS) and will immediately be managed for improved coastal habitat. The refuge is home to the endangered Alabama beach mouse, which is associated with the sand dunes and sea oats. Refuge beaches serve as nesting sites for loggerhead, and Kemp's Ridley sea turtles. Habitat types include beaches and sand dunes, scrub forest, fresh and saltwater marshes, fresh water swamps, and uplands. More than 370 species of birds have been identified on the refuge during migratory seasons, with many shorebirds and wetland-dependent species utilizing the habitats present for resting, wintering and nesting needs. The Conservation Fund has secured contracts for purchase of these lands, which would allow the project to proceed immediately pending availability of funds. Through the purchase and integration of these lands into the National Wildlife Refuge System, this project will support the recreational use goals for NRD, under the Final Programmatic Damage Assessment and Restoration Plan. Specifically, this project will provide expanded public access to high quality coastal systems, as compatible with wildlife utilizing these lands. The addition of these lands to the refuge will provide for expanded fishing, wildlife viewing, photography, boating/ paddling, walking trails, as well as other potential public recreational opportunities. Annual visitation to the Bon Secour NWR ranges from 50,000, to more than 100,000 people. While interactions by visitors vary substantially, there should be no question that additional public lands would enable greater opportunities for the local and tourism-related public to experience the wide variety of coastal ecosystems present on these tracts. In addition, Bon Secour NWR offers environmental education programs for students of all ages. The refuge provides unique and exciting outdoor environments for hands-on, inquiry based learning activities. Numerous youth and adult groups visit every year to learn about wildlife, habitat, and/ or ecological processes. With the expansion of the Little Point Clear Unit by 25% under this project, greater hands on educational and other outreach

PR100 Project Recommendation: Land Acquisition (Substantive)

opportunities would be provided to the public. This project has also been submitted through the Alabama Coastal Restoration website, as two individual tracts, with identification numbers 67 & 113.

Organization: Friends of Bon Secour National Wildlife Refuge

Comment Text: I am writing to share my support for the Bon Secour NWR acquisition through the Conservation Fund. This 488-acre tract of land will add significantly to the National Wildlife Refuge holding which, in turn, will benefit endangered species (Alabama Beach Mouse), recreational stakeholders, and the overall environmental health of the area. Through the purchase and integration of these lands into the National Wildlife Refuge System, this project will support the recreational use goals for NRD, under the Final Programmatic Damage Assessment and Restoration Plan. Specifically, this project will provide expanded public access to high quality coastal systems, as compatible with wildlife utilizing these lands. The addition of these lands to the refuge will provide for expanded fishing, wildlife viewing, photography, boating/ paddling, walking trails, as well as other potential public recreational opportunities. Annual visitation to the Bon Secour NWR ranges from 50,000, to more than 100,000 people. While interactions by visitors vary substantially, there should be no question that additional public lands would enable greater opportunities for the local and tourism-related public to experience the wide variety of coastal ecosystems present on these tracts. In addition, Bon Secour NWR offers environmental education programs for students of all ages. The refuge provides unique and exciting outdoor environments for hands-on, inquiry based learning activities. Numerous youth and adult groups visit every year to learn about wildlife, habitat, and/ or ecological processes. With the expansion of the Little Point Clear Unit by 25% under this project, greater hands on educational and other outreach opportunities would be provided to the public.

Organization: Weeks Bay Foundation

Comment Text: Our Road Tracts- [$7,450,000 - 5.89 acres] Due-diligence - - - Yellow-book Appraisal (plus review appraisers reports) and Title Report are completed for this property and available from DOI and ACHT if requested. There are few properties left on the Fort Morgan peninsula that are available for purchase that have not been developed or are not located in a neighborhood of single family homes and/or condominium developments. The three Our Road Tracts are an opportunity to acquire approximately 6 acres critical habitat that connect to Bureau of Land Management (BLM) property along the Fort Morgan Peninsula. The original BLM land was purchased for WWII veterans to enjoy the coastal land. BLM has provides public access at Lot 24 and has made an effort to restore this area - of which was heavily utilized by response vehicles during the oil spill. Ownership of the Gulf front land would allow for further public access along a shoreline dominated by private property. The three tracts that we wish to acquire are owned by one property owner. The first tract contains about 0.33 acres and currently has an abandoned house on the property that was not rebuilt after Hurricane Ivan in 2004. This is Gulf beach front habitat that would usually consist of primary and secondary dunes. If acquired the home would be removed either through volunteer fire-fighter training or other means. The second tract of land, adjacent to the first, is 1.26 acres of beach front that has never been developed. The land would normally consist of primary and secondary dunes but has had little formation since 2004. Some restoration activities can easily bring back these dunes. The third tract is north of the first two tracts. It

PR100 Project Recommendation: Land Acquisition (Substantive)

has never been developed and contains well-developed secondary dunes and scrub dunes. All three tracts are connected by a 66 foot right-of-way held by Baldwin County (0.62 acres); however, the county has no plans to install a road. The availability of these parcels on the market is a chance to conserve 5.59 acres of Alabama beach mouse habitat that contains all the elements needed for critical habitat. Because it is contiguous to BLM lands (~14.57 acres), it will expand the area under permanent conservation in a threatened landscape. Not only is this critical habitat for the beach mouse, but the site is also important habitat for neo-tropical migrating birds and nesting endangered and threatened sea turtles. Public ownership will clear the way for needed habitat restoration. We are working in partnership with the USFWS and the BLM staff (Jackson, MS) to acquire and manage these parcels collectively. If purchased, ACHT can hold the property until it can be conveyed to a federal holding (BLM or USFWS).

Organization: Alabama Coastal Heritage Trust

Comment Text: Gulf Highlands - [$35,000,000 - 113 acres, 2700 feet Gulf frontage] Objective: To acquire the last large, privately held parcel of beach/dune habitat in coastal Alabama. Outcome: Protection and management of 113 acres, 2700ft of Gulf frontage of beach/dune habitat for endangered species and provide passive recreation access to the public. Despite major development on the surrounding properties and 15 years of litigation focused on development of this property, Gulf Highlands parcel remains undisturbed. All permits have been received locally and federally and there are no contingencies left to be satisfied. Threat of development is high due to increased sales along the gulf coast and a renewed interest by resort developers. Seller is willing to abide by yellow book appraisal, but still seeking development opportunities. If development opportunity exists, sellers will proceed with development. Money stemming from the spill represents the last hope to secure this land for public use. This property provides one of the last known refuges for the endangered Alabama beach mouse, which utilizes the high ground on the property during storms (hence the Highlands portion of the propertys name). The beach is also utilized by three species of endangered sea turtles, as well as ESA-listed piping plovers. The dune field is an important nesting area for least terns and other shorebirds, and is home to several rare plants. As one of the only open tracts along the Fort Morgan peninsula, the Highlands also serves as an invaluable corridor for butterflies and birds migrating across the Gulf. A biological assessment has been prepared (USFWS) and can be provided for information on the ecological value of the land. This property could become part of the State Park system to complement the Gulf State Lodge and Conference Center project. It is envisaged that future management of the property would allow for passive human access, including primitive camping, beach access, fishing, and a nature trail and boardwalk through the dunes. Overall, the Highlands would be a good connection to other protected properties in the county owned by the State, Weeks Bay Foundation, and Bon Secour National Wildlife Refuge. Gulf Highlands LLC has promised $1 million in funding to allow for passive access and for nature tourism promotion. If yellowbook appraisal is received, the Gulf Highlands will put back this amount to make the property accessible to the public. See pledged match components in below letter. To whom it may concern: Alabama Coastal Heritage Trust on behalf of Nick Wilmott (Gulf Highlands LLC) has provided a Gulf Highland Land Acquisition project to Alabama Restoration Portal (Proposal #132; http://www.alabamacoastalrestoration.org/ProjectView.aspx?projectID=132). In the proposal budget, we outlined our match: " ACHT has promised our current existing funds that are dedicated to beach

PR100 Project Recommendation: Land Acquisition (Substantive)

mouse habitat conservation. There are two trust accounts that need to specifically be spent on beach mouse habitat related projects. (amount to be determined at time of purchase ~$300K) o Beach Mouse Trust o in lieu fees from the USFWS permit process. " ACHT would also like to offer to do all due-diligence work on the property with a grant from the Partnership for Gulf Coast Land Conservation (~$25,000) " Gulf Highlands LLC has promised $1M in funding to allow for passive access and for nature tourism promotion. If yellowbook appraisal is received, the Gulf Highlands will put back this amount to make the property accessible to the public) As we know this is some of the last intact beach mouse habitat and important high land refuge for them during storm events, ACHT is willing to put up all their trust funds to match this project acquisition.

Organization: Alabama Coastal Heritage Trust

Comment Text: Alabama Coast restoration and recreation is thus critically needed, via land acquisition and protection and restoration for the Mobile-Tensaw Delta and Mobile Bay and Dauphin Island only, not for Gulf State Park, which is the last pristine span of easily accessible to the general public white-sand beach available to Alabama citizens via abundant parking, a beach pavilion and an enormous fishing pier.

Organization: Gulf Restoration Network

Comment Text: From our perspective as a land conservation organization, investments in recreation should: 1) Include land acquisition to increase opportunities for the public to enjoy coastal habitats; 2) Be designed to have multiple benefits (parks and green space can be designed for wildlife habitat or water storage during flood events); 3) Do no harm. If roads, piers, and boat ramps are considered, make sure that best management practices, sustainable materials, and green infrastructure are included in the design; and 4) Improve and protect the natural resources that people rely upon for their recreational pursuits such as water quality and a sustainable fishery. Some examples to compensate the public for lost recreational use opportunities in Alabama caused by the Deepwater Horizon oil spill could include the fee simple acquisition and placement of perpetual conservation easements on acquired land for conservation. The Goat Island parcels, the Mobile Bay Brookley Bayfront tract and the Laguna Cove tracts are examples of potential conservation projects that could be acquired with these funds.

Organization: Pelican Coast Conservancy

Comment Text: Prioritize Projects that Provide Ecological and Recreational Benefits NWF respectfully requests the Alabama TIG give priority consideration to those projects that serve to provide multi-benefits, namely ecological and recreational. Specifically, a project that serves as a good example of this principle is a land acquisition project associated with Bon Secour National Wildlife Refuge, which NWF has recognized as one of five high priority restoration opportunities on the Alabama Coast (NWFs Restoring the Gulf of Mexico for People and Wildlife: Recommended Projects and Priorities is available at www.nwf.org/restoringthegulf). Known as Bon Secour National Wildlife Refuge Land Acquisition, the project intends to permanently protect an additional 488 acres of sensitive lands identified by the U.S. Fish and Wildlife Service as the highest priority for acquisition and long-term management of the Refuge. The Refuge is renowned for its ecological value and biological significance on the Alabama Coast

PR100 Project Recommendation: Land Acquisition (Substantive)

as well as the tangible benefits it provides for regional fish, bird, and wildlife populations. In addition to these considerable ecological benefits, this acquisition would support the important recreational use and public access opportunities provided by the Refuge, notably by significantly expanding its size by twenty-five percent. These additional public lands would expand low-impact, wildlife-compatible recreational activities including, but not limited to, fishing, boating/paddling, swimming, trails, wildlife viewing, photography, and nature-based interpretive and educational activities. Finally, The Conservation Fund has this acreage under agreement for purchase, so the project is poised for immediate implementation pending the availability of funds. NWF hopes the Alabama TIG will take advantage of this unique and rare opportunity to protect and expand access to such an exceptional asset.

Organization: National Wildlife Federation

Comment Text: The City of Mobile (City) respectfully recommends strategic land conservation (via fee acquisition and conservation easements from willing landowners) along the western shore of Mobile Bay as a means of ensuring public access and passive, nature-based recreation opportunities in underserved communities. The City has already secured a National Fish and Wildlife Foundation Gulf Environmental Benefit Fund (NFWF GEBF) grant to conduct the initial phase of this land protection effort includes preliminary due-diligence activities on three strategic areas within Perch Creek/Dog River and Three-mile Creek/Hickory Street focal areas encompassing almost 500 acres. Protecting key parcels in these focal areas will connect the existing City Parks along the western shore of Mobile Bay and associated with Three-mile Creek, and will support the goals and objectives of several publicly vetted, existing conservation, land use, public access and resilience plans (listed below). This first foundational NFWF GEBF project (to be completed in early 2017) will produce detailed habitat assessments in each focal area, identification of key parcels and willing landowners, title exams, surveys, and appraisals needed to determine the land costs. The habitat assessments will also provide scientifically-justifiable estimates on the net environmental benefit of these projects against the negotiated injury in the Natural Resource Damage Assessment (NRDA) Final Programmatic Damage Assessment and Restoration Plan (PDARP).

Organization: City of Mobile

Comment Text: The resulting 'shovel-ready' land protection project proposals will be in line with both the NFWF GEBF plea agreement and NRDA process, and the foundational investments from NFWF can be leveraged with NRDA funds to complete the acquisitions. Additionally, the proposed acquisitions along the western shore of Mobile Bay support the recommendations of several recreational-use plans at the local level and watershed level: Mayor Stimpson's Mobile Greenway Initiative focuses on providing public access, via bike and pedestrian paths, to the Bayfront. The project site is identified as "Proposed Parks and Green Spaces" on the City of Mobile Green Spaces Master Plan (March 2001) A New Plan for Mobile: An Urban Planning, Design, and Economic Development Plan identifies potential uses of these parcels for public access. Mobile County Bicentennial Bicycle and Pedestrian Master Plan (2011) also highlights these parcels as potential for bike paths along Mobile Bay. A Land Conservation Vision for the Gulf of Mexico Region (2014) by the Partnership for Gulf Coast Land Conservation

PR100 Project Recommendation: Land Acquisition (Substantive)

identifies these sites within focal areas for land protection in coastal Alabama. The Peninsula of Mobile community-based organization has a soon-to-be-released Master Plan that emphasizes these types of public access. Three-mile Creek Watershed Management Plan (2014) identifies potential in Hickory Street area for trails and public access and the important of this to the surrounding underserved community. Dog River Watershed Management Plan (2016) identifies the green spaces in this watershed as important for water quality and for increasing limited public access along this shore. The Alabama State Wildlife Action Plan (2015 Draft) recommends a coordinate plan to acquire property or purchase conservation easements "to protect, enhance, restore and manage undeveloped coastal wetlands,"... in the Mobile Bay watershed. We strongly urge you to consider this important land conservation effort as you develop Alabama's Recreational Use Restoration Plan and Environment Impact Statement and we offer our assistance to you.

Organization: City of Mobile

PR200 Project Recommendation: Water Quality (Substantive)

Comment Text: The Alabama coast was impacted following the Deepwater Horizon oil spill in a variety of ways many of which we are just starting to see the impact of. This is particularly true for the Gulf of Mexico beaches and Little Lagoon in Gulf Shores AL. Oil balls are still being washed up on the beaches and their effects on beach ecology is hard to document as we have little information as to the beach ecology in that area prior to the oil spill. Studies are urgently needed to document the current ecological health of Little Lagoon and the Gulf of Mexico beaches. Oil spills or other man-made disasters will occur in the future and a baseline of current ecological conditions is needed to evaluate the impacts of future disasters. Such a baseline is also needed to evaluate the impact of mitigation activities such as living shorelines to improve ecological conditions.

Comment Text: There are several improvements to Little Lagoon that LLPS feels are needed to restore and enhance recreational opportunities in the Lagoon and preserve such opportunities for future generations. 1) Addition of living shorelines to increase the percentage of natural shorelines, increase nursery areas for important invertebrate and vertebrate species, and reduce the need to bulkhead the shoreline. 2) Reduce the phytoplankton blooms that are becoming increasingly frequent and dense: a.) Use filter-feeding shellfish to reduce algal biomass, nutrients and bacteria, and b.) Eliminate septic tanks in the lagoon watershed that are contributing nutrients to the plankton blooms and to the risk of fecal contamination of the lagoon. 3) Establish a solid base-line as to the species found in the Little Lagoon watershed, determine their abundance and the critical habitats needed for preservation, and to evaluate the impact of future environmental actions; a) Monitor these species and habitat relationships every 5- 10years to determine impacts and causes of change in their abundance; b) Acquire critical habitats in the lagoon watershed as there are several areas of lagoon shoreline that have yet to be developed. 4) Conduct fish monitoring programs to improve recreational fishing: a) Determine the year class strengths of important fish species and their recruitment; b) Determine the growth and survival of

PR200 Project Recommendation: Water Quality (Substantive)

important species based on mark & recapture studies; c) Establish and determine the contribution of artificial reefs to improve recreational opportunities.

Organization: Little Lagoon Lake Preservation Society

Comment Text: One consequence of the oil spill mitigation efforts was making the rest of the US aware of the quality beaches in Alabama and as a result tourism increased significantly but it also increased the ecological pressure on an already stressed environment. More construction and more paved areas increased the nutrient loading of Little Lagoon reducing its productivity and recreational appeal. The lagoon needs a reduction in its nutrient loading to reduce the risks of toxic algae blooms and allow a return of its seagrass beds. Improved storm water management is needed to reduce nutrient input and toxicants from entering Little Lagoon. The City of Gulf Shores has a public sewer system available to most of its residences but there are still a number of private homes on septic tank systems that increase the groundwater nutrient loading and in turn the nutrient loading of Little Lagoon. Such septic tanks in the lower portion of the lagoon watershed are subject to flooding. This increases the risk of fecal coliform contamination of the lagoon and restrictions on the recreational use of the lagoon. A priority should be given to eliminating all septic tank systems in the Little Lagoon watershed. This will help to maximize a diversity of recreational opportunities.

Comment Text: Proposal for Little Lagoon Gulf Shores, AL Sewer hook-ups for surrounding waterfronts We have a water monitoring group for about 10 yrs on Little Lagoon and after big rains we have high e coli readings especially around the older neighborhoods near hwy 59. My proposal I would be to use some money to either pay some or all of the money necessary for sewer hook-ups to get people off the septi. Prime candidates would be of course anybody with a pipe directly in the Lagoon, someone with a septic tanks close to the Lagoon or someone whose property would no longer pass the new perk test rules. Not just for anyone who wants their sewer paid.

Comment Text: As a charter captain, 7th generation local, and someone who has spent a lifetime fishing Little Lagoon, I fully support any and all efforts in funding that may be directed to help restore water and fishing quality. Over the last several years I have personally seen and experienced a decline in the amount of fish and overall vitality of our local ecosystem. I hope this finds a hearing ear and reaches someone who has the ability to help us restore the Little Lagoon as well as the surrounding waters.

PR300 Project Recommendation: Recreational fisheries (Substantive)

Comment Text: 3. Lionfish invasion response program Proposed Restoration Approach: Develop a lionfish invasion response program for the State of Alabama. The program would be modeled after the exemplary work done in the State of Florida to control the invasion and incentivize harvest of lionfish. Link to Injury: The footprint of oil from the Deepwater Horizon oil disaster overlapped portions of the geographic range and spawning period of many fish species important to recreational fisherman in Alabama. For example, the eggs and larvae of red snapper and other finfish spawning at the time, in addition to adult fish, were exposed to petroleum hydrocarbons and chemical dispersants resulting in

PR300 Project Recommendation: Recreational fisheries (Substantive)

50,000 - 200000 kilograms of forgone production.39 Project Summary: Lionfish have become established in the Gulf of Mexico and are posing a growing risk to native fish populations, ecosystem structure and function, and are threatening highly valued commercial and recreational fisheries. Although much remains to be known about the biology of the invasion, it remains clear that strategies to mitigate the invasion are needed now in order to help protect socially and economically important fisheries. Florida Fish and Wildlife Conservation Commission (FWC) can be viewed as a model to follow with their response to the invasion. Their approach has been set up a program to study the problem, educate the public, provide resources to promote removals and provide incentives for increased harvest. This program takes a multifaceted approach to address the invasion on several fronts. Alabama could use this program as a model to establish a similar program for the waters off the coast of Alabama. This strategy would be a good fit for a restoration project to restore lost recreational use in Alabama. A recreational use project targeting lionfish would mitigate stressors to native fish species, could be modeled after the program in Florida and would be designed to educate anglers and spear fishermen about how they can help control the lionfish population. Alabama Department of Natural Resources would be the organizing entity and could partner with local and regional non-government organizations to accomplish program goals. An example of possible program goals could include: â€¢ Reduce regulatory barriers for harvesting lionfish; Develop best practices for harvesting and handling lionfish; Assist in market creation to supply a growing public demand for the fish; Develop an incentive framework that promotes the harvest of lionfish; â€¢ Host public events, tournaments, etc. to educate the public; Allocate resources to monitor lionfish populations on natural and artificial reefs; Create an information clearing house to ensure accurate and consistent information on the invasion and its impacts is gathered; Promote academic research on the extent and impacts of the invasion as well as research on mitigation tools and technologies.

Organization: Ocean Conservancy

Comment Text: I am an avid fresh and saltwater fisherman. The State Park is the only location that is convenient for both. I also supervised a unit of individuals that assisted in building the board walk at the pier so that many others can enjoy it. It is a shame for all that hard work to go to waste and for this gem to be kept from the enjoyment of so many.

Organization: Ocean Fever Outfitters

Comment Text: As a charter captain, 7th generation local, and someone who has spent a lifetime fishing Little Lagoon, I fully support any and all efforts in funding that may be directed to help restore water and fishing quality. Over the last several years I have personally seen and experienced a decline in the amount of fish and overall vitality of our local ecosystem. I hope this finds a hearing ear and reaches someone who has the ability to help us restore the Little Lagoon as well as the surrounding waters.

Comment Text: 2. Alternative restoration approaches are available and should be selected to increase recreational catch for anglers. In the PDARP, the Trustees present a list of example restoration approaches5 for recreational use. The approaches are paired with the rationale and expected benefit of each approach. In addition to the restoration approaches included in the PDARP, additional approaches

PR300 Project Recommendation: Recreational fisheries (Substantive)

should be considered to provide additional catch for anglers. The rationale for these projects is the same as that identified for aquaculture techniques: "... increase densities of target species for recreational fishing." The Trustees state: "In the context of restoration, stock enhancement programs could have one or more goals, including providing additional catch for anglers, providing information to fishery managers, and/or helping to mitigate losses suffered from anthropogenic effects. Stock enhancement could include the expansion of existing hatchery operations, the construction of new facilities, and the release and monitoring of finfish and shellfish species reared in those facilities."6 Therefore, we recommend implementing additional approaches to enhance fish stocks that would provide additional catch for anglers including lionfish removal measures and a targeted effort to identify an effective barotrauma reduction device (see Appendix: Alternative Restoration Approaches). These approaches provide the opportunity to increase catch for anglers by reducing existing stressors on fish populations, and to increase the long-term viability of the fishery.

Organization: Ocean Conservancy

Comment Text: 1. Minimizing the effects of barotrauma on reef fish Proposed Restoration Approach: Clarify the effects of fishing induced barotrauma on reef fish species following release will better define discard mortality rates in the Gulf of Mexico. This information will improve our understanding of the current stressors on reef fish populations injured by the BP Deepwater Horizon oil disaster. Link to Injury: The footprint of oil from the BP oil disaster overlapped portions of the geographic range and spawning period of many reef fish species. For example, the eggs and larvae of red snapper and other finfish spawning at the time, in addition to adult fish, were exposed to petroleum hydrocarbons and chemical dispersants resulting in 50,000-200,000 kilograms of forgone production24. Many species of impacted fish are important targets for recreational fishing. Project Summary: Reef fish, such as red snapper (Lutjanus campechanus), are iconic and popular recreational and commercial fish species in the Gulf. For example, in 2014, commercially landed red snapper had an ex-vessel value of $23.1 million.25 The recreational fishery generates millions of dollars as well. Reef fish are known to suffer from barotrauma related injuries and mortality.26 Barotrauma is the condition that results when a fish is brought up from depth rapidly and the change in ambient pressures can cause potentially lethal internal injuries. Barotrauma can cause internal injury (e.g., gas bladder rupture, hemorrhaging, etc.) and positive buoyancy (i.e., floating). These injuries may not allow the fish to return to depth upon release or cause behavioral effects that can increase the risk for predation. Overall, post-release mortality of many Gulf reef fish species is poorly understood. This uncertainty reduces accurate predictions of discard mortality in both commercial and recreational fishery harvest estimates and stock assessments, leading to increased management uncertainty. Accurate prediction of post-release survival is integral to setting appropriate annual catch limits of affected species in order to meet conservation goals. Most barotrauma studies on reef fish have been limited in geographic scope,27, 28 and have not encompassed the full geographic, depth and temperature ranges of these fish in the Gulf.29 Increasing the knowledge of barotrauma in order to increase the post-release survival rate of reef fish Gulf-wide would reduce the impacts of fishing. This investigation of barotrauma should follow the established protocols (e.g., Jarvis and Lowe)30, modified as necessary for reef fish, for both field (e.g., cages, release devices, etc.) and laboratory procedures (e.g., hyperbaric chambers and underwater acoustic tags).31 In general, these protocols focus on and characterize internal/external signs of barotrauma, physiological

PR300 Project Recommendation: Recreational fisheries (Substantive)

status, and short/long term post-release mortality of the species. Further, stakeholder inclusion in the testing and development of best release practices is required in order to determine the methods appropriate and acceptable for anglers. Results of this research project will add to the state of knowledge regarding methods of survivability for reef fish species. Data derived from this pilot study will help managers determine tools that can aid the recovery of reef fish populations impacted by the BP oil disaster and are suitable for wider use in Gulf fisheries. These data will also increase the accuracy of discard mortality estimates and improve annual catch calculations.

Organization: Ocean Conservancy

Comment Text: 2. Recreational fisheries monitoring improves management and enhances recreationally important fish stocks Proposed Restoration Project: Multiple fisheries monitoring techniques are available to increase the precision and timeliness of recreational fisheries catch and effort. These approaches are outlined below, and should be considered for implantation as a component of effective recreational use restoration. Link to Injury: Members of the public lost access to recreational fishing in Alabama because of the BP oil disaster. This approach will restore lost recreational use by providing "additional catch for anglers"32 and "providing information to fishery managers."33 a. Improve monitoring of the private vessel recreational fishery: Project Summary: Improving the private vessel recreational fishery survey in the Gulf will help keep fishery resources healthy and accessible to anglers. This fishery heavily targets four recreational fish species (red snapper, gag grouper, gray triggerfish and greater amberjack) in the Gulf that are under strict rebuilding plans. Exceeding the quota of these species detracts from rebuilding plans and can trigger accountability measures, which reduces access to anglers. Current Marine Recreational Information Program (MRIP) recreational fishery estimates are calculated from survey data collected over a two month, or wave, period.34 Completed estimates are available approximately 45 days after the wave ends, or 105 days after a wave begins.35 One method to reduce the risk of overharvest is for managers to receive more frequent catch and effort estimates. Gulf fishery managers and scientists have repeatedly stated the importance of more frequent catch estimates. Timely delivery of catch estimates improves fisheries management. They allow managers to be proactive and closely monitor catch quotas, thus reducing the likelihood of overages. Two ways to investigate how to increase the frequency and precision of estimates are through changes to the dockside sampling method and how effort is sampled. i. Increased frequency of catch estimates A pilot program would be initiated to determine the optimal sample size of the private recreational vessel fishery to provide catch estimates of precision sufficient to provide the Gulf of Mexico Fisheries Management Council (GMFMC) with monthly estimates during the high effort season from May through September for high priority reef fish species (e.g., gray triggerfish). ii. Alterative effort monitoring methods using video This project would be to equip all high use boat ramps (as determined by MRIP and the state) with video cameras to capture vessel effort. Electronic technology can provide highly specialized data that managers can use to better estimate fishing effort. This improvement translates into increased catch and effort estimate precision. Monitoring of private vessel fishing effort is currently accomplished via telephone survey in Alabama. Telephone-based surveys are a valid and conventional method of conducting data collection; however, Alabama DCNR has shown that video monitoring of public launch ramps can aid in rapid assessment of fishing effort for species like red snapper.36

PR300 Project Recommendation: Recreational fisheries (Substantive)

Organization: Ocean Conservancy

Comment Text: b. Test electronic technology reporting devices for dockside fishery samplers to record and report samples from the field. Project Summary: Electronic technology (ET) tools, like hand-held data loggers or computer tablets, have the potential to allow MRIP samplers to report recreational fishery data in near real-time. At present, data is recorded on standardized paper forms. The forms are sent to supervisors who review and edit them; then they are sent to Gulf States Marine Fisheries Commission where they are scanned into a database via an optical scanner. This process is time and personnel intensive. For many fisheries, like red snapper, data is needed on a very high frequency and management decisions can be delayed due to this data entry process. ET methods are able to provide timelier fishery data delivery than current legacy methods. Increased frequency of data will allow managers to react faster and adapt management options to protect injured resources. In other industries, ET tools have been shown to make data collection and reporting more efficient and cost effective. In order to determine if ET tools are appropriate for fishery data collection, the devices need to be tested across the Gulf. We suggest multiple devices be tested and directly compared to standard data collection methods in order to determine their efficacy c. Equip the state-permitted recreational charter for-hire fleet in Alabama with electronic logbooks (ELB) as a more effective way to track and report catch and effort in the recreational fishery. Project Summary: ELBs will modernize data collection. This technology can significantly reduce uncertainty of vessel effort and improve frequency of catch data to managers for their review. Improvements in data collection translates to more certainty in stock assessments, especially in catch per unit effort, area fished, retained/discard speciation and discard mortality estimates (based on more precise depth information). Increased data frequency affords managers the ability to adapt management strategies to unforeseen situations quickly (e.g., oil spills, etc.). Charter for-hire vessels are either state or federal permitted. Many of Alabama's federally permitted vessels have been part of past pilot projects that tested ELBs37 and the GMFMC is, at present, working towards an electronic reporting amendment.38 State permitted vessels have not participated at the same level in ELB pilot projects. Therefore, to ascertain the benefits of ELBs to this fleet, an investigation into their utility should be initiated. If successful, this action will lead to a unified and consistent method of data collection for the entire charter fleet in Alabama.

Organization: Ocean Conservancy

PR400 Project Recommendation: Improved/expanded coastal experiences (Substantive)

Comment Text: Promote Nature-Based Approaches Coastal Alabamas natural and cultural assets serve as the foundation for a robust nature-based tourism sector, which is a major cornerstone of the regions economy. As such, NWF encourages the Alabama TIG to incorporate nature-based approaches that address the loss of recreational use wherever possible. In addition to nature-based approaches this could include incorporating low-impact, green infrastructure, and/or green building concepts wherever appropriate to ensure recreational use and public access projects are selected, designed, implemented, and managed with ecosystem compatibility and sustainability as well as longevity in mind. These methods should consider sea level rise, future storm events, and other persistent or sudden

PR400 Project Recommendation: Improved/expanded coastal experiences (Substantive)

environmental or human-induced stressors that may affect a projects likelihood of success and longevity. Some examples of these approaches may include: o Prioritizing recreational opportunities that contribute to the conservation of natural areas and natural resources of the coast and region o Low-impact trails that are well-designed and marked to ensure minimal disturbance to the surrounding ecosystem o Recreational projects that include a construction component should employ principles of low impact development, sustainable design, green infrastructure, green building, best management practices, and/or eco-friendly materials o Protecting, restoring, and/or planting native vegetation to promote ecosystem health and resilience, support wildlife, marine life, and birds, and reduce water demands and maintenance o Interpretive projects and programs should incorporate stewardship elements such as education and outreach to ensure long-term use, enjoyment, and benefit by residents, visitors, tourists, and local businesses NWF offers our expertise in providing more specific suggestions to strengthen the sustainability of projects as well as our willingness to make connections with knowledgeable local and regional professionals who can lend technical expertise.

Organization: National Wildlife Federation

Comment Text: It's exciting to think that future generations (like my grandsons) will have the opportunity to experience nature and create memories like the ones I had as a child at this incredible location. As an adult it was always tempting to skip the conference and enjoy the sun and sand

Comment Text: I am thrilled about all the public access improvements proposed for the park. Dune restoration, new trails, replacing the lodge and conference center and improving educational and recreational opportunities will each play a role in allowing more residents and visitors more ways to enjoy the park.

Comment Text: [Note: This project also contains four other elements coded under PR200] 5) Increase recreational opportunities on Little Lagoon: a) Acquire and develop public access areas on the southern side of Little Lagoon west of the pass where there are no public access areas currently available; b) Add canoe and kayak access areas on Little Lagoon with appropriate parking areas; c) Establish artificial reefs in Little Lagoon for public fishing and; d) Develop a boardwalk and pier on lagoon shoreline owned by the City of Gulf Shores for public use.

Organization: Little Lagoon Lake Preservation Society

Comment Text: The Mobile County Commission has previously submitted four projects as suggestions for funding consideration that address lost recreational uses in Alabama as a result of the Deepwater Horizon oil spill. We respectfully request your consideration of these projects while preparing an EIS that is used to evaluate the projects proposed by the Alabama TIG to address recreational loss, restoration and enhancement in Alabama. The Projects proposed to the Alabama Gulf Coast Recovery Council are listed below: 1- Project ID # 199 - Bayfront Park Restoration and Improvement 2- Project ID # 200 - Chickasabogue Park Habitat Restoration and Enhancement 2- Project 3- Project ID # 227 - Escatawpa River Trail System 4 -Project ID # 228 - Mobile County Blueway Trail Development

PR400 Project Recommendation: Improved/expanded coastal experiences (Substantive)

Organization: Mobile County Commission

Comment Text: Immediately after the decision, the governor's director for the Gulf State Park Project, Cooper Shattuck, a University of Alabama attorney, stated in published remarks that foundation work on the lodge/conference center would continue, allegedly funded with BP grant money. Shattuck also stated that the work on the lodge should be finished by 2018. Associated Press, Work Begins on Gulf State Park Conference Center Restoration, AL.com, Mar. 18, 2016. And, just prior to the present scoping process, at the end of June, the Alabama governor's office issued a press release with the headline, "Gov. Bentley Makes Good on His Promise: Announces Gulf State Park Renovations on Schedule." Rick Harmon, Governor Bentley Makes Good on His Promise: Announces Gulf State Park Renovations on Schedule, Ala. Tourism Dep't, June 27, 2016. In this press release, the governor's office states that the lodge and "meeting space" (conference center) were under construction and that all five components of the "Gulf State Park Enhancement Project" were due to completed and opened by the summer of 2018. Id. Furthermore, the governor's office stated that the whole project would cost $135 million and be funded from funds that "BP provided to restore the economy," not tax monies. Id. Governor Bentley also stated that the University of Alabama system and the Alabama Department of Natural Resources and Conservation would work together to finish the project. Id. While the governor is obviously free to pursue his own objectives, the State of Alabama is giving the impression to the public that the Gulf State Park is a foreordained deal. Not only would it violate the law governing uses of the NRDA monies to make this decision prior to proper analysis, it would forsake the potential value of many other projects on the list of possible enhancements to Alabama's coast. The Alabama TIG should not be predisposed in this RP/ EIS to use these monies to build the lodge/ convention center. We ask that the state and federal trustees look more broadly at the myriad of potential projects that they could move forward with $58.5 million dollars. These many projects will provide numerous recreational opportunities on the Alabama coast to a broad swath of Alabama citizens, and this scoping process provides the opportunity to take a fresh look at these opportunities provided in the RP and EIS.

Organization: The Southern Environmental Law Center

Comment Text: Importantly, there is a long list of urgently needed restoration projects which fit within the OPA project criteria and the statutory objectives, and address damage caused to natural resources which are directly related to the oil spill. Moreover, such projects are compatible with ecosystem restoration, which should be a goal of the trustees. These projects, which are all listed at Alabama Department of Conservation and Natural Resources website, Alabama Coastal Restoration Suggested Projects, http://alabamacoastalrestoration.org/ProjectPrint.aspx (last visited Aug. 5, 2016) include the following projects pertaining to Alabama state parks: Project # Project name Cost 82 Dauphin Island Audubon Bird Sanctuary Shoreline Restoration and Management $ 9,525,000 111 Spanish Fort Ecological Park $ 21,250,000 151 Repairs to the Fort Morgan Fishing Pier $ 1,000,000 152 Promotions for fort morgan state historic site $ 200,000 159 Wolf creek park expansion $ 325,000 189 Perch Creek Nature Trail at McNally Park $ 1,500,000 199 Bayfront Park Restoration and Improvement $ 4,000,000 200 Chickasabouge Park Habitat Restoration and Enhancement $ 6,000,000 210 Infrastructure improvements in existing park and green spaces $ 10,000,000 234 Expansion of Helen Wood Park and Preserve $ 2,380,000 235 Perch Creek Blueway Trail and Park $ 2,982,500 237 Safe Harbor Dock Facility

PR400 Project Recommendation: Improved/expanded coastal experiences (Substantive)

for Coastal Alabama $ 4,150,000 295 Mid-Island Parks $ 6,264,000 272 Lillian Park Beach Habitat and Shoreline Protection Improvements $ 679,500 These types of projects serve the restoration process envisioned by NRDA and OPA much better. The $58.5 million at issue could be allocated to these projects, and others like them, in order to get the best and highest use of the NRDA monies, rather than devoting them all to one project which will not fulfill OPA's objective of restoring natural resources or providing greater access to natural resources or services.

Organization: The Southern Environmental Law Center

Comment Text: Approximately 14 currently proposed projects other than the lodge/ conference center would create new parks or expand, repair, and improve facilities at existing parks in Alabama. Approximately 12 these projects would cost (at an average of $5,018,286 per project) just over the total cost of the lodge/ conference center. In other words, NRDA monies for this Recreational Use RP could fund a dozen projects and create a variety of recreational use activities for a diverse range of communities for the cost of one lodge/ conference center. This greatly boasts the number and variety of people that could benefit from these monies and enjoy Alabama's coast.

Organization: The Southern Environmental Law Center

Comment Text: As the Trustees consider projects for recreational loss of use funding in Alabama, there are projects across Mobile and Baldwin Counties, including Gulf State Park, which would restore the injuries experienced in Alabama.32 Should Alabama's aim be to find a project that meets the same compensation for "loss of use" as the proposed hotel and convention center, there are a number of projects (or suites of projects) that could meet the same recovery metrics. Considering Alabama's lack of public beach access, the acquisition of beach property, recreational facilities, or public access points could reasonably provide the same measurable outcome. For example, these projects found in the Alabama Coastal Restoration portal33 would meet the criteria for recreational loss of use: • Project 79 - Aloe Bay Harbour Town (Mobile County) • Project 82 - Dauphin Island Audubon Bird Sanctuary Shoreline Restoration and Management (Mobile County) • Project 102 - Alabama Audubon Coastal Bird Stewardship Program (Baldwin/Mobile County) • Project 111 - Spanish Fort Ecological Park (Baldwin County) • Project 174 - USA Coastal and Environmental Sciences Initiatives (Mobile County) • Project 177 - Hog Bayou Campground (Mobile County) • Project 188 - Coastal Sustainable Tourism Laboratory (Baldwin County) • Project 199 - Bayfront Park Restoration Improvement (Mobile County) • Project 200 - Chickasabouge Park Habitat Restoration and Enhancement (Mobile County) • Project 210 - Infrastructure Improvements of existing park and green spaces (Mobile County) • Project 233 - D'Olive Creek Property Purchase, Habitat Study, Nutrient Removal Research/Education Facility (Baldwin County) • Project 240 - Delta Port Marina Oysterman Support Dock (Mobile County) • Project 266 - Perdido Watershed Access Improvement (Baldwin County) In addition to these specific projects, other recreational projects that would meet the needs of the community include land acquisition for public access, living shoreline and artificial reef projects, fishing access - piers and boat launches, fishery programs34 and other park enhancement and educational opportunities cross Alabama's coastal zone. In Early Restoration, the Trustees stated that it is challenging to choose a "recreational use ... restoration project...large enough to provide a significant contribution towards compensating for the recreational

PR400 Project Recommendation: Improved/expanded coastal experiences (Substantive)

use losses" in Alabama.35 We wholly disagree, and the above-listed project proposals demonstrate that there are a variety of options to restore recreational use losses. However, if the Trustees truly believe that no appropriate project or suite of projects exists to compensate for the lost recreational uses experienced in Alabama, then a no-action alternative is the appropriate choice.

Organization: Gulf Restoration Network

Comment Text: The increased private construction around Little Lagoon has reduced shoreline vegetation and marsh areas. It has also limited public assess to the lagoon for recreational opportunities. This is particularly an issue for the section of Gulf beach and Little Lagoon shoreline along Hwy 182 from the lagoon pass to the western end of the highway. That five mile section of highway does not provide any public assess areas to the Gulf or to the Lagoon, severely limiting recreational opportunities for out of town visitors such as myself. There are several areas of marsh in that portion of the lagoon that need to be preserved. With careful planning recreational opportunities can be increased along that section of Gulf and lagoon while preserving some valuable habitat.

Comment Text: The creation and enhancement of hiking trails, along with the construction of a lodge, would provide and enhance recreational use in Alabama, and would restore the state resources in a way that would benefit all of the public.

PR4000 Project Recommendation: Artificial Reefs (Substantive)

Comment Text: Consider Artificial Reefs The State of Alabama has developed a very mature, robust artificial reef (AR) program that includes a recent 2014 report by ADCNRs Marine Resources Division in partnership with Alabama Wildlife Federation (NWFs state affiliate) and the Alabama Chapter of the Coastal Conservation Association (see http://www.alreefs.com/resources/submitted_plan.pdf). NWF believes that ARs could help to restore or replace the loss of human use stemming from the DWH oil disaster, specifically it would be appropriate: 1) To restore or replace existing ARs that were oiled and/or damaged, or 2) Scaled appropriately, ARs could help compensate the public for lost access, or human use, by generating new opportunities for recreational fishing, snorkeling, and engaging in other recreational activities. Notably, as part of the DWH recovery effort, Alabama was awarded a $12.5 million dollar National Fish and Wildlife Foundation Gulf Environmental Benefit Fund (NFWF GEBF) grant for a three-year project to expand and enhance the states AR program (see http://www.nfwf.org/gulf/Documents/al-artificial reef-15.pdf). As an existing restoration investment, this project should provide sound economic and ecological resource leverage opportunities. Also since this project incorporates extensive monitoring to determine success, the results gathered should be useful to better inform the siting and design of future AR projects.

Organization: National Wildlife Federation

PR500 Project Recommendation: New/additional lodging (Substantive)

Comment Text: Gulf State Park Lodge and Conference Center is inappropriate as a Natural Resource Damage project. We have commented7 extensively on recreational use restoration projects in Alabama, with specific focus on the Gulf State Park Lodge and Conference Center. We reassert our comments8 from Phase III early restoration, which explained why components related to the Gulf State Park Lodge and Conference Center are inappropriate as a Natural Resource Damage projects under OPA.9 The project is unacceptable as proposed because its expected impacts would undermine the intent or spirit of NRDA and set a dangerous precedent. Many projects approved in NRDA early restoration will enhance, upgrade or add infrastructure as part of a larger package of recreational amenities or improvements. Roads, utilities (e.g., water, sewer or electricity), parking areas, sidewalks and other types of associated infrastructure are appropriate only if they are essential for making the recreational opportunities accessible, functional or fully utilized, and only if the construction, operation and maintenance of such infrastructure would have a negligible environmental impact. An example of appropriate infrastructure might be a restroom at an existing park, or a replacement or addition of sidewalk or boardwalk to an area that is already partially developed. In contrast, an example of inappropriate infrastructure would be developing an area of natural habitat with buildings, roads or parking lots where the infrastructure would have an ongoing and adverse environmental impact, or paving an existing parking lot when such a need should be addressed through regular operating budgets. The Gulf State Park Lodge and Conference Center will increase disturbance to wildlife resulting from higher visitation, noise levels, trash and foot traffic. In addition, the areas adjacent to the project site are already heavily developed. The proposed project site provides habitat to endangered beach mice in an area with limited undeveloped habitat available. Adjacent beaches provide habitat for nesting sea turtles and birds. While we have raised these and other concerns in our earlier comment letter,10 we reiterate the following concerns about the Gulf State Park Lodge and Conference Center:

Organization: Ocean Conservancy

Comment Text: With that, I feel that we have a responsibility to this unique natural environment to create sustainable access to Gulf State Park so that the uniqueness and beauty of the area can be responsibly enjoyed. In reviewing the plans for Gulf State Park, I believe that the plans for the lodge are a great way to responsibly provide enjoyable access to the area. The opportunity to create a lodge facility that focuses on the care and sustainability of our natural environment is a great way to communicate that we greatly treasure the Gulf Coast and our incredible natural resources. I am incredibly proud to see our public identify opportunities to responsibly create access to enjoy the Gulf Coast of Alabama, rather than the alternatives of large, obtrusive, irresponsible coastal structures.

Comment Text: Alabama needs a new lodge which will give every Alabamian a better chance to enjoy our beautiful beach. It will also bring in new revenues to the state by attracting guests from elsewhere. An ADA compliant lodge will be inclusive for those with disabilities, too. We are from Birmingham and absolutely love the Alabama beaches and would visit much more with a new lodge. We also have a company her that would look strongly at the Gulf State Park lodge when making arrangements for our next retreats and dealer meetings.

PR500 Project Recommendation: New/additional lodging (Substantive)

Comment Text: Our family likes to vacation at national and state parks. Having a lodge in Alabama at the beach to replace the one that was lost will be wonderful not only for the Alabama residents but also for families like ours.

Comment Text: Please rebuild the Lodge at Gulf State Park. My extended family doesn't camp and just isn't interested in staying in cabins or tents. We all love the Gulf State Park though. The boys love the pier and freshwater fishing lakes. The moms love the beach. The kids love the bike trails. If a Lodge was within the park, our extended family would come, park our cars and spend our annual week together inside Gulf State Park.

Comment Text: Being a member of several organizations that have annual conferences, I am very much displeased when we take our money to spend in other states, and go to similar conference centers. The new lodge and conference center will restore waterfront meeting and lodging access for many organizations that cannot meet in coastal Alabama now and it will be an economic benefit to the entire state. The previous lodge was a center piece of the community; it was in the price range of pretty much any group that wished to hold meetings there. Additionally, this new facility will provide more options for public access to our natural resources through park improvements; it will be an asset to local residents and visitors alike.

Comment Text: I am thrilled about all the public access improvements proposed for the park. Dune restoration, new trails, replacing the lodge and conference center and improving educational and recreational opportunities will each play a role in allowing more residents and visitors more ways to enjoy the park.

Comment Text: I strongly support the Alabama Gulf State Park project and believe that through responsible planning the improvements made and the reconstruction of the hotel and conference center can be both environmentally friendly and economically sound. I support the efforts of those involved with the planning and implementation of this project. I believe this project will be an economic boost to not only Coastal Alabama but to the entire state.

Comment Text: I would very much like to have a Lodge at the Gulf State Park. I enjoy the beach but I do not want to stay in a cabin or campground. The Lodge would encourage more use of the State Park and I like the idea that the Lodge would be a "green" facility. It can serve as a model of what should be done and what can be done in building public facilities. It would have a very positive impact on our state, our people, and our visitors.

Comment Text: The State Park Lodge offered a great place for events. My Brother and Sister-in-law renewed their vows there. It holds a lot of sentimental value for my family and myself. When I started looking for a venue for my husband's 60th birthday party this last June, I had a hard time finding a venue for an intimate crowd, approximately 50 people. I settled for a not so ideal place. The State Park would have been perfect.

Organization: Advanced Wastewater Products, LLC

PR500 Project Recommendation: New/additional lodging (Substantive)

Comment Text: I am excited about the meeting space and the green concept of the entire Gulf State Park Lodge. As a lifetime visitor there with family property in Orange Beach, as well as a frequent traveler to conferences, I am excited at the new professional organizations this will attract as well as the features of the plan that we can enjoy while on vacation in the area.

Comment Text: A lodge would be a much needed addition to Gulf Shore Park. We love that the lodge is being designed "green" so as to help protect the environment and to show folks that thinking green is sustainable. Ecotourism is very important and the lodge would help Alabama capitalize on this growing industry. It would bring more jobs to the community as well as boost tourism. A lodge would be an ideal location for conferences or just for families to enjoy the area. A lodge would encourage more use of the park! Please do build this so everyone can come and enjoy the park and the area!!!

Comment Text: The plan for Gulf State Park is a "must-do" for this community and this state. The park draws visitors throughout the year and must be reconfigured in a way that provides public access and the services that users have come to expect. The restoration of the park, including the construction of the lodge, are imperative for our long-term economy and our quality of life.

Organization: Global Marketing Solutions LLC

Comment Text: Having a new and improved lodge at GSP would provide more reasonable accommodations and activities to more people, bringing in more tourist revenue to the area.

Comment Text: The rebuilt Gulf State Park Lodge will take advantage of an already disturbed area and will offer visitors and researchers alike on-site lodging, allowing them to immerse themselves in the park in a way that they cannot do with existing facilities. Coupled with the development of new interpretative trail systems and visitors center, the lodge will create the only place where visitors can experience the ecological and cultural depth of the region.

Organization: The University of Alabama, Office of Archaeological Research

Comment Text: It would be so great to have lodging to stay in while visiting the area and I feel it would be a great gathering place for family and friends for such events as reunions. This would encourage more outdoor activities in the park for visitors such as nature hikes and biking.

Comment Text: A lodge would create more traffic to the park. I would like to see Gulf State Park to grow and encourage more people to go outdoors. Spending time with family and friends while in nature is easier where there's a lodging! I'm excited to see where this project goes.

Comment Text: A new lodge would be a great addition to the coast and provide renewed interest in the park itself.

Comment Text: I think rebuilding the lodge at Gulf State Park is a great restoration plan. It would be nice to have professional conferences there so that my family could go to the beach and enjoy the park while I am in meetings.

PR500 Project Recommendation: New/additional lodging (Substantive)

Comment Text: I support the building of a structure to house conventions on the beaches of beautiful Alabama. There is so much to offer in this area and expanding on the natural beauty there of trails and the building of a large convention site will allow more people to come and enjoy one of Alabama's treasures. Our family owns property in Orange Beach and we love the idea of welcoming others to our area. A facility to hold large conventions is definitely needed.

Comment Text: As a former Commissioner of Conservation and Natural Resources for the State of Alabama, in the strongest possible terms I oppose using any BP funds for the construction of a luxury hotel/convention center at Gulf State Park or for the renovation of the Alabama Governor's Beach Mansion. Both of these projects are currently underway because of 2010 BP grant funds that have illegally been transferred to State of Alabama accounts that are controlled solely by the Governor of Alabama. Both the grant contracts and the laws and constitution of Alabama prohibit the use of this money on these projects, yet Gov. Bentley is spending them on these projects anyway. I find it necessary to point out that the Gulf State Park Lodge & Convention Center was not even standing when the BP oil well blew. Similarly, the Alabama Governor's Beach Mansion was in no way affected by the oil spill. The BP grant and settlement monies were supposed to go to restoring our environment, yet Gov. Bentley has chosen, without approval of the Alabama legislature, to instead build a Gulf State Park luxury hotel that will price most Alabamians off the public beach forever. Similarly, the only citizens that will benefit from the renovation of the Governor's Beach Mansion are Gov. Bentley and his special guests.

Organization: Former AL Commissioner of Conservation & Natural Resources

Comment Text: I'm excited a new lodge would create the chance for more people to enjoy Alabama's gulf coast and would provide the opportunity for more people to visit the park in the future than can today (not everyone is able to or interested in camping, for example, but the lodge provides lodging for folks of all abilities and ages).

Comment Text: I support the Gulf State Park project and encourage swift completion for economic benefit to this area.

Comment Text: A lodge at Gulf State Park would provide a gateway to the natural resources that are unique to the Gulf Shores area. The State Park is centrally located to saltwater and freshwater recreation opportunities as well as the natural habitat of dunes, pine scrub and wetlands. A lodge would allow visitors who cannot camp at the State Park direct access to these significant resources without the impact of driving from more remote lodging facilities. With the immediate surroundings overbuilt with high-rise condos and vacation properties, the lodge would offer a more natural setting and restore the sense of the smaller beach community that many grew up with. As a "destination", the lodge would attract visitors from throughout the southeast with a resulting positive impact on the local economy. Facilities in the lodge would attract receptions, meetings and events, providing a natural setting and unique atmosphere for attendees. In addition, this increases appreciation for the importance of maintaining natural areas for the benefit of all.

Organization:

PR500 Project Recommendation: New/additional lodging (Substantive)

Comment Text: When preparing your restoration plan for the Gulf Coast, please consider the importance of the improvements to trails and visitor facilities, specifically the construction of a lodge, to allow the public to enjoy the natural resources of the area and restore lost recreational use within Alabama. As a family with young children, we often visit Callaway Gardens and Florida's beaches. The restoration of the Gulf State Park area to include a trail system and lodge would not only compensate the public for lost recreational use opportunities, but also provide a family-friendly destination for Alabama residents and out-of-state visitors.

Comment Text: The entire $58,500,000 Deepwater Horizon oil spill DWH NRDA fund that US District Judge Charles R. Butler enjoined Trustees and the Alabama Trustee Implementation Group from spending on an environmentally disastrous concrete tower hotel at the beach (a pork-barrel pipe-dream of Alabama governors for decades) should be spent on every mile of Alabama coastline EXCEPT the overdeveloped strand of white-sand beach that extends from the Perdido Pass to Fort Morgan on the Gulf of Mexico. The Alabama littoral from Fort Morgan to the Perdido Pass is already overloaded with hotel rooms and condominium rooms that drew so many tourists to it in just one year after the Deepwater Horizon spill that the Alabama Gulf Coast and Convention Bureaus Director Herbert Malone concluded in official data compilations that: By 2011, tourism along the Alabama Gulf Coast has exceeded pre-spill levels, and its Annual Report on Tourism 2015 confirmed that Over the last five years our area has been blessed with unprecedented tourism growth - year after year we are seeing increases in visitors, in visitor spending, and in the numbers of jobs in our local tourism industry. See CVB statistics located at: https://www.thestateofthegulf.com/media/1235/tourism-white-paper.pdf (Visitor expenditures along the Alabama Gulf Coast in 2012 were up 26% compared to 2009; in 2013 the trend continued with total visitor expenditures of over $1 Billion, a 33% increase from 2009; The numbers demonstrate that tourists are coming back and regaining confidence, said Herb Malone, President and Chief Executive Officer of Gulf Shores and Orange Beach Tourism. It was absolutely phenomenal. In early 2014, Mr. Malone celebrated 2013's record numbers: To see back-to-back record years is unprecedented, he said, especially when you consider that the first record came immediately after the 2010 Gulf oil spill.).

Organization: Gulf Restoration Network

Comment Text: Building a swanky hotel at Gulf State Park with NRDA money would be a shocking violation of trustee obligations to spend NRDA money for NRDA purposes, for the benefit of the environment of the Alabama coast - - it would stake out an expensive private enclave for the wealthy and the politically connected upon the footprint of an old hotel and convention center that didnt even exist in 2010, and would wall out the Alabama public from enjoyment of it. The narrow white-sand beach from Perdido Pass to Fort Morgan is inundated with tourists now, and there is no need whatsoever for $58,500,000 of NRDA funds to be spent there, where human density is already and full capacity

Organization: Gulf Restoration Network

PR500 Project Recommendation: New/additional lodging (Substantive)

Comment Text: The trustees' claims are dubious at best because logic dictates that a hotel which will cost hundreds of dollars per night for lodging will exclude many more Alabamians than it will include. Gulf State Park is one of the few remaining areas in Baldwin County that allow free beach access. The purpose of a state park should be to provide inexpensive access to as much of the public as possible, not to limit access by imposing prohibitive costs to gain access. An economic development project which will end with a high-end hotel, privately run, and beyond the financial reach of many Alabamians, will diminish access to the shoreline rather than increase access. The hotel and convention center project is not the best alternative here, under any reasonable OPA and NEPA analysis and would be vulnerable to further legal challenge.

Organization: The Southern Environmental Law Center

Comment Text: B. Building a Hotel and Convention Center will Further Deny Access to the Beach by Residents of Limited Means Further, the hotel and convention center would not make the public whole, because it would create further cost barriers to accessing public coastal resources.25 The project description states Gulf State Park is used primarily as a "retreat and recreational area."26 Gulf State Park is one of the few areas along the Alabama Coast that provides access to the general non- paying public. Public access to Baldwin County's public beach is already extremely limited. There are few free public access points in Orange Beach and Gulf Shores. The proposed project will reduce what little access currently exists, because the proposed hotel and convention-center facility27 will only be available to paying guests, and the cost of access can reasonably be expected to be considerable given the average price for lodging at a beach-front location in the area. At the same time, as the Governor has noted, tourism in the area is booming.28 This presumably creates further strains on limited public beach. If the Trustees truly want to increase the public's access to Alabama's beach environment to accommodate additional visitors, projects such as land acquisition should be a priority. Evaluating the cumulative socioeconomic impacts is an important consideration when comparing recreational loss of use. It is not clear as to whether "new visitors"29 to the Gulf State Park would actually be new visitors to the Park, to the Orange Beach/Gulf Shores area, or to the entire region. This is particularly important given the tourism boom the region is experiencing even without the convention center and hotel facility. A thorough analysis should be conducted as to how this project will impact similar businesses 30 in the area that are already meeting the need for lodging. Since a significant portion of the privately run hotel and conference center will be built utilizing public funding, the State is essentially subsidizing a private enterprise. The public deserves a comprehensive analysis of how this will impact the economy of the surrounding region.

Organization: Gulf Restoration Network

Comment Text: C. Building a Hotel and Convention-Center Facility could Considerably Impact the Local Environment The proposed project would be built in a relatively fragile beach environment in a region where undisturbed scrub shrub and beach habitat is scarce. The area also provides rare habitat to the endangered Alabama Beach Mouse and other threatened species. The close proximity of an Early Restoration Phase I Dune Restoration Project31 at the base of the primary dunes in front of the proposed hotel and conference center would almost certainly be impacted by construction and

PR500 Project Recommendation: New/additional lodging (Substantive)

pedestrian traffic associated with the new facilities. Hence, the lodge and conference center would directly conflict with another NRDA Early Restoration project. The long-term restoration needs of dunes injured by the oil disaster would be undermined by the hotel and conference center, both during construction and due to human use upon completion. All phases of restoration need to be evaluated comprehensively to avoid conflicting restoration goals. The NEPA rules against segmentation and piece-mealing require any analysis to consider the proposal in the context of the impacts to the entire region, including other components of the projects and the cumulative (direct and indirect) effects. We reiterate that this project is not an appropriate NRDA project, under the requirements of OPA and its implementing regulations, and must be removed from consideration for NRDA funding. Should the Trustees nonetheless proceed with the selection of this inappropriate and controversial project the Trustees must ensure consistency with already funded Early NRDA projects, thoroughly consider the potential impacts of the project on the environment, as required by National Environmental Policy Act, and consult the U.S. Fish and Wildlife Service on impacts to threatened and endangered species, as required by the Endangered Species Act.

Organization: Gulf Restoration Network

PR700 Project Recommendation: Living Shorelines (Substantive)

Comment Text: Little lagoon suffered a series of injuries including the blocking of the pass and the infusion of fresh water beyond what the lagoon could reasonably hold. This increased the levels and resulted in shoreline erosion. Since the lagoon is a closed system in general, this shoreline erosion results in the shallowing of the lagoon with the added soil from the shore. projects that should be looked at are: 1. shoreline restoration and the building of natural sand beach areas. 2. The introduction of additional grass beds and other plants where possible. 3. The introduction, in a large scale, of shellfish to the areas of the lagoon that will support their growth. 4. While the introduction of fecal coliform from septic systems is of concern, the fund should also study the other sources of pollution and recommend solutions.

Comment Text: Onshore Living Shoreline About 10 yrs ago I took my shoreline which was eroded back about 61 under my trees and established a living shoreline with oysters and crabs and fish all for under $500. If yall put up the money for materials you could build a lot of good shoreline cheaply. Heres how I did it. One winter when the water was low I was in my kayak and I saw how bad my erosion was. I took my paddle and couldn't reach the end to reach the soil it went like this. My tall pine trees were standing up on their roots. We had Katrina and Ivan and I live at the end of 7-8 bulkheads. I sorry I don't have a picture for you to see the erosion, it was bad! I had to do something fast when the water was low. I didn't want a bulkhead - it's like stepping into a bathtub. I didn't want to dump a pile of rocks in either so I devised a plan and this is it. I took bags of topsoil and put them in a 5 gallon bucket and floated down the water. I poured the bags in as close as I could then I took a 2X2 picket and attached a 2x6 on the end. I pushed it in with the big end around the roots. Then I took the small end and finished packing it tight. I filled in probably 4 feet until the opening became about 2 feet tall. I followed with a trailer load of sand. Did the same thing with buckets and packing. Next I took heavy plastic material marine cloth

PR700 Project Recommendation: Living Shorelines (Substantive)

and laid it out. I put small holes every six inches or so so roots could find their way through. Next came the dump truck full of rocks - 4 to 6 inch size. Would have liked bigger to follow six to 10 inches but couldn't find the next size and too heavy, filled in more - still around the roots. Followed with cordgrass I took from my lot across the way on the Lagoon. Would have used more but didn't have it to spare. If you like this proposal the grasses would have to be purchased so maybe you use some variety and more. Oyster have attached to my rocks and crabs are always there. Since I have trees and shrubs on my shore I have shady water - cooler means higher dissolved oxygen. Another aspect of the proposal would be to buy trees and shrubs that provide good share for those that don't have them, also good for [illegible]. I undertook this project when I was probably a 55 year woman so it can be done by anybody. I did an hour or two a day and took about a month. I took a plastic 2 seater wagon and would load 3.5 gal bucket and carry it to the pier and then get in the water. I did 10 trips a day till it was gone. Also I wore a heavy shirt because of needle brush and e. privet and wore safety goggles. Before I started I took a 5 gal bucket of sand and sprinkled it over the muddy muck to keep from sinking. I will say this was some of the hardest work I've done but also with some of the best results. I also lost a couple pounds. This project would lend well to having groups do one at a time - either volunteer or neighborhood out doing each other or just one more person loading the buckets. My project was on a canal off Little Lagoon in Gulf Shores so if you only would do a few I would like it to go there. If you are interested I will give you more details about the cost but it will vary with how bad the erosion was and how big the lot was. My east side away from the bulkheads wasn't so bad. That side had shorelines of grass. I didn't have time to do pictures but could provide later also if interested. I would volunteer to oversee the work on Little Lagoon to make sure it gets done.

PR800 Project Recommendation: Educational Opportunities (Substantive)

Comment Text: Lastly, projects that add an educational opportunity for the community may not be easily incorporated into the process, but if there is a way to add kiosks, signage or programs that showcase the importance of our precious coastal resources, we encourage you to find and include them in your planning. The BP Deepwater Horizon Oil Disaster briefly reminded us that our economy along the Gulf Coast is intrinsically tied to our environment and we cannot let that lesson be lost.

Organization: Mobile Baykeepers

PS100 Project Selection: Project Metrics/utilizing comparable measures across alternatives (Substantive)

Comment Text: A. Clear and Consistent Metrics and Supporting Data for Alternatives The Trustees must conduct a comprehensive review of project alternatives under NEPA and OPA, an obligation affirmed by the court in GRN v. Jewell, et al., 1:15-cv-191 (S.D.Ala.). Under NEPA, that review of alternatives must "present environmental impacts of the proposal and the alternatives in comparative form, thus sharply defining the issues and providing a clear basis for choice among options by the decision- -â€maker and

PS100 Project Selection: Project Metrics/utilizing comparable measures across alternatives (Substantive)

the public."2 The Trustees must not only rigorously explore alternative projects but also establish clear, data-driven metrics for evaluating project proposals comparatively. Theoretical discussions that merely indicate probable injury and assertions are insufficient. For example, in Early Restoration, the Trustees invoked metrics, like improvements in "user days" and "new visits," but failed to offer any recent data supporting their analysis.3 To comply with NEPA and OPA, the Trustees must clearly define the loss of use injury Alabama suffered, the scale of that injury, and how and to what extent each alternative project or set of projects would compensate for the identified injury.

Organization: Gulf Restoration Network

PS200 Project Selection: Multiple/dual purpose projects (Substantive)

Comment Text: Promote Nature-Based Approaches Coastal Alabamas natural and cultural assets serve as the foundation for a robust nature-based tourism sector, which is a major cornerstone of the regions economy. As such, NWF encourages the Alabama TIG to incorporate nature-based approaches that address the loss of recreational use wherever possible. In addition to nature-based approaches this could include incorporating low-impact, green infrastructure, and/or green building concepts wherever appropriate to ensure recreational use and public access projects are selected, designed, implemented, and managed with ecosystem compatibility and sustainability as well as longevity in mind. These methods should consider sea level rise, future storm events, and other persistent or sudden environmental or human-induced stressors that may affect a projects likelihood of success and longevity. Some examples of these approaches may include: o Prioritizing recreational opportunities that contribute to the conservation of natural areas and natural resources of the coast and region o Low-impact trails that are well-designed and marked to ensure minimal disturbance to the surrounding ecosystem o Recreational projects that include a construction component should employ principles of low impact development, sustainable design, green infrastructure, green building, best management practices, and/or eco-friendly materials o Protecting, restoring, and/or planting native vegetation to promote ecosystem health and resilience, support wildlife, marine life, and birds, and reduce water demands and maintenance o Interpretive projects and programs should incorporate stewardship elements such as education and outreach to ensure long-term use, enjoyment, and benefit by residents, visitors, tourists, and local businesses NWF offers our expertise in providing more specific suggestions to strengthen the sustainability of projects as well as our willingness to make connections with knowledgeable local and regional professionals who can lend technical expertise.

Organization: National Wildlife Federation

Comment Text: 1. The Trustees should avoid recreational use projects that have the potential to harm injured natural resources and the environment. Ocean Conservancy commends the Alabama TIG for seeking additional project ideas, and strongly recommends selecting alternative restoration approaches that will restore lost recreational use in place of the Gulf State Park Lodge and Conference Center. The Alabama TIG will restore lost recreational use in the amount of $83,500,000 from combined early

PS200 Project Selection: Multiple/dual purpose projects (Substantive)

restoration and post-settlement funds; this amount should be spent entirely on projects that do no further harm to the environment. It is contradictory to the spirit of restoration to select projects that would negatively impact natural resources in Alabama. The Trustees should avoid recreational use projects that have the potential to harm injured natural resources and the environment by, for example: 1) altering natural habitat used by sensitive or threatened and endangered species; 2) increasing impervious surface cover and runoff of contaminants; 3) increasing visitor traffic and disturbance of species that use the beach for nesting, refuge or foraging; and 4) concentrating fishing pressure on overfished species through new fishery access points, such as boat ramps or artificial reefs. According to the Final Programmatic Damage Assessment and Restoration Plan (PDARP),4 natural resource restoration activities may include both ecological services and recreational services provided by natural resources. However, the restoration approaches implemented through NRDA to date and described for recreational use in the PDARP focus heavily on the recreational use side instead of the ecological services. Ecological services can include nutrient cycling, food production for other species, habitat provision, storm protection, carbon sequestration and other services that natural resources provide. Restoring ecological services as an approach for lost recreational use allows for projects related to habitat restoration, fish and invertebrate populations, and the like. If recreational use of natural resources is to continue to be an important component of the Gulf economy, resources relied upon for recreation must be stewarded by restoration and management actions.

Organization: Ocean Conservancy

Comment Text: As the Trustees consider projects for recreational loss of use funding in Alabama, there are projects across Mobile and Baldwin Counties, including Gulf State Park, which would restore the injuries experienced in Alabama.32 Should Alabama's aim be to find a project that meets the same compensation for "loss of use" as the proposed hotel and convention center, there are a number of projects (or suites of projects) that could meet the same recovery metrics. Considering Alabama's lack of public beach access, the acquisition of beach property, recreational facilities, or public access points could reasonably provide the same measurable outcome. For example, these projects found in the Alabama Coastal Restoration portal33 would meet the criteria for recreational loss of use: • Project 79 - Aloe Bay Harbour Town (Mobile County) • Project 82 - Dauphin Island Audubon Bird Sanctuary Shoreline Restoration and Management (Mobile County) • Project 102 - Alabama Audubon Coastal Bird Stewardship Program (Baldwin/Mobile County) • Project 111 - Spanish Fort Ecological Park (Baldwin County) • Project 174 - USA Coastal and Environmental Sciences Initiatives (Mobile County) • Project 177 - Hog Bayou Campground (Mobile County) • Project 188 - Coastal Sustainable Tourism Laboratory (Baldwin County) • Project 199 - Bayfront Park Restoration Improvement (Mobile County) • Project 200 - Chickasabouge Park Habitat Restoration and Enhancement (Mobile County) • Project 210 - Infrastructure Improvements of existing park and green spaces (Mobile County) • Project 233 - D'Olive Creek Property Purchase, Habitat Study, Nutrient Removal Research/Education Facility (Baldwin County) • Project 240 - Delta Port Marina Oysterman Support Dock (Mobile County) • Project 266 - Perdido Watershed Access Improvement (Baldwin County) In addition to these specific projects, other recreational projects that would meet the needs of the community include land acquisition for public access, living shoreline and artificial reef projects, fishing access - piers and boat launches, fishery programs34 and other park enhancement and educational opportunities cross Alabama's coastal zone.

PS200 Project Selection: Multiple/dual purpose projects (Substantive)

In Early Restoration, the Trustees stated that it is challenging to choose a "recreational use ... restoration project...large enough to provide a significant contribution towards compensating for the recreational use losses" in Alabama.35 We wholly disagree, and the above-listed project proposals demonstrate that there are a variety of options to restore recreational use losses. However, if the Trustees truly believe that no appropriate project or suite of projects exists to compensate for the lost recreational uses experienced in Alabama, then a no-action alternative is the appropriate choice.

Organization: Gulf Restoration Network

Comment Text: B. Recreational Loss of Use and Environmental Protection - Dual Purpose Projects As the Trustees consider projects for recreational use restoration, we are particularly supportive of projects that serve to protect and enhance the natural environment, as well as provide significant value to coastal communities impacted by BP's oil. This dual purpose for recreational-use projects is vital to the overall health of our region's ecosystem and to the sustainability of the projects themselves against threats like climate change. We hope that the Trustees utilize this model when selecting future projects.

Organization: Gulf Restoration Network

Comment Text: Prioritize Projects that Provide Ecological and Recreational Benefits NWF respectfully requests the Alabama TIG give priority consideration to those projects that serve to provide multi-benefits, namely ecological and recreational. Specifically, a project that serves as a good example of this principle is a land acquisition project associated with Bon Secour National Wildlife Refuge, which NWF has recognized as one of five high priority restoration opportunities on the Alabama Coast (NWFs Restoring the Gulf of Mexico for People and Wildlife: Recommended Projects and Priorities is available at www.nwf.org/restoringthegulf). Known as Bon Secour National Wildlife Refuge Land Acquisition, the project intends to permanently protect an additional 488 acres of sensitive lands identified by the U.S. Fish and Wildlife Service as the highest priority for acquisition and long-term management of the Refuge. The Refuge is renowned for its ecological value and biological significance on the Alabama Coast as well as the tangible benefits it provides for regional fish, bird, and wildlife populations. In addition to these considerable ecological benefits, this acquisition would support the important recreational use and public access opportunities provided by the Refuge, notably by significantly expanding its size by twenty-five percent. These additional public lands would expand low-impact, wildlife-compatible recreational activities including, but not limited to, fishing, boating/paddling, swimming, trails, wildlife viewing, photography, and nature-based interpretive and educational activities. Finally, The Conservation Fund has this acreage under agreement for purchase, so the project is poised for immediate implementation pending the availability of funds. NWF hopes the Alabama TIG will take advantage of this unique and rare opportunity to protect and expand access to such an exceptional asset.

Organization: National Wildlife Federation

Comment Text: From our perspective as a land conservation organization, investments in recreation should: 1) Include land acquisition to increase opportunities for the public to enjoy coastal habitats; 2) Be designed to have multiple benefits (parks and green space can be designed for wildlife habitat or

PS200 Project Selection: Multiple/dual purpose projects (Substantive)

water storage during flood events); 3) Do no harm. If roads, piers, and boat ramps are considered, make sure that best management practices, sustainable materials, and green infrastructure are included in the design; and 4) Improve and protect the natural resources that people rely upon for their recreational pursuits such as water quality and a sustainable fishery. Some examples to compensate the public for lost recreational use opportunities in Alabama caused by the Deepwater Horizon oil spill could include the fee simple acquisition and placement of perpetual conservation easements on acquired land for conservation. The Goat Island parcels, the Mobile Bay Brookley Bayfront tract and the Laguna Cove tracts are examples of potential conservation projects that could be acquired with these funds.

Organization: Pelican Coast Conservancy

Comment Text: Making Gulf State Park a world class destination is a smart way to leverage the resources coming to Alabama from the Deepwater Horizon settlement. The multiple projects proposed on this site will have something for everyone: local residents, Alabamians and visitors from far and wide. The facilities, trails, teaching environments and interactive experiences here should be of the highest quality, energy efficient and as beautiful as our coastline. By attracting visitors - and having the ability to compete with the multitude of other options - we are building economic potential for all the near-by communities and new entrepreneurial opportunities throughout the state. This investment - particularly if it reflects our very best - can be a multiplier: attracting more visitors, more revenue and more potential for visitors to go home impressed by what's amazing in Alabama.

Organization:

PS300 Project Selection: Importance of leveraging opportunities (Substantive)

Comment Text: Coordination and Leveraging NWF encourages the Alabama TIG to seek opportunities to coordinate and leverage proposals and projects across all NRD Restoration Types, including Recreational Use, in a way that complements and increases the net benefits of ecosystem restoration, and utilizes potential partnerships with public and private entities as well as technical and scientific expertise. We underscore the vital importance of AL TIG members to work cooperatively with other DWH-related funding streams and partners such as neighboring state TIGs, the RESTORE Council, NFWF GEBF, and other state and federal resource agencies, to design and develop restoration projects that address Alabama and the Gulfs ecological restoration needs in a holistic, cost-effective manner. This approach will ensure restoration efforts avoid duplication and maximize their ecological and financial impacts.

Organization: National Wildlife Federation

PS500 Project Selection: Streamlining the Process (Substantive)

Comment Text: As was originally determined by the Gulf Coast Ecosystem Restoration Task Force's final review, there needs to be a streamlining of federal and state agency priorities, goals and processes in

PS500 Project Selection: Streamlining the Process (Substantive)

order to speed up the process. Addressing that first could both shorten the timeline and ensure the best possible projects move forward.

Organization: Mobile Baykeepers

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APPENDIX B

PUBLIC COMMENT RECEIVED ON THE DRAFT RESTORATION PLAN/ ENVIRONMENTAL IMPACT STATEMENT

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Correspondence ID: 1
Address: Foley, AL 36535
United States of America
Outside Organization: Unaffiliated Individual
Affiliation:
Received: Jan,18,2017 09:01:32
Correspondence Type: Web Form
Correspondence:
In regard to the Alabama Restoration Area Plan 1 - Draft Restoration Plan/Environmental Impact Statement, please let me offer the following.

I reviewed the portion of the document regarding the Laguna Cove Little Lagoon Natural Resource Protection proposal. I was pleased that it was one of the priority projects. The Laguna Cove project represents one of the last remaining sections of marsh on Little Lagoon and is at high risk to be lost due to commercial development. What is proposed is a very well thought out blending of providing recreational opportunities and preserving ecologically important marsh areas.

Before the housing complex that was built to the west of the Laguna cove marsh, highway 182 dead-ended near the marsh. That dead-end provided a paved turn-around area as well as parking allowing public access to the marsh and the front beach. That gave me the opportunity to explore the marsh, and fish in areas that otherwise I had no access to.

Whether as part of the current Laguna Cove project or in a latter phase, I would like to see addition parking added on the south side of highway 182 and a boardwalk added to provide access to the front beach. Currently there is no public access for recreational activities from highway 182 to Little Lagoon or the front beach west of Little Lagoon pass. This results in miles of the southern shoreline of Little Lagoon and its paralleling section of Gulf-front beach with no public access to recreational opportunities in those areas. The Laguna Cove Little Lagoon Natural Resource Protection proposal is a key step in providing recreation opportunities for the general public along an important portion of the Alabama coast.

There are a few areas in the document regarding the Laguna Cove project that need some clarification or corrections. They are:

P 4-24, Lagoon Cove Little lagoon, table 4-10, What is drag-stripping red fish?

P 4-59, Lagoon Cove Little lagoon, table 4-25 says "Gulf Shores Utilities runs sewer and water lines along SR 182 until the eastern end of the road (Gulf Shores Utilities, 2016). Baldwin County Sewer System, the private sewer company, runs lines parallel to the town's lines along SR 182. These lines are on the southern side of SR 182 and do not directly border the site"
Should say western end of the road?

P 5-26, Table 5-6 labeled wrong, should be Baldwin County

Correspondence ID: 2
Address: Dauphin Island, AL 36528
United States of America
Outside Organization: Unaffiliated Individual
Affiliation:
Received: Jan,24,2017 09:28:48
Correspondence Type: Web Form
Correspondence: I am in complete opposition to the Mid-Island Parks and Public Beach Improvements Project, Parcel B and Parcel C.

This is a residential neighborhood and building a public parking lot and a public boat launch adjacent to single family residential homes will not only increase noise and traffic, but will devalue these homes and other properties in the area. In addition, Parcel B and Parcel C proposals will threaten our quality of life and the tranquil atmosphere that our neighborhood provides.

Correspondence ID: 3
Address: Dauphin Island, AL 36528
United States of America
Outside Organization: Blu Revival Surf Shop Unaffiliated Individual
Affiliation: OffcialRep
Received: Jan,24,2017 12:47:24
Correspondence Type: Web Form
Correspondence: To begin with, this process should have been more transparent (how and why these sites were chosen) and why was there no initial public involvement in the form of public hearing from the start? In addition, the unreasonably short notice and turnaround for informing the public and allowing comment deadline is grossly unfair and disrespectful of the local residents. The one and only poorly promoted meeting should not have been held the same night as a Town Hall meeting, ensuring a meager turn-out.

Please do not proceed with plans A,B and C regarding the Mid-Island Parks and Public Beach. Parcel A is an extremely sensitive ecosystem for beach creatures of all types; varieties of sea birds nest, turtles, beach mice and snakes to name a few. It has slowly regenerated after storm damage and heavy public access to this area will compromise the gains nature has made, have permanent detrimental impact, and access is already available to the public in at least 3 other areas; East End, Pier Site, and West End Beach. That's plenty of access for such a small, delicate barrier island.

Parcel B and C are also important environmentally, serving as one of the few natural pass-throughs linking the gulf beach to the MS sound - I know this because I am a permanent resident (corner lot of Cadillac and Pirates Cove) across the street from B and C and have observed daily, an amazingly rich biodiversity in this space, surely to be impacted with this irresponsible plan.

Also, Parcel B is not adequate space to accomodate cars, vehicles with boat trailers, restrooms etc...there are currently 3 boat ramps (not to mention many private ramps homeowners share with neighbors and friends, 2 of which are directly across from parcel B) available to boaters on the island; a fourth is

Correspondence ID: 3
overkill, and environmentally irresponsible, detrimental to the delicate marsh area immediately across from parcel C.

Also, pedestrian traffic across 4 lanes of Bienville Blvd. during the busy Spring/Summer is a hazard, cars/trucks travel at high speeds through this area and families crossing would be risking life and limb to cross that many lanes.

In addition, Cadillac and Pirates Cove, during the busy Spring/Summer seasons are already very busy by-ways that cannot accomodate more congestion. Residents are already concerned about the heavy traffic here; many people walk pets, ride bikes, many of which are children and elderly.

There are better uses for these funds. Building a fishing pier, upgrading existing resources in desperate need.

Finally, the Town of Dauphin Island already struggles to manage existing recreational sites, it cannot adequately manage more, and after the funds are used, it will be too heavy a burden to maintain.

Thank you for your time.

Correspondence ID: 4
Address: Dauphin Island, AL 36528
United States of America
Outside Organization: Unaffiliated Individual
Affiliation:
Received: Jan,24,2017 13:20:52
Correspondence Type: Web Form
Correspondence: We do not believe in taking monies meant for the property owners of Dauphin Island and investing for public use. This money is meant for the property owners and should be used or distributed as such - for the property owners.

Correspondence ID: 5
Address: Dauphin Island , AL 36528
United States of America
Outside Organization: Unaffiliated Individual
Affiliation:
Received: Jan,24,2017 14:02:47
Correspondence Type: Web Form
Correspondence: Why can't the boat launch be at the west end of Dauphin Island? The proposed site is in the middle of 100's of houses where children play and walk to the beach. The potential dangers of someone getting hit by a vehicle increase tenfold at the present proposed location.

Correspondence ID: 6
Address: Dauphin Island, AL 36528
United States of America
Outside Organization: Retired Unaffiliated Individual
Affiliation: Member
Received: Jan,24,2017 14:49:48
Correspondence Type: Web Form
Correspondence: My comments are directed to the "Mid-Island Parks and Public Beach Improvements Project."
As a full time resident of Dauphin Island, I am vehemenly opposed to the project as the draft was presented at the public meeting. I am not opposed to the purchase of Parcel A beachfront, but I am opposed to the purchase and stated use of Parcels B and C. I live full time on Lafitte Bay (across the street from Parcel C) and do not believe the intended use of B anc C is in the best interest of Property Owners in the immediate and surrounding areas. It was stated that Parcel C would become a public boat launch - wow, Parcel C is in a residential area with either full time or part time residents on all sides of this location. What resident wants to be awakened at 4:00 am by fishermen launching their boats, yelling at each other to stop or go. The biggest issue I see is the interruption of peace and tranquility in and around the launch area. Home owners did not buy property on the water to lay out on their docks and have to hear, see and smell a boat launch. Also, I do not believe Parcel B will accommodate the required parking for the number of trucks with boat trailers attached. Along with large numbers of people using the launch comes the trash they leave behind (to be blown in property owners yards). Yes, I am opposed to the purchase and use of Parcel B and Parcel C and will never support this project as is, in a residential area.

Correspondence ID: 7
Address: Dauphin Island, AL 36528
United States of America
Outside Organization: Property Owner Unaffiliated Individual
Affiliation: Member
Received: Jan,25,2017 06:36:03
Correspondence Type: Web Form
Correspondence: To Whom it may Concern: My wife and I are owners of a home directly across the street from one of your proposed projects. We are greatly concerned about how this parking lot and boat launch project will affect us and our neighbors in this a residential area. We are a quiet neighbor with a homes that are full time residents or are used by family and friends. There is one rental property in the mix. We were drawn to the Island by its peaceful, tranquil nature. We enjoy the clean air, the darkness at night so as to watch the stars, being able to have our windows and doors open to catch the breeze. The children on their bikes and skateboards and people walking and running on our streets would come to an end because of the would come to an end because of the huge increase in traffic to the 100 car parking lot and to the boat launch to be built.

With the boat launch comes the noise, beginning usually well before daylight and continuing throughout the day and night. Then comes the smells of gas, oil and fish remains. It would be like living next to a pig farm. The dirt and dust from these lots would force us to keep our homes closed up all the time. We are blessed with an ocean breeze, why fill it with dirt from the lots.

Correspondence ID: 7
We are supportive of preserving the dunes and our beaches,but see absolutely no sense in flooding the area with 200 to 500 people a day. We have witnessed the destruction that beach goers can do to our beaches. Signs are posted, trash containers in place, but I have seen no enforcement. I am sure this will be the norm for this area also. Dog are allowed to run loose on the beaches, intimidating other dog owners with there pets leashed. You can have all the ordinances your books will hold, but if there is no enforcement what good do they do.

We urge you to not go forward with these projects and use your funds for other projects that won't involve a heavy residential neighborhood. Ask yourself if you would want your quality of life disrupted by this. We would have appreciated it if we would have been notified in a letter about what would be happening. Thank You, Terry and Rita Etherton, 2000 Bienville Blvd.

Correspondence ID: 8
Address: Gulf Shores, AL 36542
United States of America
Outside Organization: Little Lagoon Preservation Society Unaffiliated Individual
Affiliation: OffcialRep
Received: Jan,26,2017 10:23:30
Correspondence Type: Web Form
Correspondence: Thank you for the opportunity to comment on the Laguna Cove property acquisition project for public access and shoreline preservation. Little Lagoon Preservation Society "will seek to preserve, protect and enhance the Little Lagoon so that we can continue to enjoy it now and for generations to come. As President of the Society (http://littlelagoon.org), I represent the 300 families who entrust me to act in their interests on matters concerning the health and well being of Little Lagoon.

As a coastal sedimentary Geologist (MS, 1981), I view the Laguna Cove property as a remarkable example of nearly pristine paleo tidal inlet shoreline, wetlands and habitat which are critical to maintaining the health of, and the fishery within, Little Lagoon. Per coastal expert Dr. Scott Douglas, nearly 50% of Little Lagoon natural shoreline has been compromised/hardened by bulkheads. The figure is even more alarming considering that ~1/3 of Little Lagoon is preserved in a natural state in the BNWR. Preserving and protecting this piece of most important habitat has ranked very high on our Society's list for some time and we commend you for prioritizing the project.

We like that the plan for the property is to minimize ecological impact on the property while offering the public a gathering spot to enjoy Little Lagoon. A kayak launch beats the heck out of a fairly high density PUD complete with a marina which is what has been permitted for the property owner by the USACOE. The planned fishing pier will also give the public access to what I know from experience are some of the most productive fishing waters in Little Lagoon. As someone who loves to fish and for nearly 50 years has enjoyed wade fishing at Little Lagoon Pass I can really appreciated the importance of providing public access to our coastal waters.

The development market here on the coast is picking up again after being suppressed for some time. Please do what it takes and allocate the necessary resources to ensure this property is acquired and preserved for all to enjoy.

Respectfully,
James "Dennis" Hatfield
President, Little Lagoon Preservation Society

Correspondence ID: 9
Address: Dauphin Island, AL 36582
United States of America
Outside Organization: Unaffiliated Individual
Affiliation:
Received: Jan,26,2017 16:34:58
Correspondence Type: Web Form
Correspondence: It was recently brought to our attention, the proposed plans for the Mid Island Parks Beach Improvement Project. As neighbors to this proposed project, we are very concerned about several negative consequences in the adjacent area.
There currently is limited access to the western end of Dauphin Island and the site of the proposed parking lots and marina would markedly add to the congestion at the narrowest point in the island, causing a major "choke" point for traffic. The area is currently residential with both full time and part time owners as well as rentals. The peace and quiet of the neighborhood would be greatly diminished especially if a boat launch was developed on parcel C(on Bayou Heron). This would have a negative effect on property values as well as quality of life in the neighborhood.
As this is one of the narrowest portions of the island, water runoff from parking lots which are planned will be a problem and the protective dunes will be sacrificed at a critical position on the island. This could result in a major cut in the island at this point should a storm threaten, similar to the "Katrina cut" at the west end of the island.
Directly across from the proposed marina is a bird sanctuary with nesting for herons, blackbirds, and other species that would be adversely affected by the traffic, noise, etc of a huge increase in water traffic in this narrow sensitive channel.
We appreciate having the opportunity for this input and hope a satisfactory alternative will be found. Marc and Jerri Gottlieb

Correspondence ID: 10
Address: Madison, MS 39110
United States of America
Outside Organization: National Wildlife Federation Conservation/Preservation
Affiliation: OffcialRep
Received: Jan,26,2017 00:00:00
Correspondence Type: Web Form

Correspondence ID: 10

Correspondence: Dear Alabama Trustee Implementation Group Members,

The National Wildlife Federation (NWF) appreciates your efforts to prepare this Alabama Restoration Area Plan 1 - Draft Restoration Plan/Environmental Impact Statement (Draft RP/EIS) on the restoration type, Provide and Enhance Recreational Opportunities.

The Natural Resource Damage (NRD) process is critical to restoring coastal Alabama and the Gulf of Mexico in a comprehensive, science-based manner that considers both cumulative and complementary projects to support lasting restoration for the region.

Thank you for the opportunity to review the Draft RP/EIS, and NWF offers several recommendations for the TIG's consideration as this document is finalized.

Transparency and Public Input

Transparency and accountability are vital to the integrity, public confidence, and overall success of this singular restoration effort. NWF thanks the Alabama Trustee Implementation Group (TIG) for holding two public meetings that coincided with the public comment period, that at least one meeting was held in both Baldwin and Mobile counties, and that they were structured to allow for informal (i.e. open house style) and formal (i.e. open microphone to address the TIG directly) opportunities to engage the TIG. As future RP/EIS documents are prepared and released for public review and comment, NWF encourages the TIG to continue providing public meetings with similar timing, structure, and logistics.

As Early Restoration projects and RPs are implemented and future RPs are developed, NWF recommends that these public meetings include updates on these NRD efforts to ensure the public has a solid understanding of the complete picture of restoration efforts being planned and underway. It would be helpful for such updates to not only be showcased during an open house segment but included in meeting presentations as well.

Further, Section 1.7 Public Involvement (p. 1-14) includes a summary of public scoping comments submitted in response to the TIG's July 6th, 2016, Notice of Intent with all comments compiled in Appendix A. While the TIG developed and applied a five-step coding analysis process for these comments, including a step to interpret and analyze these comments to identify issues and themes, it remains unclear how comment content influenced the Draft RP/EIS. The Final RP/EIS should make these connections clearer.

Process

As part of Section 2.0 Project Screening and Alternatives, NWF compliments the TIG on the inclusion of tables to summarize how their screening process was used to identify a reasonable range of alternatives, specifically Tables 2-1, 2-2, 2-3, 2-4, and 2-5, as well as Appendix B: Table of Projects Meeting Initial Eligibility Screen. These served to provide vital insight into how the TIG is evaluating and selecting potential projects.

Also specific to Figure 2-1: Graphical Summary of Alabama Trustee Implementation Group Recreation Project Screening, NWF asks that a brief descriptor (i.e. screening rationale used) be added to each of the five process steps, so as to provide a more complete visual summary of the screening process.

Consideration of Ecological Benefits

NWF is pleased that the TIG applied a project screening process that gave priority not only to projects whose primary objective was recreation but to "...ecological projects expected to provide substantial recreational benefitsâ€¦" (p. 2-3) as well as an effort to give deeper consideration to projects that were initially categorized as "Primarily Ecological" (p. 2-4).

Ultimately, this was reflected in two of the alternatives that were carried forward for detailed OPA/NEPA analysis; Gulf Highlands Land Acquisition and Improvements and Laguna Cove Little Lagoon Natural Resource Protection. In future restoration planning for recreational use, NWF encourages the TIG to continue giving priority consideration to multi-benefit projects, namely those that support the recovery of Alabama's coastal and marine resources; promote coastal resiliency and protection from storms, sea level rise, and extreme weather; enhance research and monitoring; and/or support recreational opportunities.

As noted in our scoping comments, the expansion of Bon Secour National Wildlife Refuge through the purchase of two parcels known as the Little Point Clear Unit is one of NWF's high priority restoration opportunities for coastal Alabama (See www.nwf.org/restoringthegulf). As a project not carried forward in the alternatives analysis, the TIG states that, "The benefits associated with management of this project are primarily ecological with few recreational benefits. Accordingly, the AL TIG may consider this project in future, ecologically focused restoration planning" (p. 2-17). National Wildlife Refuges provide recreational access to the public, and by expanding Bon Secour NWR's boundaries, this project would provide access to lands otherwise unavailable to the public. As part of any future restoration planning, NWF urges the TIG's consideration of this proposal. Not only does this project provide unparalleled ecological value for an array of wildlife, marine life, birds and other species, support key ecological services, and provide protection from storms and extreme weather, this area occurs within the vicinity of shoreline that has a strong geographic nexus to the shoreline injuries caused by the Deepwater Horizon.

Coordination that Maximizes Restoration Impact

NWF encourages the TIG's continued efforts to ensure strong coordination with other Deepwater Horizon and Gulf of Mexico restoration programs as well as other partners such as state and federal agencies, municipalities, and non-profits.

For example, the Draft RP/EIS acknowledged that two of nine alternatives carried forward for detailed OPA/NEPA analysis - "Gulf Highlands Land Acquisition and Improvements" and "Mid-Island Parks and Public Beach Improvements (Parcels A)" - were being considered for funding through other restoration sources (i.e. NFWF GEBF). Funding for both of these projects was announced in NFWF GEBF's November 2016 funding cycle, a few weeks prior to the release of this Draft RP/EIS.

NWF recommends the TIG to continue synergistic restoration efforts, regardless of restoration type, to maximize their collective impact in a comprehensive, science-based, and cost-effective manner.

Maintain the Highest Commitment to Do No Harm

The six preferred alternatives included in this Draft RP/EIS involve creating new or updating existing infrastructure, such as constructing buildings, parking lots, restrooms, playgrounds, piers, boardwalks, trails, bicycle paths, and boat ramps, as well as installing signage and lighting.
While the Draft discusses efforts to minimize projects' adverse environmental impacts, NWF reiterates our concern that the TIG ensure the highest

Correspondence ID: 10
commitment to "Do No Harm" to ecological resources by ensuring projects avoid adverse environmental impacts and result in no net environmental harm; namely degrading or negatively impacting the coast's natural resources and/or reducing the impact of - or conflicting with the intended ecological goals of - already existing or planned natural resource restoration investments. This also includes ensuring local, state, and federal agencies who are responsible for environmental protection measures have the resources and capacity to carry them out, especially through on-site monitoring, adaptive management, and enforcement of appropriate environmental laws and regulations.

In the rare case where minor and/or short-term adverse impacts may occur up-front, projects should set aside funds for compensatory mitigation and identify a detailed plan and timeline.

Thank you again for the chance to support Alabama's restoration efforts and NWF appreciates the TIG's consideration of our recommendations. Please reach me at (504) 481-3659 or mastrototaroj@nwf.org for more details, or if NWF can provide other assistance.

Correspondence ID: 11
Address: Mobile, AL 36602
United States of America
Outside Organization: Pelican Coast Conservancy Unaffiliated Individual
Affiliation: OffcialRep
Received:
Jan,27,2017 09:49:34
Correspondence Type: Web Form
Correspondence: I would like to commend the members of the Alabama TIG for all of their diligent effort compiling the list or prioritized projects. The activity of land conservation has been identified as an important part of the restoration process in the Alabama Restoration Area Plan 1 - Draft Restoration Plan/Environmental Impact Statement. The land trust community has worked with state and federal trustees, the nonprofit community and the general public to increase the amount of awareness level on the importance of conserving important natural areas across the Gulf of Mexico region. The Laguna Cove project is an excellent example of utilizing NRDA funds to acquire ecologically sensitive habitat. This parcel has a very high threat of development. The Laguna Cove tract is one of the largest undeveloped pieces of property on Little Lagoon. I have worked since 2012 to see this parcel conserved. I nominated the parcel to Forever Wild, submitted a NOAA/NRDA Early Restoration Project and completed an Alabama Restore/NFWF/NRDA online portal project submittal. The project was nominated to the NOAA/NRDA Early Restoration portal when I served as Executive Director of the Weeks Bay Foundation. The Pelican Coast Conservancy's Board has also endorsed the protection of the Laguna Cove property. The protection of Laguna Cove has been endorsed by the Little Lagoon Preservation Society (LLPS) Partnership for Gulf Coast Land Conservation and numerous other ngos. There are many conservation values identified in the NRDA project nomination that demonstrate the importance of protecting this parcel.
Please, do not hesitate to contact me if I can be of any further assistance.

Working for conservation,

Walter C. Ernest IV

Correspondence ID: 12
Address: Dauphin Island, AL 36528
United States of America
Outside Organization: Unaffiliated Individual
Affiliation:
Received: Jan,27,2017 13:34:40
Correspondence Type: Web Form
Correspondence: As a property owner at Dauphin Island both my husband and I are opposed to the project to build a new boat launch at Dauphin Island (park ID=534&projectID=65924&documentID=76540). We have concerns about the environmental impact on this area and also the street traffic it would cause. There does not seem to be enough parking in this area for a boat launch(and if a big parking lot is allowed what is the impact of the runoff in this area on wildlife/water/property?) If no parking lot is made will the property owners it this area have to put up with illegal parking , trash, and the stench from dead fish etc ? We are concerned that this project would take away from the islands quaint attractions and quiet neighborhoods which influenced us to buy property there last summer.

Correspondence ID: 13
Address: New Orleans, LA 70130
United States of America
Outside Organization: Ocean Conservancy Conservation/Preservation
Affiliation: OffcialRep
Received: Jan,27,2017 00:00:00
Correspondence Type: Web Form
Correspondence: January 30, 2017

NOAA Gulf of Mexico Disaster Response Center
Attn: Alabama Recreational Use Restoration Plan
7344 Zeigler Blvd.
Mobile, AL 36608

Dear Alabama Trustee Implementation Group:

Ocean Conservancy submits the following comments on the Draft Recreational Use Restoration Plan I and Draft Environmental Impact Statement: Provide and Enhance Recreational Opportunities (Draft RP/EIS) prepared by the Deepwater Horizon federal and state natural resource trustee agencies for the Alabama Trustee Implementation Group (Alabama TIG). The Draft RP/EIS proposes ten individual restoration alternatives, six of which are preferred alternative projects which would take place in Baldwin and Mobile counties. The total funding proposed is $70,675,000, with $56,300,000 of that total to be dedicated to the Gulf State Lodge and Convention Center project at Gulf State Park.

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Ocean Conservancy supports implementation of five of the six preferred projects, with some additional recommendations described below. However, as discussed below, Ocean Conservancy does not support approval or funding of the Gulf State Lodge project using natural resource damages (NRD) funds.

1. Five of the six preferred projects should be approved and funded.

Ocean Conservancy supports approval of five of the six preferred projects: (1) Fort Morgan Pier Rehabilitation, (2) Laguna Cove Little Lagoon Natural Resource Protection, (3) Bayfront Park Restoration and Improvement, (4) Dauphin Island Eco-Tourism and Environment Education Area, and (5) Mid-Island Parks and Public Beach Improvements. These projects are appropriate uses of NRD funding and will provide and enhance recreational opportunities that were lost as a result of the BP oil disaster.

For those five projects, we commend the Trustees for including permeable surfaces in the planned construction of additional parking areas. We recommend the Trustees continue to seek low-impact development practices for restoration projects to lessen the long-term impacts of these projects in the Alabama coastal zone.

Two projects, Laguna Cove Little Lagoon Natural Resource Protection and the Mid-Island Parks and Public Beach Improvements, include the use of sea turtle friendly lighting ("certified 'sea-turtle friendly' fixtures placed in accordance with appropriate best management practices (BMPs)"). We commend this planning element. Additionally, we recommend using sea turtle friendly lighting at the Fort Morgan Pier Rehabilitation project if the pier will be lit outside of planned operating hours (8am-5pm). We raise this concern because, as acknowledged in the plan, an increase in artificial lighting is a threat to hatchling sea turtles, which may become disoriented and unable to reach the Gulf of Mexico when artificial lighting is visible from nesting areas.

For the Fort Morgan Pier Rehabilitation specifically, we have additional concern about cost. The project budget appears to have increased significantly from an early high-end estimate of $800,000 reported in the news media to its current budget of nearly $3 million. We ask that the Trustees explain the $2.2 million project budget increase in the final plan to assure the public that restoration funds are being spent and accounted for appropriately.

2. The Gulf State Park Lodge project is not an appropriate use of NRD funding, and the alternatives analysis is still deficient.

The proposed lodge and conference center at Gulf State Park is outside of the scope of an appropriate NRD activity. Ocean Conservancy commented in detail on the Gulf State Park project in February 2014 when it was proposed during Early Restoration. We stated that "[i]ts intent [wa]s economic, rather than ecological or recreational, and it d[id] not represent an 'equivalent' of injured natural resources and services." This argument still holds true. While the public aspects of the project (public education programs, public beach access, public restrooms and post-beach shower facilities, a bike share program, and a public tram system) are an appropriate means to restoring lost recreational uses, the private hotel aspect of the project is not an appropriate use of NRD money.

First, the proposal would use natural resource damages money to build private hotel rooms, and then allow a private owner to charge the public commercial rates to access services provided by the facility. It is highly likely that the cost would be prohibitive to many members of the public. The project proposal does not specify third-party operators or concessioners, nor does it identify private economic profits. However, it has been reported that an agreement has been made with Hilton Hotels for reservation management and other private agreements may well exist now or in the future. The use of NRD monies to benefit private economic interests is unprecedented and improper, and violates the key tenets of the NRD process, because it fails to make the public whole.

Second, the Gulf State Park Lodge and Conference Center project will increase disturbance to wildlife resulting from higher visitation, noise levels, trash and foot traffic. The areas adjacent to the project site are already heavily developed. The proposed project site provides habitat to endangered beach mice in an area with limited undeveloped habitat available, and adjacent beaches provide habitat for nesting sea turtles and birds. Development, as proposed, will damage rather than restore these injured habitats.

Third, the project proposal still suffers from legal deficiencies regarding alternatives analysis. In February 2016, the U.S. District Court for the Southern Division of Alabama held that the Trustees failed to consider reasonable alternatives to the lodge and conference center project. As a result, the court enjoined the use of early restoration funds by the Trustees with respect to construction of the lodge and conference center at the state park, pending further National Environmental Policy Act (NEPA) review by the Trustees. The Alabama TIG is now re-proposing the project and attempting to correct the shortcomings cited by the court. ("[T]he AL TIG is proposing and evaluating whether to implement the lodge and associated public access amenities with NRDA funds."). The court found that the Trustees failed to consider reasonable alternatives to the proposed project: "At both the program level and the project level, the Trustees have unreasonably narrowed the universe of possible alternatives to two: (1) go forward with the project as proposed or (2) no action." As such, upon re-proposal and further analysis, the Trustees should have considered additional alternatives for Gulf State Park. Yet, no additional alternatives were proposed or analyzed for the site. Once again, the Trustees have set forth a proposal for the lodge, conference center and public amenities but have not discussed any other alternatives for the site at Gulf State Park. The only possibilities are (1) the proposal as presented or (2) no action. As before, this still fails to satisfy the alternatives analysis requirements of NEPA and the Oil Pollution Act (OPA).

As explained in the court's opinion, the Trustees had argued that since funding required a project stipulation between the Trustees and BP, it meant that the only projects the Trustees should consider and analyze were those stipulated by BP. In short, the only alternative was the only project that would placate BP. However, the court explained that this was circular reasoning that did not satisfy the statutory requirements of NEPA and OPA. Instead, NEPA requires that the Trustees must "[r]igorously explore and objectively evaluate all reasonable alternatives," "[i]nclude reasonable alternatives not within the jurisdiction of the lead agency," and "[d]evote substantial treatment to each alternative." Despite a remand from the court, the Trustees have still failed to explore or evaluate any other alternatives for the Gulf State Park site. Instead, the Trustees have furthered their circular reasoning by explaining that work is already being done, thereby foreclosing the possibility or consideration of other alternative uses for the site and the funding.

Fourth, the NEPA review contained in the Draft RP/EIS suffers from an ex post facto problem. It is highly disconcerting (and potentially contrary to law) to conduct NEPA review after construction of the project is already underway. Federal regulations require that an EIS commence "as close as possible to the time the agency is developing or is presented with a proposal." The regulations further specify: "The statement shall be prepared early enough so that it can serve practically as an important contribution to the decision-making process and will not be used to rationalize or justify decisions already made." NEPA requires federal agencies to fully consider and disclose the environmental consequences of an agency action before proceeding with that action and compels federal agencies prospectively to evaluate the environmental impacts of proposed actions that they carry out, fund or authorize.

Despite this, the Draft RP/EIS states that parts of the proposed project are already under construction. This means that the environmental review taking place at this stage is occurring after decisions impacting the environment have already been made. The actions in question are already taking place. Stated

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differently, the agencies have already made an "irreversible and irretrievable commitment of resources" which violates the procedural requirements of NEPA. Therefore, the environmental review contained in the Draft RP/EIS constitutes an impermissible ex post facto review. Not only does the review suffer from major shortcomings as discussed above and at length in our previous comments (and by the GRN v. Jewell opinion), it now suffers from a new problem-using NEPA review as a justification and rationalization after the fact rather than as a procedural planning tool before a commitment of resources has taken place.

Lastly, we urge the Trustees to provide a full and clear accounting of the project's budget. The Draft RP/EIS discusses additional sources of funding being used for various portions of the project. However, it is difficult to ascertain from the information presented which funding is going where. We request a full accounting of the sources of funding and how those sources correspond to the various components of the Gulf State Park project already underway and proposed.

For these numerous reasons and those explained in our previous comment letters, the Gulf State Park project should not move forward with NRD funding.

Conclusion

Ocean Conservancy supports approval of five projects as appropriate uses of NRD funding to provide and enhance recreational opportunities that were lost as a result of the BP oil disaster: (1) Fort Morgan Pier Rehabilitation, (2) Laguna Cove Little Lagoon Natural Resource Protection, (3) Bayfront Park Restoration and Improvement, (4) Dauphin Island Eco-Tourism and Environment Education Area, and (5) Mid-Island Parks and Public Beach Improvements. However, we continue to have strong concerns about the Gulf State Park Lodge project. Ocean Conservancy recommends that this project is not approved for inclusion in the final Recreational Use Restoration Plan I and Environmental Impact Statement: Provide and Enhance Recreational Opportunities.

Sincerely,

Kara Lankford
Interim Director, Gulf Restoration Program
Ocean Conservancy

Footnotes:
1. Ocean Conservancy is a nonprofit organization that works to protect the ocean from today's greatest global challenges. Together, we create science-based solutions for a healthy ocean and the wildlife and communities that depend on it.
2. Notice of Availability of an Alabama Trustee Implementation Group (Alabama TIG) Draft Recreational Use Restoration Plan I and Draft Environmental Impact Statement: Provide and Enhance Recreational Opportunities (Draft RP/EIS), 81 Fed. Reg. 91138 (Dec. 16, 2016).
3. Draft RP/EIS at pg 2-27, section 2.2.1.3 Alternative 3: Fort Morgan Peninsula Public Access Improvements.
4. DeWitt, R. (2016, March 3). Alabama's Fort Morgan Pier, once a community's focal point, must be replaced. Alabama NewsCenter. Retrieved January 18, 2017, from http://alabamanewscenter.com/2016/03/03/alabamas-fort-morgan-pier-once-a-communitys-focal-point-must-be-replaced/
5. Ocean Conservancy public comments regarding Phase III Early Restoration Plan and Final Early Restoration Programmatic Environmental Impact Statement (Feb 2014).
6. Id. at 6.
7. Cason, M. (2016, August 8). Gulf State Park lodge second phase, Hilton agreement approved. AL.com. Retrieved January 18, 2017, from http://www.al.com/news/birmingham/index.ssf/2016/08/gulf_state_park_lodge_second_p.html
8. Gulf Restoration Network v. Jewell, 161 F. Supp. 3d 1119 (S.D. Ala. 2016).
9. Draft RP/EIS at 2-21.
10. Gulf Restoration Network v. Jewell, 161 F. Supp. 3d 1119, 1130 (S.D. Ala. 2016).
11. See 161 F. Supp. 3d 1129-1131.
12. Id. at 1129.
13. 40 C.F.R. Â§ 1502.14.
14. Draft RP/EIS at 3-3.
15. 40 C.F.R Â§ 1502.5.
16. Id. See also, 40 C.F.R Â§ 1502.2(g) ("Environmental impact statements shall serve as the means of assessing the environmental impact of proposed agency actions, rather than justifying decisions already made").
17. 42 U.S.C. Â§ 4332; 40 C.F.R. Â§Â§ 1501.2, 1502.5 (emphasis added).
18. Draft RP/EIS at 3-3.
19. Pit River Tribe v. U.S. Forest Serv., 469 F.3d 768, 786 (9th Cir. 2006) (citing Metcalf v. Daley, 214 F.3d 1135, 1143 (9th Cir.2000)).

Correspondence ID: 14
Address: Wilmer, AL 36587
United States of America
Outside Organization: Unaffiliated Individual
Affiliation:
Received: Jan,29,2017 15:24:18
Correspondence Type: Web Form
Correspondence: Attn: NOAA Gulf of Mexico Disaster Response Center

As as Owner of several pieces of property located on the west end of Dauphin Island, i am strongly opposed to the Mid-Island Parks and Public Beach Improvements Projects. There is currently very limited space for traffic, pedestrians and bicycle riders. During late winter months, spring, summer and early fall, the traffic is extremely congested on weekends. the week days during late spring to early fall are also very congested considering the area that only has two lanes for vehicles. We currently have an issue with visitors not wanting to pay to park at the existing public beach and they abuse side court streets and private beach house driveways for illegal parking. Revenue collected would probably be minimum compared to Beach House Rental revenue and lodging fees and tax.
My experience has been that Weekly House Rentals for a group of Eight would be between 2400.00 and 2800.00 for One week. Renters already have very limited parking and public beach access (erosion of beach shoreline). Another issue to consider is he rainy season. When there are rainy days and summer

Correspondence ID: 14
rain storms there is a horrific problem with water drainage and no passing areas on the streets due to large pools of water on the street.
I want to state again that I am strongly opposed to this public beach and parking project due to reasons stated above. Health and safety of the current residents and visitors is already a concern and has been an ongoing issue for the last several years, especially since the Storm Katrina!
Thank you for taking the time to consider the current issues at hand with regards to space, safety and all other problems that come with overcrowding and abuse of roadways and our natural resources.

Respectfully,
Jane Cooley

Correspondence ID: 15
Address: Dauphin Island, AL 36528
United States of America
Outside Organization: Dauphin Island Home Owner Unaffiliated Individual
Affiliation: Member
Received: Jan,29,2017 16:32:35
Correspondence Type: Web Form
Correspondence: 1.Destruction of neighborhood. The development of both parcels B and C are in the middle of an established residential neighborhood and will destroy the character of our neighborhood with excessive traffic and noise.
2. Economic damage to neighborhood. The changes to the neighborhood will have a negative economic impact on numerous homes and families. The value of these homes will decline, and it will be difficult to sell or rent homes near this type of development.
3. Traffic and safety. Safety will be an issues as numerous people attempt to cross Bienville to get to the beach. At peak season, this will hinder traffic and endanger lives. Increase in traffic will also impact neighboring side streets.
4. Destruction of dunes. Creating parking lots from areas of active dunes will increase wind and water erosion on an already narrow part of the island and create a path for flood water to rush across the island during hurricanes or other severe storms.
5. Damage to Bayou Heron and Marsh. If a boat launch is included on parcel C,
the narrow channel of Bayou Heron will also be damaged by erosion and pollution. The fragile adjacent marsh which serves as an important habitat for a variety of birds and other wildlife will also be negatively impacted. The channel is already narrow and frequently silted in and would have to be continuously dredged and maintained, causing more environmental damage.
6.Not the intended use for these funds. Monies meant to restore resources are being used to adversely impact the very resources thought to be conserved.
7. No physical notice given to neighborhood. Many neighbors found out about project last week. Comment period should be extended beyond January 30.
8. Parcel C is zoned for multi-family residential use only.
Personal comment: My husband and I own the home at 1914 Cadillac, immediately adjoining parcels B & C. This project will negatively impact the value of our home and our ability to live there and enjoy life. We are not wealthy people. I am a public school teacher, and my husband has a small law firm with our son. We have worked hard all our lives and saved for the purchase of this house. In addition to the direct negative impact on our family, we are saddened by the damage to be done to our neighborhood. Finally, we are concerned for the environmental impact of turning active dunes with natural vegetation into parking lots. The irony of the situation is that the BP money was supposed to make us whole, but we will sustain much more damage from these developments than from the actual spill. If funds are available to restore our coast, a more practical focus would be combating erosion caused by the dredging of the Mobile Bay channel.

Correspondence ID: 16
Address: Dauphin Island, AL 36528
United States of America
Outside Organization: Unaffiliated Individual
Affiliation:
Received: Jan,29,2017 16:37:34
Correspondence Type: Web Form
Correspondence: Alabama Projects:

The Non-Transparency of the Alabama Gulf Coast Recovery Council for the BP projects and the injustice to Dauphin Island Alabama is atrocious, and deserves public outrage. The Council becoming a nonprofit entity instead of state entity, so they could have behind close door meetings, shows their intent to conceal information from the public.

All oilrigs and gas pipelines coming into Alabama go only through Dauphin Island and around the Island, and bring in Billions of Dollars to the State of Alabama and the Federal Government.

Dauphin Island has been impacted by the oil in the past, during the spill and will continue to be affected by the spill in the future and from the future impact from oilrigs and the gas pipelines that go through the Island. The federal government with billions of dollars at its disposal due to the Oil Spill has a responsibility to make sure Dauphin Island receives money for a complete shoreline restoration.

Over the past 37 years, the Corps of Engineers and the State of Alabama has purposely let Dauphin Island's shoreline erode away because of dredging of the Mobile Entrance Shipping channel. The State of Alabama has not required the Corps and the Alabama State Port Authority to mitigate the erosion to the adjacent shoreline of Dauphin Island from the dredging one of the deepest Federally Authorized channels in the nation.

Now to add insult to injury, the State of Alabama puts the Director of the Port Authority, Jimmy Lyons on the committee that is making the decisions for BP money going to Dauphin Island. Mr. Lyons wants all of the money coming to Mobile County for the Mobile Harbor.

There is a major conflict of interest between the Department of Conservation and National Resources and the US Corps of Engineers and Dauphin Island.

All the while knowing about the erosion on Dauphin Island, the Alabama Department of Conservation wanted to sell 19 Million cys of sand off Dauphin Island to the Corps for $50 Million Dollars to be used on the Mississippi barrier islands, knowing that under Alabama Law none of the money could be used for sand for Dauphin Island.

Now we find, the Department of Conservation and National Resources is deliberately holding up all of Dauphin Island's beach restoration projects until

Correspondence ID: 16
Barrier Island Restoration Assessment final report is finished. This assessment is not due until March 2019, which shows the extent of the manipulation and delay techniques the Department will go, to not give Dauphin Island a complete shoreline restoration project.

"Town of Dauphin Island Beach and Barrier Island Restoration Project Alternative 3 (Town of Dauphin Island)"
"The AL TIG's preference is to not move forward with a major structural restoration project on Dauphin Island until the Dauphin Island Barrier Island Restoration Assessment is complete, which has been made clear to the public at many recent public meetings (NFWF, 2016)."

In addition, the Department of Conservation and National Resources and the Corps have been deliberately concealing the factual data and the documentation used in the "Alabama Coastal Comprehensive Plan" and the" Alabama Barrier Island Restoration Assessment" studies that are being managed by the Corps, and being paid for with BP money. These studies are really for the deepening and the widening of the Mobile Harbor Entrance Channel for the Port Authority, which will destroy Dauphin Island even more.

There has been no explanation for the source of the money for the "Alabama Coastal Comprehensive Plan". It was stated that the State was paying the $1 Million Dollars for the study, but now according to a newspaper report the $1 Million Dollars was being sponsored by the Mobile Bay National Estuary Program and the Mississippi-Alabama Sea-Grant Consortium. Where did this money originate?

The conflict of interest of the Port Authority, the Corps of Engineers, the Mobile Bay National Estuary Program, and the Mississippi/Alabama Sea Grant.

Susan Rees of the Corps and Jimmy Lyons, Director of the Port Authority & Vice Chairman of the BP "Alabama Gulf Coast Recovery Council", were put on the MBNEP Personnel Committee, which decides the salary of Roberta Swann, the Director of the Mobile Bay National Estuary Program.

According to the Mobile Bay National Estuary Program Executive Committee Meeting Minutes March 20, 2015

"Mr. England recommended adjusting Ms. Swann's salary at Dr. Valentine's discretion, to which Dr. Rees responded that she thought it was the role of a personnel committee to review Ms. Swann's salary. Commissioner Ludgood made a motion that a Personnel Committee convene annually to consider the Director's salary. Dr. Valentine seconded the motion, which was approved unanimously with Dr. Swann abstaining. Bob Howard inquired as to the composition of the Personnel Committee. Dr. Rees, Mr. Lyons, and Dr. Valentine were named as PC members, and Mr. Hinesley suggested adding Mr. England to the Committee. It was noted that Ms. Swann's last salary adjustment was January, 2012. Ms. Denson therefore recommended moving quickly, and Ms. Powell suggested prior to and effective October 1, 2014."

This a dangerous conflict of interest that the salary of one of the National Estuary Directors, whose mission is to determine the impacts of the dredging activities has on the beach erosion and protect the environment of the Mobile Bay is put under the monetary control of the Corps and the Port Authority, the very two groups that want to expand the Mobile Harbor Channels over the environment.

Especially since the Mobile Bay NEP mission is:
"maintain is to promote wise stewardship of the water quality characteristics and living resource base of the Mobile Bay estuarine system and focusing on reducing the loss of beach and dune habitat through regulation changes, determining the impacts of dredging activities and disposal practices on natural beach erosion processes, researching the extent of shoreline erosion caused by boat wakes and other factors"

Ms. Swann's personal salary being controlled by the Corps and the Port Authority has the potential to undermine the impartiality of the MBNEP Director, because of the possibility of a clash between the Corps interest, the Port Authority's interest and the public's environmental interest.

In addition, Ms. Swann's husband, Dr. LaDon Swann who is the head of the Mississippi/Alabama Sea Grant, is on his wife's executive committee, and his knowing that the Port Authority and the Corps have control over his wife's salary, could inhibit his questioning of them concerning the environmental impacts of expansions for the Mobile Harbor.

According to Lagniappe Mobile Dec. 2, 2015:
"Aside from the previously mentioned study on the environmental impacts of a widened ship channel, another study, the $1 million Alabama Coastal Comprehensive Plan, is being sponsored by the Mobile Bay National Estuary Program and the Mississippi-Alabama Sea-Grant Consortium. The ACCP will focus on Alabama's entire coastline in hopes of developing a comprehensive plan to strengthen its economic, environmental and social resilience."

No one should be over the salary of the Director of the Mobile Bay Estuary Program that has a conflict of interest of the mission of Estuary program or anyone that gives or receives money from the program.

I personally feel that a husband and wife should not head-up, two of the most influential environmental groups for coastal Alabama that are submitting BP projects and have the power to sway the environment of Coastal Alabama and Coastal Mississippi.

I am against the use of $85.5 million and the State's reasoning behind the use of the BP environmental money for the rebuilding of the Gulf State Park that was destroyed by Hurricane Ivan in 2004, which is under the Alabama Department of Conservation and National Resources.

The lost of the hotel has nothing to do with the BP oil spill. The Governor of the State of Alabama has already taken one Billion Dollars of the BP environmental money for the State. Let the State use part of its Billion Dollars of environmental money to rebuild the Hotel instead of environmental money, which could be used for the shoreline restoration.
This is a sham by the State of Alabama to use the BP environmental money for the hotel.

The State received insurance money for the hotel after Hurricane Ivan. Why isn't the insurance money part of the scheme?
What happened to the insurance money that the State of Alabama received to rebuild the Hotel after Hurricane Ivan?

http://www.alreporter.com/sanford-reports-that-he-is-being-pressured-to-support-controversial-gulf-state-park-project/

"For decades Gulf State Park was served by the Gulf State Park Lodge, which provided affordable accommodations to Alabama families on vacation. Unfortunately the lodge was never built back after it (like the fishing pier) was destroyed by Hurricane Ivan in 2004. Even though the State had ample insurance money to rebuild the lodge, Gov. Bob Riley (R) refused; opting instead to pursue a much more costly convention center and luxury hotel to be

Correspondence ID: 16
managed in partnership with a private hotel chain. After a lawsuit and the Great Recession, that deal fell through. Now Gov. Robert Bentley (R) is pursuing a far more costly project using $85.5 million of the BP oil spill settlement that was supposed to be used for coastal restoration. That apparently is not enough for the Governor because on Tuesday, May 26, he sent Budget Director Bill Newton to the Senate Governmental Affairs Committee to pitch the need for another $50 million in bond issuing authority which would cost taxpayers an estimated $3.4 million a year. The project's backers claim that the project would generate enough money to service those debts?."

Caroline Graves
cmgraves2010@gmail.com

Correspondence ID: 17
Address: Dauphin Island, AL 36582
United States of America
Outside Organization: Unaffiliated Individual
Affiliation:
Received: Jan,29,2017 18:52:43
Correspondence Type: Web Form
Correspondence: As property owners of a home that is within 1/4 of a mile of the proposed area that is being considered for public access, we are DEFINITELY AGAINST this proposal ! While Part A (beach access) alone would not be hinderous, Part B (parking lot) would pose a major threat with car traffic, as well as foot traffic, in the area because you must cross the main road connecting the east and west ends of the island ! Part C (boat launch) threatens to not only change the quality of the area, but would cause major environmental headaches !

Correspondence ID: 18
Address: Dauphin Island, AL 36528
United States of America
Outside Organization: Unaffiliated Individual
Affiliation:
Received: Jan,29,2017 19:25:37
Correspondence Type: Web Form
Correspondence: The draft restoration plan proposes six preferred alternatives to restore lost recreational use opportunities in Alabama, with a total estimated cost of $70.7 million with 3 projects considered for approval involve Dauphin Island. The Town of Dauphin Island also proposed the West End Beach and Barrier Island Restoration Project AL-92 for $58,601,000 which was not carried forward. This is a mistake and should be reconsidered. Dauphin Island is in a weakened state due to the loss of over 20 million cubic yards of sand being dredged from the Mobile Ship Channel by the Corps of Engineers and deposited into the open gulf and therefore removed from the littoral system never to reach the Island's shoreline. The Island was further weakened by the excavation of sand from the north side of the Island and put on the south shoreline to protect the Island's infrastructure from the oil spill. This sand also has disappeared from the shoreline. Without a stable shoreline, the proposed recreational use projects will be vulnerable to future hurricanes and tropical storms.

Correspondence ID: 19
Address: WILMER, AL 36587
United States of America
Outside Organization: Unaffiliated Individual
Affiliation:
Received: Jan,30,2017 06:44:26
Correspondence Type: Web Form
Correspondence: I am opposed to this project. I am a building contractor on Dauphin Island and have built numerous houses on the island and currently have five houses under construction. I own the property east of the proposed parking and public beach project and property west of The Inn condos. I am on the island approximately five days a week during daytime hours and I'm very much aware of the traffic issues and visitors not taking advantage of the already existing public beach and parking area where there is a fee to park. The island currently has TWO public beach and parking areas where a fee is charged and many Locals and Visitors are still choosing to use private property beach access owned by others and non-parking areas to avoid paying a Fee.

I am against any additional Town owned Property and think Restore Money would be better spent on beach re-nourishment to benefit ALL beach goers. Additional parking for LOCALS, should be added at the West End Beach Park that is already in existence.

The Property proposed for a new parking and public beach area would be a greater asset for the Town of Dauphin Island in reference to a Tax Base with Houses built for residents and seasonal renters. Both Condo and Beach House Rentals bring in a tremendous amount of revenue and lodging taxes that in turn supports the various existing programs and expenses of the Town of Dauphin Island.

Thanks,
Lester Cooley

Correspondence ID: 20
Address: Dauphin Island, AL 36528
United States of America
Outside Organization: Unaffiliated Individual
Affiliation:
Received: Jan,30,2017 08:33:03
Correspondence Type: Web Form
Correspondence: I feel the proposed plans for Dauphin Island's Eco Tourism and Environmental Education Area needs to be reevaluated. Yes the property needs to purchased but only for environmental preservation. The area should remain undisturbed as a wildlife area. It certainly does not need to be

Correspondence ID: 20
"invaded by tourism and concrete. Also, anyone who has observed the area realizes a fishing pier would be useless. The area is extremely shallow most of the time.

The Bayfront Park also seems like a waste of funds. One Million dollars for a survey/study? Why not just use previous studies and speak with the local residents.

The beauty and attraction of Dauphin Island remains with the lack of concrete and the abundance of natural areas. Please do not take all your ideas from those wanting to increase tourism just for the sake of profits. Many residents feel this way and we are not all represented by the Town Council or Chamber of Commerce. Times have changed since the oil spill. Vacation rentals have increased, especially of those visitors wanting a quiet natural area. The environment was hardest hit by the spill why not help it return to its previous state.

Thank you for considering our comments.

Correspondence ID: 21
Address: Dauphin Island, AL 36528
United States of America
Outside Organization: Town of Dauphin Island Town or City Government
Affiliation: OffcialRep
Received: Jan,17,2017 00:00:00
Correspondence Type: Letter
Correspondence: Dear Sirs,
As Mayor of the Town of Dauphin Island, Alabama, I write in support of the Alabama Trustee Implementation Group and its First Draft Restoration Plan and Environmental Impact Statement. As an elected official of a barrier island community, I witnessed first hand the devastating impacts caused by the Deepwater Horizon oil spill in 2010 including environmental, economic and lost recreational shoreline use opportunities. The Draft Restoration Plan as proposed successfully addresses these loss of use issues and will serve the coastal Alabama region well for years to come.

In closing, I wholeheartedly support the Draft Restoration Plan developed by the Alabama Trustee Implementation Group and encourage its formal adoption.

Respectfully submitted,

Jeff Collier
Mayor

Correspondence ID: 22
Address: Fort Morgan, AL N/A
United States of America
Outside Organization: Unaffiliated Individual
Affiliation:
Received: Jan,28,2017 00:00:00
Correspondence Type: E-mail
Correspondence: I am an 86 year old resident of the area near the Laguna Cove Project. In my childhood I spent summers and most weekends here on the shores of the Little Lagoon; my permanent residence has been here for the past 35 years. In between it was a vacation site where we visited my parents. Thus I know the parcel well. Additionally, for the past ten years I have been a member of the Little Lagoon Preservation Society's Water Quality Testing Team.

Over the years I have observed the decline in the marine life in the Little Lagoon and the loss of submerged aquatic and shoreline vegetation. Much of the shoreline outside of the Bon Secour National Wildlife Refuge has been hardened with bulkheads as development has expanded. The Laguna Cove Parcel has the largest remaining undeveloped natural shoreline. The proposed project would protect it with low impact amenities which will allow the public to appreciate the environmental importance.

Frances G. West
chan@goefish.com

Correspondence ID: 23
Address: Grove Hill, AL 36451
United States of America
Outside Organization: Unaffiliated Individual
Affiliation:
Received: Jan,30,2017 12:22:05
Correspondence Type: Web Form
Correspondence: My husband and I have a house just down the street from the proposed boat landing and we want to express our opposition to this plan. The neighborhood where you are proposing to locate the boat landing and parking lot is a quiet residential area with privately owned vacation homes most of which are not rental units. The people who live in and use these homes year round have families and small children.
There is a boat launch facility on Cadillac Ave. at Gulf Breeze Motel which my family uses frequently and the cost is reasonable. The proposed boat launch facility would place the City in direct competition with one of its business owners.
The constant activity associated with a boat launch facility would disturb the peace, use and enjoyment of the home owners and their guests. One of the reasons many of these home owners chose to buy homes on Dauphin Island, including me, is the quiet, low-key lifestyle of this neighborhood. I believe the proposed boat launch and parking lot will destroy the enjoyment of my property as well as diminish its value.
Anyone who has used the public boat launch on the East end of the island can attest to the high volume of noise and traffic in the area day and night, as well as the fact many vehicles are parked up and down the side of the street. I do not want this in my neighborhood.

Correspondence ID: 24
Address: Dauphin Island, AL 36528
United States of America
Outside Organization: Unaffiliated Individual
Affiliation:
Received: Jan,30,2017 13:11:30
Correspondence Type: Web Form
Correspondence: The idea to build a fishing pier in Aloe Bay is a bad one! There is precious little water in that location now, and the island is constantly changing. Such a shallow spot would be a very poor fishing location, I would think.

In addition, it seems that parking would be an issue, and would present traffic issues for people leaving and arriving at the island.

We already have one fishing pier with no water beneath. This project, I think, would almost guarantee a second one, sometime in the future.

Correspondence ID: 25
Address: Mobile, AL 36619
United States of America
Outside Organization: Unaffiliated Individual
Affiliation:
Received: Jan,30,2017 13:58:59
Correspondence Type: Web Form
Correspondence: I am commenting on the proposal labelled "Mid-Island Parks and Public Beach Improvements Project" proposing the acquisition of two parcels of land on Dauphin Island for the purpose of building a parking lot and restrooms, with the potential eventual development of a public boat ramp on a third parcel. As a frequent visitor to the island, I believe that putting a parking lot and restrooms on Parcel B where proposed would create an incredible traffic issue as this land is a)near an elementary school, b)in a residential area and c)located where the road narrows from four lanes to two. In addition, placing restrooms across the street from the public beach means that there will be a constant stream of people trying to cross the road, thereby placing themselves and those people driving down the road in danger. Gulf Shores has a similar situation and there are several incidents per year of children and adults being hit by cars when they try to cross the main road by the beach. Furthermore, Dauphin Island is too small to handle such a large influx of cars and people, without destroying much of what draws tourists and residents to the island. Finally, my understanding of the purpose of the restore funds was to preserve natural habitats that were damaged by the oil spill. Dauphin Island is a critical part of the migration path for thousands of birds in the spring and fall and as much habitat as possible should be preserved, not paved.

Correspondence ID: 26
Address: Mobile, AL 36528
United States of America
Outside Organization: Unaffiliated Individual
Affiliation:
Received: Jan,30,2017 00:00:00
Correspondence Type: Web Form
Correspondence: I am writing to oppose portions of the Mid-Island Parks and Public Beach Improvements Project, which will affect property on Dauphin Island. My understanding is that Parcel A will be a public beach area, Parcel B will be a parking lot and public restroom facility for the beach access, and Parcel C will be a public boat launch.

I am particularly opposed to the proposal for Parcel C to be a public boat launch. This property is beside and adjacent to private residences. Introducing a public boat launch will eliminate all privacy for these residents and rob them of the essential features that make Dauphin Island so appealing. No longer will these homeowners have a quiet, relaxing getaway. Not only will boaters be yelling instructions from the driver to the boater and vice versa, we will also hear boat engines, etc. at less than desirable times (4:00, 5:00, 6:00 a.m. and late at night). Boaters will not be monitored and have no incentive to be quiet or respectful. There is no incentive for them to not litter or throw trash from their boats and vehicles onto the surrounding property, including people's homes. In sum, I oppose the proposal for Parcel C because of the noise, litter, and decreased or completely eliminated privacy for all those around the boat launch.

Correspondence ID: 27
Address: Dauphin Island, AL 36528
United States of America
Outside Organization: Unaffiliated Individual
Affiliation:
Received: Jan,30,2017 00:00:00
Correspondence Type: Web Form

Correspondence ID: 27
Correspondence: Please do not implement this plan to have 300 parking places and heavy vehicle, boat and foot traffic in extremely close proximity to many residential properties.

The residential character of the area will be destroyed. The owners of the properties in the area will own property of a completely different character than currently exists.
The peace and tranquility of the area will no longer exist.

The heavy boat traffic will damage the sea wall that retains the land on the waterway where the proposed boat ramp would be placed and will likely erode the land on the other side of the waterway (which has no seawall). The heavy boat traffic will also make use of the waterway dangerous.

The property values and the rental prospects of land and residences in the vicinity will be damaged. Tax revenues will be lowered.

Mailing address:
9 Demouy Ave.
Mobile, AL 36606

Correspondence ID: 28
Address: Dauphin Island, AL 36528
United States of America
Outside Organization: Unaffiliated Individual
Affiliation:
Received: Jan,30,2017 00:00:00
Correspondence Type: Web Form
Correspondence: I'm writhing to object to the proposed Mid-Island Parks and Public Beach Improvements Project Alabama Restoration Area. My main objection is with the purchase and plan development of parcel B & C. The plan to make parcel C a boat ramp with residential currently residing on all sides does not make sense. Added the boat ramp would:
1. Reduce the property values of the homes in that area
2. Increase the traffic in an area that has children playing, people walking & riding their bikes
3. Boats launching at all hours of the night with residential homes within 200 feet of the boat ramp
4. Nose pollution of boats being launched and starting and running outboard motors at all hours of the night
5. Does not add any green space to the island
6. The area is not sufficient for the amount of trailer parking required which means that people would be parking down the street in front of her a residential homes

Correspondence ID: 29
Address: mobile, AL 36604
United States of America
Outside Organization: Unaffiliated Individual
Affiliation:
Received: Jan,30,2017 00:00:00
Correspondence Type: Web Form
Correspondence: I am a property owner on Dauphin island on Lafitte bay within one block of the proposed Dauphin island Mid Island Park parcels A, B and C. I have not received any notice of the proposal and have not noticed any posted notice for comments on the parcels themselves. I consider this a violation of my rights to due process since these projects will have a material adverse impact on my property value. Parcels B and C in particular are being placed in the middle of a residential area . To understand the adverse impact of a boat launch and parking area all you have to do is go to the east end of the island near the ferry on any weekend and notice the dozens and dozens of trucks and boat trailers parked along the public median. The impact will be worse along Pineda and Cadillac since these roads are two lanes along which residents walk and bike continually. The heavy use of these 2 lane roads by non-property owners will increase traffic / lower safety for children and increase noise and potential crime and vandalism. Immediately to the west of parcel C is a private beach access which is restricted to use by Dauphin island Property Owners and is owned by the property owners association. Public access and the overflow that will be caused by public access at parcel B and C will likely destroy the use of this park as a private facility. In addition the use of Parcel C as a boat launch will increase pollution on the north side of the island , increase erosion and potentially lead to the use of the adjacent private park /beach access as an illegal boat launch by those who do not want to pay a launch or parking fee. We have already experienced this problem and have been addressing it through the property owners association. I strongly urge that this proposed project be cancelled and public access be located in areas that are not IMMEDIATELY adjacent to private homes. Also any proposal of this magnitude needs to include actual notice to landowners within at least 1/4 of a mile.

Correspondence ID: 30
Address: Dauphin Island, AL 36528
United States of America
Outside Organization: Unaffiliated Individual
Affiliation:
Received: Jan,30,2017 00:00:00
Correspondence Type: Web Form
Correspondence: I am deeply upset and concerned about the possible boat launch and 100 parking places that are in the works at Pineda and Cadillac. My husband and I own 2012 Cadillac with George Cunningham and we are totally against the site. We and other property owners and neighbors successfully fought a similar proposition on the lot next door.

I understand the need for more launches; however, they do not need to be in such close proximity to homeowners. There will be increased traffic, trash, noise and many other issues that will affect out quality of life. Plus, times have changed. People's general behavior is not as gracious or neighborly as in the past. People launch boats and park their cars and trailers all over the place. We are constantly telling people they cannot drop boats on the property associations pocket parks. We are in the process of planting trees and installing parking curbs to keep them out.

Please study other locations. This will hurt us in so many ways.

Thank you

Lucy Rouse Wright

Correspondence ID: 31
Address: mobile, AL Mobile Ala
United States of America
Outside Organization: individual Unaffiliated Individual
Affiliation: Member
Received: Jan,30,2017 00:00:00
Correspondence Type: Web Form
Correspondence: I am commenting on the Mid Island access plan for Dauphin Island Alabama. first, I am disappointed that I never heard of this project until a Dauphin Island resident emailed me about it TODAY. I am aware of no posted signs, mailings, newspaper stories or any other information publicly circulated about this project. I understand there will be a boat ramp into the canal that dead ends in one direction and enters a dredged channel leading into the Mississippi sound in the other. The canal and channel are already overcrowded with boat traffic. There is already a boat ramp about 1/4 mile farther up the canal to the East. people who live along the canal and channel will no longer be able to fish or swim in them. The proposed ramp and parking lots sit between and adjacent to homes, some of which have been on the Island have been on the Island for over 50 years. There is no provision for trash pick up. there is no provision for any buffer or fence between the ramp and parking lots and these homes. There are insufficient planned parking spaces. If you take the time to look at the ramps near the East end of the island, on any given weekend there are at least 100 vehicles attached to empty boat trailers parked along the right of way of Bienville Blvd. I am aware of no study of how many boats will use the proposed ramp. The excess vehicles and empty trailers will be parked up and down Cadillac and other streets in front of the homes mentioned above. there will be noise every day beginning before daylight from people using the ramp. there will be dead fish every night. The proposed boat ramp is unneeded and represents an effort by the Town of Dauphin Island to use the funds for a land grab. Obviously, I strongly oppose the project.

Correspondence ID: 32
Address: Dauphin Island, AL 36528
United States of America
Outside Organization: Unaffiliated Individual
Affiliation:
Received: Jan,30,2017 00:00:00
Correspondence Type: Web Form
Correspondence: This is in reference to the Mid Island Park and Public Beach Improvement Project"

I am a home owner directly in front of the Parcel C section of the project "A boat launch" and Parcel B public parking
This area located in a individual residence area. The issues I see are the congestion and the hours of operation that will interfere with the noise ordinance and cause a disturbance to the area. The parking will be an issue. You have factors that come along with public access to the water. Privacy and concern of theft and chaos .

Another and most important issue is devaluation of the surrounding properties. It is not in the best interest for the property owners to suffer an economic downfall to the value of their property.

The area itself is a high traffic area and family oriented section of the island and I think it is in the best interest of the town to maintain and preserve this area as it was intended Residents Only

Correspondence ID: 33
Address: Dauphin island, AL 36528
United States of America
Outside Organization: Unaffiliated Individual
Affiliation:
Received: Jan,30,2017 00:00:00
Correspondence Type: Web Form
Correspondence: Too much congestion and not safe for children and will reduce our property value

Correspondence ID: 34
Address: dauphin island, AL 36528
United States of America
Outside Organization: Unaffiliated Individual
Affiliation:
Received: Jan,30,2017 00:00:00
Correspondence Type: Web Form
Correspondence: Mid Island Park and Public Beach Restoration Project

My name is David Phillips and I built the house that's across the street from the propossed new boat launch. I like the idea of the beach restoraion and public use for the beach area.

But i am opposed to a full blown boat launch at the corner of Pineda and Cadillac. I would not have a problem with a kayak launch but not a motorized boat launch- too much noise, traffic, and activity all hours of the day and night. Also there would be baot trailers parked all over our property especially during tournaments like DI Rodeo.

We built our house here on DI because it peaceful and quite. A public boat launch will ruin this for us and all our neighbors on Pineda Street.

A kayak launchwould be fine but please don't put a boat launch in on that sight.
David and Sue Phillips

Correspondence ID: 35
Address: Dauphin Island, AL 36528
United States of America
Outside Organization: POA Unaffiliated Individual
Affiliation: Member
Received: Jan,30,2017 00:00:00
Correspondence Type: Web Form
Correspondence: I own a home at 305 Pineda and the adjacent lot on Pineda to the South. Proposed Park Parcel C, where I understand the boat launch is proposed, is directly across the street from my property, which formerly belonged to my parents. My husband and I also own a home at 2006 Cadillac which is only 2 lots from the proposed ramp.

We object strenuously to the project because of the negative impact it will have on the residential character of the neighborhood and safety concerns because of the traffic both on land and water and the negative impact on wildlife, particularly birds. There are many small children in the neighborhood and the number of cars(and boat trailers) based on parking spaces proposed on Parcels B and C alone will be a safety issue and eliminate walking and bike riding in the area. The plan will introduce a huge volume of boat traffic into the neighborhood and render kayaking and sailing in the area of Heron Bayou impossible. A boat ramp is noisy at all hours of the day, including very early morning, and that will destroy the quiet of the neighborhood. The volume of people and cars would create an incredible amount of litter and trash.

Importantly, the lots identified as Parcels B and C are vital bird habitats. My children, grandchildren and I spend innumerable hours watching the birds in those two parcels and the plan will destroy the aviary. We object to the plan for all of the same reasons that the other neighbors object and would like an opportunity to be heard. This will completely destroy a neighborhood that has been residential since the first bridge to the Island was built. M. Kathleen Miller

Correspondence ID: 36
Address: Dauphinisland , AL 36528
United States of America
Outside Organization: Unaffiliated Individual
Affiliation:
Received: Jan,30,2017 00:00:00
Correspondence Type: Web Form
Correspondence: There would be too much boat traffic which would definitely cause sea wall erosion on the 50 plus year old present seawall. So many boaters already don't adhere to the No Wake zone. Many homeowners swim with family in the area and there have been numerous near misses Ive encountered. Majority homeowners boatdocks will be damaged from wakes the boat makes. Plus, vehicle traffic at the intersection which is too narrow.

Correspondence ID: 37
Address: Dauphin Island, AL 36528
United States of America
Outside Organization: Unaffiliated Individual
Affiliation:
Received: Jan,30,2017 00:00:00
Correspondence Type: Web Form
Correspondence: I would like to comment on the proposed Dauphin Island Development Project. When reading the purpose of this funding and the description for Dauphin Island specifically, a boat ramp, extensive public parking, and restrooms do not promote eco-tourism and environmental education as is stated in the description I read for DI projects. Ecotourism could be promoted possibly with a canoe/kayak launch but a boat launch (even for small boats) will increase gas pollution, noise at all hours, boat parking issues and boat traffic in a residential area that is extensively used for kayaking, paddle boarding and swimming.

The public swimming area with parking, does not fit with the description of an environmental education area. There is little beachfront left on the island that is not covered by houses and condos. I agree that the beach are could be used and conserved for environmental education and eco-tourism related excursions but I do not agree with it being use as another public beach when we have a new public beach on the east end in addition to the central public beach, as well as other public parking opportunities on the island.

Correspondence ID: 37
Most of us who live in the area just heard about this plan. While the City may or may not have the right to proceed with this plan, there should have been more of an effort to let the residents in the area know that this was being proposed. That is the transparent and ethical way to proceed. We may have had valuable input. As described, I disagree with this proposed project.

Correspondence ID: 38
Address: dauphin island, AL 36528
United States of America
Outside Organization: Unaffiliated Individual
Affiliation:
Received: Jan,30,2017 00:00:00
Correspondence Type: Web Form
Correspondence: please do not allow a boat launch and parking in the area in which I have invested for a nice family oriented beach retreat . this would be complete nightmare.

Correspondence ID: 39
Address: mobile, AL 36602
United States of America
Outside Organization: Unaffiliated Individual
Affiliation:
Received: Jan,30,2017 00:00:00
Correspondence Type: Web Form
Correspondence: As a citizen who frequents Dauphin Island, I am strongly against the proposal to put in a boat launch toward the middle of the Island. However it may be zoned, the proposed boat launch and parking facility will be an incredible intrusion into the residential atmosphere and solitude of the residents in the area, incease noise and pollution levels and decrease property values. The inflow of cars, trucks, boats and trailers and will ultimately result in heightened congestion, a literal traffic dam that will impede not only the east/west flow of traffic, but will create daily opportunities for accidents involving vehicles and pedestrians. Unlike the east end of the Island, this area is not set up to safely handle the enhanced demands on traffic which will ultimately divert needed manpower resources from DI authorities. Adequate launch facilities exist either elsewhere on the Island or at Alabama Port. It simply is not needed, particularly in this area.

Not everything is about money. Maintain the village atmosphere of the Island. Please do not favorably consider this ill-advised plan.

Charles J Potts

Correspondence ID: 40
Address: Camden, AL 36726
United States of America
Outside Organization: Unaffiliated Individual
Affiliation:
Received: Jan,30,2017 16:29:22
Correspondence Type: Web Form
Correspondence: I am a long time visitor, vacationer, and proponent of anything Dauphin Island, whose family owns a house on Lafitte Bay. This proposal for a public boat launch with attached parking, a 200 car parking lot, and a public access beach (all of which would be located in a heavy residential and family area), disturbs me, as to how news of it was kept from the public until the midnight hour and as to how fictional and misleading the impact statement is. First and foremost, the statement that no adverse impact to public health and safety are expected is flat out wrong, and at worst is an ignorant, false, and intentionally misleading statement. Anyone who has spent a single second of time at the intersections of cadillac avenue, pirate's cove, Pineda, and Bienville, will tell you that children on bicycles or scooters zoom in and along the road all day everyday, families walk pets all day every day, and any accidents are avoided form the fact that traffic there is local, with the travelers having knowledge of the need to keep a lookout for small children and pedestrians. If the Town of Dauphin Island gives access to 200 vehicles driven by people having no knowledge or experience of the area, this not only increases the chances of a pedestrian being struck, it guarantees it. Furthermore, the garbage and human wasted generated will certainly have an impact on the area, despite the fact the Town is ignoring the reality not everyone will use the garbage cans. Everyone who owns a house on Dauphin Island does so because it is quiet, quaint, and not crowded. Ramming this project down people's throats is not why they choose to spend money and own property on the island. The increased traffic also leads and correlates with an increased risk of crime, as some of the new visitors might not be there to "enjoy the sunsets" as our little island likes to advertise.

The boat ramp raises completely new issues. First, there is already a pay boat ramp located on this canal at the Gulf Breeze Motel, an the new construction of one puts the town in direct competition with a private business. This should certainly be alarming to ANYONE who considers starting a business on the island. Why isn't this money spent on dredging canals to improve access to already existing launch facilities??? This would eliminate the need to pave over and completely alter the proposed space. The increased traffic from people launching boats also brings up the problems mentioned above with pedestrians. In short, this whole thing is a terrible idea, and I will join others in fighting it.

Correspondence ID: 41
Address: Dauphin Island, AL 36528
United States of America
Outside Organization: Unaffiliated Individual
Affiliation:
Received: Jan,30,2017 16:37:01
Correspondence Type: Web Form
Correspondence: I purchased my home in November of 2016 completely unaware of potential changes to property in immediate proximity, that would have a negative impact to the value of my home. One thing that we particularly loved about our house, was the fact that it was on a dead-end street that did not allow traffic.
A public boat launch will create traffic problems and parking problems, that will make traveling to or from mine and my neighbors homes difficult on weekends and holidays. I have seen the problems with traffic flow at the east end boat launches where they have four lanes of traffic. People are trailering boats in excess of 35 feet long these days, and if there is a public boat launch they will attempt to use it, blocking driveways and the streets after they have launched.
Have you ever noticed the aroma that generally accompanies public boat ramps that service fisherman? It comes with territory, and a Southeast wind will bring that odor right down our street. That is common wind in this region.

Correspondence ID: 42
Address: Dauphin is2, AL 3652i
United States of America
Outside Organization: Unaffiliated Individual
Affiliation:
Received: Jan,30,2017 16:47:54
Correspondence Type: Web Form
Correspondence: As a property ownerin this area this project would totally destroy our way of life on this beautiful island know more walking down what use to be a peaceful neighborhood just look at the east end we don't want that

Correspondence ID: 43
Address: Fairhope, AL 36532
United States of America
Outside Organization: Baldwin County Commission Unaffiliated Individual
Affiliation: OffcialRep
Received: Jan,30,2017 17:22:25
Correspondence Type: Web Form
Correspondence: Comments from Baldwin County Commission Chairman Chris Elliott on Alabama Trustee Implementation Group Draft Restoration Plan I and Environmental Impact Statement: Provide and Enhance Recreational Opportunities" (RP/EIS)

The suite of projects proposed in the Alabama Trustee Implementation Group Draft Restoration Plan I and Environmental Impact Statement: Provide and Enhance Recreational Opportunities (RP/EIS), will support and enhance our coastal economic and environmental resilience.

The value of a healthy ecosystem as an intrinsic component of a healthy economy is well recognized. Baldwin county, Alabama, is known for its very positive quality of life. Our quality of life is a fundamental factor in the continual residential population growth we have enjoyed for more than 20 years, and in our phenomenal tourism industry which has set new records nearly every year since 2012, two years after the Deepwater Horizon disaster.

Acquiring, protecting and establishing sustainable use opportunities for critical remaining undeveloped coastal beaches, wetlands and contingent uplands is vital to assuring future generations continued enjoyment of outdoor activities. It also assures that those who follow us will have the opportunity to experience near pristine conditions of a rapidly vanishing beach-dune habitat. These assurances are critical to having visitors return again and again to our coastal communities, contributing to Alabamas economic prosperity.

My comments are in support of all 6 of the proposed projects. I would especially like to address the three projects to be located in Baldwin County. These are:

Gulf State Park Lodge and Associated Public Access Amenities Project- $56,300,000
Fort Morgan Pier Rehabilitation - $3,075,000
Laguna Cove Little Lagoon Natural Resource Protection - $4,400,000

These project costs represent an aggregate financial investment of only $63,775,000 in allocated NRDA funds assigned to address losses in recreational use beginning April of 2010 through November 2011. By comparison, in one month, July,2015, tourism generated $118.9 Million in taxable retail sales for Gulf Shores and Orange Beach, a record for the two cities. It was a 5.5 percent increase over July 2014 and represents, in one month, nearly double the financial outlay of these three individual projects.

The need for short term overnight capacity in the Gulf Shores/ Orange Beach communities has been well documented. Overnight visitors to these beachfront locations include many local Baldwin County and Mobile County residents and business owners who express a desire for a weekend visit for meetings or special events and do not desire to contend with week-long condo rental contracts. This situation will only continue. With Baldwin County experiencing an annual residential growth rate averaging over 10% and an annual visitor count exceeding 5 million tourists, providing and enhancing access to our coastal venues and natural resources is imperative. The county, with the beach cities of Gulf Shores and Orange Beach as the main attractions, experienced a 4.7 increase in visitors from 5.5 million in 2013 to 6.1 million in 2015. 2016 saw a similar increase.

The Gulf State Park Lodge and Associated Public Access Amenities Project is the highest priority contributor among these three projects in addressing this specific issue. It is also the single largest project component within the NRDA PDARP/PEIS Restoration Allocations for Alabama in the Provide and Enhance Recreational Opportunities funding category. These allocations represent a total of $110,505,305. Of which $85,505,305 were contributed through BP Early Restoration funds and $25,000,000 are to be sourced through the BP Settlement. This single project justifiably represents nearly 51% of the entire allocation toward recovering Alabamas contributable resource losses toward recreational use.

Correspondence ID: 43
The understood purpose of these projects are only to provide compensatory restoration for losses that occurred over 19 months, after which the NRDA Final PDARP/PEIS studies conclude that recreational use returned to baseline levels. The reverberation of the economic impact from loss of the recreational use of our coastal natural resources was very deep within our county. It is essential to not under-represent tourisms contribution to this coastal regions and this states economic resilience.

Ours is a year-round coastal economy supporting approximately 48,000 tourism and hospitality employees throughout our area who work 365 days a year to ensure that our destination is ready for guests. Baldwin county is Alabamas largest contributor to this states lodging tax revenue. In 1999, Baldwin County's annual state lodging tax returns were $5.9 million, representing only 22 percent of the state's overall $27.1 million. By 2014, Baldwin Countys lodging tax drew $17.8 million, or 31 percent of the state's $58 million in these revenues.

Research done for our neighboring state to the east indicates that project investments like those proposed here have an even greater down-range benefit. The group Florida TaxWatch has conducted independent research which shows that every 85 visitors to Florida equals one new job in the state, and that only half of those jobs are created in the tourism sector. Half of the jobs that result from the state's investment in attracting visitors to Florida are created in non-tourism industry sectors, such as administrative services, transportation and health care, which helps balance job creation and diversify the state economy.

All residents and visitors in Baldwin County appreciate having more and higher quality access to off-beach recreational opportunities. Such opportunities will be enhanced by all three proposed projects.

The Gulf State Park project includes associated improvements and enhancements to the complete park, with added nature trails, water access to inland lakes and waterways, additional camping opportunities, and improved interpretive facilities to educate all visitors about the unique habitats surrounding them.

Public recreational fishing from a land-based pier or wharf structure in the Gulf Shores / Orange Beach area is limited to the Gulf State Park Pier. The proposed project to restore and enhance the Ft. Morgan Pier will be welcomed by thousands of local and visiting fishing enthusiasts annually. Fishing is big business here. In the State of Alabama, more than 690,000 resident and non-resident fishing licenses, tags and permits were counted in the USFWS National Fishing License Report for 2015.

Public access to the City of Gulf Shores Little Lagoon will be significantly enhanced through the proposed project to acquire, protect and provide careful use of some of the last remaining undeveloped habitat tracts with lagoon frontage. Paddle craft access, educational nature trails and protected areas will give even more recreational opportunities to be enjoyed for many future generations.

These three projects address losses in recreational use and, they also represent choices in enhancing the coastal economic resilience while protecting critical ecosystem resources, habitat, and wildlife. We anticipate the return on this allocation investment will contribute to meeting a well-documented need for implementing sustainable, long term growth in Baldwin County.

Thank you for this opportunity to comment.

Chris Elliott
Chairman
Baldwin County Commission
Commissioner, District 2

Correspondence ID: 44
Address: Birmingham, AL 35233
United States of America
Outside Organization: Southern Environmental Law Center Unaffiliated Individual
Affiliation: OffcialRep
Received: Jan,30,2017 00:00:00
Correspondence Type: Web Form
Correspondence: Southern Environmental Law Center
2829 2nd Avenue South, Suite 282
Birmingham, AL 35233

January 30, 2017

NOAA Gulf of Mexico Disaster Response Center
Attn: Alabama Recreational Use Restoration Plan
7344 Zeigler Blvd
Mobile, AL 36608

RE: Notice of Availability of an Alabama Trustee Implementation Group Draft Recreational Use Restoration Plan I and Draft Environmental Impact Statement

To Whom It May Concern:

The Southern Environmental Law Center appreciates the opportunity to comment on the draft Recreational Use Restoration Plan I (RP) and Environmental Impact Statement (EIS) proposed by the Alabama Trustee Implementation Group (Alabama TIG) for expenditure of Natural Resource Damage Assessment (NRDA) funds. 81 Fed. Reg. 91138 (Dec. 16, 2016). The use of these NRDA funds should be spent in the most effective way possible to remediate natural resource impacts from the Deepwater Horizon (DWH) oil spill in Alabama.

Our comments below focus on several issues concerning the draft RP/EIS. One, the Gulf State Park Lodge and Associated Public Access Amenities Project preferred alternative (Lodge Project) appears to be an improper pre-judged political outcome dictated by the Alabama governor's office. Two, NRDA

Correspondence ID: 44
monies spent for a Lodge Project do not satisfy the intent and goals of Oil Pollution Act (OPA) regulations. And, three, other funds exist if the governor believes that the Lodge Project is in the public interest.

A. The Gulf State Park Lodge and Associated Public Access Amenities Project Appears to be an Improper Pre-judged Political Outcome Violating the Tenants of the National Environmental Policy Act and the Oil Pollution Act.

Due to the Alabama governor's prior actions and statements about the Lodge Project, it appears that a decision to use money from NRDA funds for the Lodge Project was made well before the NEPA process began. As the Alabama TIG is aware, this current process results from a federal court decision in February, 2016, sending the Alabama TIG back to the drawing board for further analysis of their proposed NRDA expenditures. Gulf Restoration Network v. Jewell, No. 1:15-cv-0191-CB-C, 2016 U.S. Dist. LEXIS 18231 (S.D. Ala. Feb. 16, 2016) (GRN case). The court found that the Alabama TIG, inconsistent with the requirements of the National Environmental Policy Act (NEPA) and OPA, failed to perform a proper alternatives analysis of projects other than the lodge/ conference center proposal (other aspects of the "Gulf State Park Enhancement Project" were not challenged in the lawsuit). Id. at *30-31. The court found that the Trustees had "unreasonably narrowed" the universe of possible alternatives to the lodge and convention center to: "(1) go forward with the project as proposed or (2) no action." Id. at *21. The court also stated that "[t]his case demonstrates the importance of providing a clear and meaningful analysis of alternatives." Id. at *23. The GRN court rejected the Trustees' argument that they were constrained by their "framework" arrangement with BP to use NRDA funds for the lodge, calling the argument "circular logic" a "the paradigm of a self-fulfilling prophecy" and an arbitrary and capricious violation of NEPA and OPA requirements ("Trustees have failed to evaluate whether there were reasonable restoration alternatives that would have conformed to the requirements of OPA and NEPA."). Id. at *20-21. The court then enjoined the use of $58.5 million of NRDA funds to build the lodge/ conference center. Id. at *31. Yet, as proved in this draft RP/EIS, the state and federal trustees appear intent on making the Lodge Project the main recipient of these funds regardless of the merits of the project.

This was evident even after the federal court enjoined the use of NRDA monies for the Lodge. Immediately after the decision, the Alabama governor's former director for the Gulf State Park Project, Cooper Shattuck, a University of Alabama attorney, stated in published remarks that foundation work on the lodge/conference center would continue despite the decision, allegedly funded with BP grant money. Shattuck also stated that the work on the lodge should be finished by 2018. Associated Press, Work Begins on Gulf State Park Conference Center Restoration, AL.com, Mar. 18, 2016. And, at the end of June 2016, the Alabama governor's office issued a press release with the headline, "Gov. Bentley Makes Good on His Promise: Announces Gulf State Park Renovations on Schedule." Rick Harmon, Governor Bentley Makes Good on His Promise: Announces Gulf State Park Renovations on Schedule, Ala. Tourism Dep't, June 27, 2016. In this press release, the governor's office states that the lodge and "meeting space" (conference center) were under construction and that all five components of the "Gulf State Park Enhancement Project" were due to completed and opened by the summer of 2018. Id. Furthermore, the governor's office stated that the whole project would cost $135 million and be funded from funds that "BP provided to restore the economy," not tax monies. Id. Governor Bentley also stated that the University of Alabama system and the Alabama Department of Natural Resources and Conservation (one the Alabama TIG trustees) would work together to finish the project. Id.

The governor's own statements and prior actions amount to a prejudged political decision on the Lodge Project in violation of NEPA and OPA. See, e.g., International Snowmobile Mfrs. Association, et al. v. Norton, et al. 1249, 1259-61 (D. Wyo. Oct. 14, 2004). It's clear that the governor of Alabama has driven and continues to drive the expenditure of these monies to the Lodge Project, regardless of the merits of the project or analysis under NEPA. While the governor is obviously free to pursue his own objectives, the State of Alabama is also giving the improper impression to the public that the Gulf State Park is a foreordained project and will be using NRDA monies. Not only would it violate the law governing uses of the NRDA monies to make this decision prior to NEPA analysis, it would forsake the potential value of many other projects on the list of possible enhancements to Alabama's coast. A majority of these NRDA funds in the draft RP/ EIS are going to the Lodge Project. If the Lodge Project were not the main thrust and goal of the state, many more projects could be included that would further the goals of early restoration plans.

The Alabama TIG should take the requisite "hard look" under NEPA of this Lodge Project and make an unbiased analysis of if this expenditure is the best of use of NRDA funds.

B. The connection between the Lodge Project and the DWH spill is too attenuated and does not satisfy the requirements of NRD regs.

OPA's overall goal is "to make the environment and public whole for injuries to natural resources and services resulting from...a discharge of oil... through the return of the injured natural resources and services to baseline and compensation for interim losses of such natural resources and services from the date of the incident until recovery." 15 C.F.R. Â§ 990.10. For purposes of this provision, "natural resource" means "land, fish, wildlife, biota, air, water, ground water, drinking water supplies, and other such resources â€¦ controlled by the United States." 15 C.F.R Â§ 990.30. "Services" are defined as "the functions performed by a natural resource for the benefit of another natural resource and/or the public." Id.

Under OPA, state and federal trustees are appointed to recover and manage damages on behalf of the public. See 33 U.S.C. Â§ 2702(b)(2)(A); 33 U.S.C. Â§ 2706(b). These trustees "(A) shall assess natural resource damages under section 1002(b)(2)(A) [33 USCS Â§ 2702(b)(2)(A)] â€¦ and (B) shall develop and implement a plan for the restoration, rehabilitation, replacement, or acquisition of the equivalent, of the natural resources under their trusteeship." 33 U.S.C. Â§ 2706(c). The Trustees' assessment process takes place in three stages: preassessment, restoration planning, and restoration implementation. 15 C.F.R. Â§ 990.12.

The first step in the Restoration Planning phase is the injury determination. 15 C.F.R. Â§ 990.51. The trustees "must determine if injuries to natural resources and/or services have resulted from the incident" and if so, "identify the nature of the injury." 15 C.F.R. Â§ 990.51. Trustees must evaluate whether the injury meets the regulatory definition of "injury" and whether a pathway can be established from the oil discharge to the injury. Id The statutory language describing injuries, and the methods for evaluating and quantifying them, clearly indicates that the principal type of injury that may form the basis of NRDA recovery is direct damage to natural resources - - an existing thing - - and loss of services that correspond directly to those damaged natural resources. See 15 C.F.R. Â§Â§ 990.30, 990.51.

The lodge/ conference center project was approved for $85.5 million in NRDA funding out of $1 billion advanced by BP in 2011 for "early" restoration projects. Of that amount, $58.5 million was dedicated to construction of the lodge/conference center structure. The lodge/convention center, which was part of Phase III of the early restoration projects, was by far the most expensive "recreational" project approved for any of the states; in fact, it sucked up every cent allocated to Alabama from the early restoration funds for recreational losses. According to the Programmatic Environmental Impact Statement ("PEIS") prepared for Phase III, the lodge/convention center was designated as a project designed to make up for loss of recreational use by supposedly creating 120,000 new "visitor nights" per year to the Gulf State Park. The PEIS did not consider any alternatives to the lodge/convention center other than a "no action" alternative.

Correspondence ID: 44
In reality, unlike many urgent restoration projects waiting in the que for NRDA funds, the lodge/ conference center does not meet the OPA statutory criteria for numerous reasons. First, the lodge/ conference center project amounts to the construction of a new building, from the ground up, that did not exist at the time of the oil spill. The lodge itself is not a "natural resource" or a service of a natural resource damages as clearly defined in the statute. A building is not air, water or biota.

Second, the lodge project does not, by definition, involve "restoring" any natural resource, or anything at all for that matter. An interpretation that building a new structure somehow meets the definition of restoring a natural resource strains credibility and falls wholly outside the parameters of the OPA statutory language and its remedial purpose. A hotel and conference center that did not exist at the time of the spill cannot be "restored."

Third, there is no nexus between the spill and injury which would be remedied by construction of the lodge. The law requires a tangible "injury" to a resource that existed at the time of the spill, and a direct and demonstrable pathway or nexus between the spill and the injury. See, e.g., 15 C.F.R. Â§ 990.51; United States v. Hyundai Merchant Marine Co., No. A94-0391-CV (HRH), 1997 U.S. Dist. LEXIS 10530, at 36-*40. (D. Alaska Mar. 31, 1997), aff'd United States v. Hyundai Merchant Marine Co., 172 F.3d 1187 (9th Cir. 1999). No such injury or pathway exists here. The lodge was damaged by a hurricane in 2004; there is no connection to the DWH. Hotel construction projects should be considered outside the scope of restoration projects under NRDA, generally, because they lack a real nexus to the spill, and will not directly benefit the citizens impacted by the spill. The lodge/ convention center project fails to satisfy the first step of the Restoration Planning phase of the NRDA process because there is no injury relating to the project which is cognizable under the OPA. See 15 C.F.R. 990.53(a)(1) ("If the information on injury determination and quantification [which includes a determination of whether a pathway exists from the incident to the natural resources injury being restored] under Â§Â§ 990.51 and 990.52 of this part and its relevance to restoration justify restoration, trustees may proceed with the Restoration Planning Phase. Otherwise, trustees may not take additional action under this part.").

In the GRN case, the trustees sought to defend the lodge/convention center by arguing that the OPA injury requirement was satisfied by record evidence which allegedly showed a number of lost "user days" of the shoreline adjacent to the state park due to oiling and beach closures related directly to the spill. However, the Trustees failed to consider, as required by OPA, the actual connection between the lodge project's benefits (increased user days) and the loss of services resulting from injury to natural resources (loss of user days of a different type as a result of beach oiling and closures). See 15 C.F.R. Â§ 990.51; 15 C.F.R. Â§ 990.55(b)(2). Indeed, the trustees have never articulated any rational connection between injuries to the beach or coastline - - the natural resources involved in the equation - - and repayment for those injuries in the form of building a hotel and conference center. Those structures are not required for access to the beach, by any stretch of the imagination.

Additionally, as the plaintiff in the GRN case pointed out, the record evidence was woefully insufficient to prove that a new hotel and conference center would actually increase access to the beach to make up for lost user days, or bring thousands of "new" visitors to the shoreline. As it stands, there is still no competent evidence to substantiate those self-serving claims. The trustees' claims are dubious at best because logic dictates that a hotel which will cost hundreds of dollars per night for lodging will exclude many more Alabamians than it will include. Gulf State Park is one of the few remaining areas in Baldwin County that allow free beach access. The purpose of a state park should be to provide inexpensive access to as much of the public as possible, not to limit access by imposing prohibitive costs to gain access. An economic development project which will end with a high-end hotel, privately run, and beyond the financial reach of many Alabamians, will diminish access to the shoreline rather than increase access. The Lodge Project should not be a preferred alternative here, under any reasonable OPA and NEPA analysis, and it would be vulnerable to further legal challenge.

C. Alabama has received other funds that it can use to build a lodge.

The state of Alabama does not have to use NRDA monies to build the Lodge Project. For example, on April 4, 2016, the Department of Justice reached a settlement with BP concerning DWH for approximately $ 20 billion. That settlement resolved the government's claims under the Clean Water Act and OPA, and it also settled economic damages claims for the five Gulf States. This money will flow to the states through NRDA, the Restore Act and via economic damages paid to the Gulf States by BP.

Alabama's share of just the economic damage portion of this money is approximately $ 1 billion. Press Release, Governor Bentley, Attorney General Strange Announce Landmark Agreement in BP Oil Spill Case, Office of Alabama Governor Robert Bentley (July 2, 2015). This $ 1 billion went to the state legislature, with no federal strings attached, and was under the control of the Alabama legislature. Mike Cason, Alabama to receive $2.3 Billion in BP Oil Spill Settlement, AL.com, July 2, 2015. The Alabama governor had the opportunity to convince the legislature that this money could have gone towards the Lodge Project. Furthermore, Restore Act money is beginning to flow into the state, and Alabama's first Multi-Year Implementation Plan under Pot 1 funds has been designed with an "Economic and Infrastructure" focus. See, http://www.restorealabama.org (last visited Jan.30, 2017). Alabama could seek funds under this source of Restore Act funding. It is also an option for the governor's office to use other means, such as other appropriations from the legislature, to build the Lodge Project.

D. Conclusion

We strongly encourage the Alabama TIG to reconsider its designation of Gulf State Park Lodge Project and Associated Public Access Amenities as a preferred alternative. This project appears to have been a predetermined political decision by the state of Alabama, and this violates the NEPA process. Furthermore, we do not believe that the lodge/ conference center has a close enough nexus to the actual spill at DWH to satisfy the requirements of NRDA. Finally, the governor's office has other means if it determines that building the Lodge Project at Gulf State Park is worth the investment of state dollars.

Thank you for your consideration.

Sincerely,

Keith Johnston
Managing Attorney

Correspondence ID: 45
Address: Mobile, AL 36601
United States of America
Outside Organization: Operation HomeCare, Inc Unaffiliated Individual
Affiliation: OffcialRep
Received: Jan,30,2017 17:36:58
Correspondence Type: Web Form
Correspondence: The Trustees and TIG have not conducted nor presented in this draft restoration plan and EIS a clear, data-driven alternative in comparison form for the Gulf State Park Lodge and Convention Center (GSPLCC). The GSPLCC does not restore the loss of public access/enjoyment, beach use, fishing or boating activities lost due to the BP oil disaster, in fact it reduces and create barriers to coastal residence access and enjoyment.

Therefore, the Gulf State Park Lodge and Convention Center should be eliminated from consideration as eligible for Alabama's loss of use (recreational) NRDA funds.

The Trustees and TIGS should explore and analyze potential suites of projects currently in the portal for Mobile County to ensure equitable distribution of loss of use funding.
Specifically
Project 177
Project 333
Project 199
Project 200
Project 210
Project 334

Correspondence ID: 46
Address: Bayou La Batre, AL 36509
United States of America
Outside Organization: Gulf Permaculture Unaffiliated Individual
Affiliation: Member
Received: Jan,30,2017 18:16:39
Correspondence Type: Web Form
Correspondence: AL TIG has not conducted nor presented in this draft restoration plan/EIS a clear, data-driven alternative in comparison form for GSPLCC project. GSPLCC does not address the loss of public access, especially for our physically handicapped citizens, ecological & educational enjoyment, beach use, fishing or boating activities lost due to the BP oil disaster, in fact it create barriers to coastal resident's access and enjoyment.

Therefore, GSPLCC project should be eliminated from consideration as eligible for Alabama's loss of use (recreational) NRDA funds.

TIG should explore and analyze potential suites of projects currently in the portal for Mobile County to ensure equitable distribution of loss of use funding, specifically project(s) 177, 333, 199, 200, 210, 334.

Correspondence ID: 47
Address: Birmingham, AL 35222
United States of America
Outside Organization: Birmingham Audubon Society Unaffiliated Individual
Affiliation: OffcialRep
Received: Jan,30,2017 18:19:31
Correspondence Type: Web Form
Correspondence: Dear Alabama Trustee Implementation Group Members,

Thank you for the opportunity) to review and offer comments on the Alabama Restoration Area Plan 1 - Draft Restoration Plan/Environmental Impact Statement (Draft RP/EIS) on the restoration type, Provide and Enhance Recreational Opportunities.

Nexus Between Recreation & Ecological Outcomes
We are pleased that projects with multiple public benefits were prioritized in this plan, notably the Gulf Highlands and Laguna Cove proposed acquisition projects, which would yield strong ecological benefits for species targeted in the AL Coastal Bird Stewardship Program funded through the Gulf Environmental Benefit Fund, as well as improving compatible nature-based recreation outcomes. We recommend placing a high priority on these and other land acquisition projects that will yield ecological benefits to priority species and ecosystems in restoration activities being planned by the Alabama Trustee Implementation Group for 2018-2020.

Access to Project Data/Information
We strongly recommend that the Alabama TIG take steps to explicitly ensure any scientific information generated from any Alabama restoration projects be available to scientists, planners and restoration practitioners during, and after the conclusion of any project

Birmingham Audubon recommends continued efforts by the Alabama TIG to coordinate science-based restoration efforts across multiple types of restoration, and to ensure the maximum tangible and cost-effective outcomes.

We appreciate the opportunity to assist in restoration of Alabama's Gulf coastal resources, and look forward to an ongoing partnership to ensure successful project outcomes. Please contact me if you have any questions or to discuss ways in which Birmingham Audubon can serve as a resource in your efforts.

Sincerely,

Suzanne Langley
Executive Director, Birmingham Audubon Society

Correspondence ID: 48
Address: Coden, AL 36523
United States of America
Outside Organization: Unaffiliated Individual
Affiliation:
Received: Jan,30,2017 18:23:22
Correspondence Type: Web Form
Correspondence: The Gulf State Park Lodge and Convention Center did not exist at the time of the BP oil disaster; therefore suffered no loss of use.

Please comply with the NRDA regulations and reject this project for NRDA funds.

The Trustee and TIG have not to date established uniform standards of evaluating project proposals based on merit review and/or equitable distribution of funds based on nexus to injury.

The following projects should be part of a mandatory comprehensive review of project alternatives;
Project 177, 199, 200, 240, 333, 334.

Correspondence ID: 49
Address: Camden, AL 36726
United States of America
Outside Organization: Unaffiliated Individual
Affiliation:
Received: Jan,30,2017 18:35:30
Correspondence Type: Web Form
Correspondence: We own a house on Pineda st on lafitte bay.The proposed project would devalue our property and would mainly only benefit the sellers of the property or their agents.Untold numbers of people walk and ride bicycles on Cadillac that would be in danger of accidents if the project is completed.We already have 3 public beaches on the island and three boat launches more is unnecessary,dangerous and wasteful.Surely a better use for the money that would benefit residents rather than hamper them could be realized, It would be nice to save the money to use on cleanup for the next hurricaine

Correspondence ID: 50
Address: Dauphin island, AL 36528
United States of America
Outside Organization: Unaffiliated Individual
Affiliation:
Received: Jan,30,2017 18:55:41
Correspondence Type: Web Form
Correspondence: Against this project due to untold problems that could accompany this project such as traffic problems, theft, vandalism, loss of property value, and safety concerns that would affect residents and homes around the immediate area.

Correspondence ID: 51
Address: Theodore , AL 36582
United States of America
Outside Organization: Unaffiliated Individual
Affiliation:
Received: Jan,30,2017 19:08:01
Correspondence Type: Web Form
Correspondence: In regards to plans for a public boat launch on Dauphin Island at the Corner of Pineda I object. I have numerous friends and interest on Dauphin Island and particularly in that neighborhood. Creating yet another public beach and parking lot would spoil the grass land, sea life and beauty of the water where the launch it to go It is also too narrow a of a channel there and a safety hazard to the homes around the designated area. It is the only protected area left where kayaks, paddle boards and swimmers can go without risk of boaters. If you want to accommodate more trailers and people, then make one the launch at one of the existing public beaches such as the west end. Don't ruin the entire Island. Restidential home owners are already suffering from hurricanes. One more boat launch and property values plumit down again.

Thank you.

Correspondence ID: 52
Address: Dauphin island , AL 36528
United States of America
Outside Organization: Unaffiliated Individual
Affiliation:
Received: Jan,30,2017 19:15:44
Correspondence Type: Web Form
Correspondence: I am against the new project for public beach and boat launch. This will decrease my home value, cause congestion on an already small part of the island, cause more theft, more trash, and safety issues for families and pets who walk and bike the area.

Correspondence ID: 53
Address: Dauphin Island, AL 36528
United States of America
Outside Organization: Unaffiliated Individual
Affiliation:

Correspondence ID: 53
Received: Jan,30,2017 19:21:39
Correspondence Type: Web Form
Correspondence: Second Comment:
I just reviewed the map. The map of the areas that was included is an old map that does not show all of the newer homes. I believe that a current map would show that it is definitely not a commercial area but a residential area with many full time residents. I object to this proposed project.

Correspondence ID: 54
Address: New Orleans, LA 70130
United States of America
Outside Organization: Gulf Restoration Network Unaffiliated Individual
Affiliation: OffcialRep
Received: Jan,30,2017 19:24:08
Correspondence Type: Web Form
Correspondence: 30 January 2017

Alabama Trustee Implementation Group
NOAA Gulf of Mexico Disaster Response Center
Attn: Alabama Recreational Use Restoration Plan
7344 Zeigler Blvd
Mobile, AL 36608

RE: Gulf Restoration Network Comments on Alabama Trustee Implementation Group Restoration Area Plan 1 - Draft Restoration Plan and Environmental Impact Statement

Dear Trustees:

The Gulf Restoration Network (1) appreciates the opportunity to comment on the Alabama Trustee Implementation Group (TIG) draft restoration plan and environmental impact statement (EIS) to address Alabama's natural-resource injury from the BP/Deepwater Horizon oil disaster.

The draft restoration plan and EIS analysis proposes ten alternative restoration opportunities, of which six are preferred alternative projects in Mobile and Baldwin counties. Of the $70,675,000 total proposed funding, $56,300,000 would be dedicated to the Gulf State Lodge and Convention Center at Gulf State Park.

The GRN, while generally supportive of five of the six preferred projects, does not support approval or funding of the Gulf State Lodge project and its use of natural resource damages (NRD) monies. The scope of the TIG's review does not evaluate alternatives fully and fairly, nor did it seek the best of use of funds to restore actual damage caused by the BP spill.

In its current form, it is not clear how the Trustees choose the Lodge project over others, not having provided consistent and transparent metrics for a comparative analysis of alternatives' benefits and costs comparatively. Specifically, the discussion does not include the needed exploration of reasonable alternative projects to address the injury, which the Lodge project fails to do. As such, the Gulf State Park Lodge and Convention Center should not be approved for NRD funding.

I. The Gulf State Park Lodge and Convention Center project lacks a comprehensive alternatives analysis, and is an inappropriate use of NRD funding.

A. Clear and Consistent Metrics and Supporting Data for Alternatives

As affirmed by the court in GRN v. Jewell, et al., 1:15-cv-191 (S.D. Ala.), the Trustees must conduct a comprehensive review of project alternatives under NEPA and OPA. Under NEPA, that review of alternatives must "present environmental impacts of the proposal and the alternatives in comparative form, thus sharply defining the issues and providing a clear basis for choice among options by the decision-maker and the public."(2) The Trustees must not only rigorously explore alternative projects but also establish clear, data-driven metrics for evaluating project proposals comparatively. As explained later in these comments, there is no data - or even a projection - indicating how the lodge/convention center will make up for damaged resources.

Currently, the analysis of alternatives in the draft restoration plan and EIS is completely inadequate. There is no analysis of the most rudimentary of reasonable alternatives: a scaled down Gulf State Park project that includes the various newly added public access components. There is no analysis whatsoever of alternative funding for the lodge and convention center. With respect to the Gulf State Park and this project, the document still only considers the no action alternative and this project. This is exactly what the federal court invalidated before.

This is particularly egregious since the draft restoration plan and EIS state that construction would still continue with other funds if the no action alternative were selected.(3) The documents assert, however, that it is unknown whether the various newly added public access amenities (e.g. bike share program, public tram system, public beach access, etc.) would be funded if the Lodge project was completed with private funds, or not be funded at all. If this is the case, then an alternative must be considered that would use the NRD funds to fund the new public access amenities - about $8 million - and allow private funds to complete the lodge/convention center. The remaining $48 million could then be used for other projects, such as the Gulf Highlands land acquisition. This alternative would plainly result in a much greater restoration or replacement of lost services from damaged natural resources, yet this alternative is not even considered. Again, this is a procedural violation of NEPA and a substantive violation of the Oil Pollution Act.

In fact, the draft restoration plan and EIS treats the lodge/convention center primarily as a means to generate revenue. The current draft restoration plan and EIS asserts that "a portion" of the net revenues from the lodge would be used to "support" the public access amenities,(4) costing approximately $8.7 million to implement. However, there is no information about what the net revenues will be, or what it will take to support the supposed public access amenities. There is no contract with an operator of the lodge, or any budget for maintaining the public access aspects of the proposal. This is in essence treating the lodge and convention center as an investment, and a way to create a revenue stream. If that is the intent, the Trustees must examine alternatives to create a revenue stream. Building a hotel is improvident, and not necessary to support the public access amenities. It is illogical to assert that a hotel must be built to support the parts of the project that will actually improve public access.

Correspondence ID: 54
Additionally, other projects - including the rejected ones - all add up to roughly the same amount allocated to the Gulf State Park Lodge and Convention Center project. Yet this project has no specific numbers or metrics for measuring compensation for lost use, while the other projects do.

Moreover, the fact that the alternatives analysis contained within this draft restoration plan and EIS has been prepared after the Lodge and Conference Center project is already underway clearly prejudices the analysis of alternatives, and pre-determines the outcome. This is obvious, since the document offers no other alternatives for the park site, and does not consider any other funding source for the proposed project at that site.

If an alternative was provided and analyzed to consider private funding that also provides public access amenities, then the entire $56.3 million in funding could be utilized for some other purpose, particularly increasing public access for all users. A list of alternative projects is provided in section II of these comments.

In short, the draft restoration plan and EIS does not contain the detailed and rigorous consideration of alternatives required by NEPA.

B. Cumulative and Indirect Impacts

The TIG is required under NEPA to consider cumulative and indirect impacts of potential projects.(5) All effects and impacts must be accounted for, including ecological, aesthetic, historic, cultural, or social - whether direct, indirect, or cumulative.(6)

The indirect impacts caused by increased human use, such as automobile and foot traffic, may result in increased threats to environmentally sensitive areas (e.g. critical habitat for endangered species). The Trustees fail to conduct a comprehensive analysis of cumulative and indirect impacts this proposed recreational use projects could potentially cause, such as:

â€¢ Increased auto traffic in and around project areas, such as state parks, potentially causing maintenance problems from increased use of roadways; and,
â€¢ Increased threats to wildlife (including endangered species, such as the beach mouse) and direct and adjacent habitat from human traffic in environmentally sensitive areas.
As proposed, development of the Lodge and associated Convention Center will cause harm, rather than restoring these natural resources for the public.

C. Proposed projects are meant to address natural resource, natural resource services or resource use injuries, not economic loss

As required by the Gulf Restoration Network v. Jewell decision,(7) the Trustees must conduct comprehensive analysis under NEPA and OPA when considering projects for lost recreational use in Alabama. The hotel and convention center proposed by Alabama does not have a nexus to a loss of use of a damaged environmental resource caused by the Spill or repair any such damage, and is inappropriate for funding under NRDA.

The original PEIS stated that the convention center project would make up for lost recreational use of natural resources attributable to the oil disaster by creating "approximately 120,000 new visitor-nights per year at the lodge," with "a roughly comparable number of visitor-days at the park."(8) This claim was not supported by any data, and the current document recognizes this fact and makes no claims regarding "new visits." In its current iteration, "the objective of the alternative is to compensate for lost recreational use along the Alabama coast and is designed to improve the public's accessibility and enjoyment of Alabama's coastal resources."(9) There are no metrics given for how the project is projected to do this, i.e. visitor nights or some measure of accessibility. However, within this draft restoration plan and EIS, other alternatives include a metric for usage; for example, the Fort Morgan Beach Access Project gets a specific projection of user days.(10) There is no factual basis for the assertion that the convention center lodge will make up for any lost user days, or even that it will "enhance the visitor experience." This is a violation of both NEPA and the Oil Pollution Act.

In the NRDA process, trustees are required to create "a plan for the restoration, rehabilitation, replacement, or acquisition of the equivalent, of the natural resources under their trusteeship."(11) NRDA regulations require that compensatory restoration "provide services of the same type and quality and of comparable value as those injured."(12) If actions of the same type, quality and value are not available, then the Trustees should employ "actions that provide natural resources and services of comparable type and quality as those provided by the injured natural resources."(13)

According to the Trustees' explanation in Early Restoration Plan, "[t]he spill led to large numbers lost and degraded beach trips over the course of many months as well as lost fishing trips and oyster harvesting due to closure of waters"(14) and "[t]he State currently anticipates that the ongoing analyses will show the oiling of Alabama's coast caused losses in beach use, fishing and boating that number in the millions of user-days."(15) According to the DEIS, projects such as public education programs, public beach access, public restrooms and post-beach shower facilities, a bike share program, and a public tram system, can be reasonably anticipated to "provide services of the same type and quality and of comparable value as those injured."(16)

It is actually evident that the hotel and convention center is meant to compensate for economic, not natural resource, concerns,(17) and is unrelated to the recreational services lost due the oil disaster. The Governor of Alabama has candidly explained that a major purpose of the project will be to generate revenue that will go to other less-visited parks, including in areas of the state completely unaffected by the Spill.(18) The conclusion that the project is economically motivated is bolstered by the Coastal Recovery Commission of Alabama's project description, released in 2011, which stated that the project would not qualify as oil spill mitigation.(19) Far from addressing BP oil spill natural resource injuries, the hotel and convention facility appears calculated to address a different, unrelated injury entirely: the budget shortfall suffered by the State of Alabama and its parks system.

These comments are particularly troubling since they indicate that the Alabama Trustee predetermined the outcome of the NEPA process. In fact, the state of Alabama has made numerous comments to these effects, which are cited in the scoping comments supplied by the Southern Environmental Law Center on August 5, 2016, and incorporated here by reference. This is a violation of NEPA's fundamental purpose, and a grave disservice to the public. E.g., Int'l Snowmobile Mfrs. Ass'n v. Norton, 340 F. Supp. 2d 1249, 1261 (D. Wyo. 2004)

Building a hotel and conference center simply does not restore beach use, fishing or boating lost due to the BP oil disaster. The project thus fails to meet the basic requirements for a loss of use project. The outcome of this process was clearly predetermined, which invalidates the NEPA process. The TIG should reject it as a candidate for Alabama's recreational use NRDA funds.

D. Building a Hotel and Convention Center will Further Deny Access to the Beach by Residents of Limited Means

Further, the hotel and convention center would not make the public whole, because it would create further cost barriers to accessing public coastal resources.(20) The project has described the Gulf State Park as an attraction that is primarily used as a "retreat and recreational area." Gulf State Park is one of the few areas along the Alabama Coast that provides access to the general non-paying public. Public access to Baldwin County's public beach is already

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extremely limited. There are few free public access points in Orange Beach and Gulf Shores. The proposed project will reduce what little access currently exists, because the proposed hotel and convention center facility(21) will likely only be available to paying guests, and the cost of access can reasonably be expected to be considerable given the average price for lodging at a beach-front location in the area. Even if accessible, the transition from free to paid parking will limit current access to Gulf State Park by those who cannot afford to added cost.

The claim that a lodge is necessary to make it more accessible does not hold weight. The Pinkowski report states that the Lodge could garner an anticipated 84,315 visitor nights per year; however, these are not specified to be new visitors.(22) In addition, this is 40,000 off of the original projection in the Programmatic EIS. While the restoration plan and EIS indicates that Gulf State Park lacks access points,(23) the Trustees fail to include an alternative that would provide additional, free public access alternatives in other areas and/or without the construction of a private lodge/facility, which would better serve Alabama's public. In light of these numbers, the projected numbers do not support the claim of increasing or restoring public access, or short-term lodging/user days.

If the Trustees truly want to increase the public's access to Alabama's beach environment to accommodate additional visitors, projects such as land acquisition should be a priority.

Finally, the draft restoration plan and EIS examines a revenue sharing agreement with the operator. This relates to the claim that the hotel will generate support for the public access amenities.(24) The Trustees fail to provide an analysis of the revenues and how they will be allocated. Within its analysis, Pinkowski has a projection of free cash to service debt, without explaining what "net profit" would be available after the operator gets paid.(25) The projections are also some form of 'earning before interest, tax, depreciation, and amortization' - which fails to provide a true financial picture of what the property would produce, despite the indication (see GSP proposed five-year financial projection) that the hotel could support itself with private financing.(26)

II. Projects Meriting Review for Recreational Loss of Use

As the Trustees considered projects for recreational loss of use funding in Alabama, there are numerous projects across Mobile and Baldwin Counties that would restore the injuries experienced in Alabama.(27) The alternatives analysis should have focused on identifying a project, or suite of projects, that would provide the same compensation for "loss of use" as the proposed hotel and convention center. Considering Alabama's lack of public beach access, the acquisition of beach property, recreational facilities, or public access points could reasonably provide the same measurable outcome. In fact, there are a number of projects (or suites of projects) that have been proposed that could meet the same recovery metrics and benefit a broader set of the impacted public. By only considering the Lodge and Convention Center, the Trustees' actions are clearly contrary to the spirit and letter of NEPA. We must avoid implementing projects that risk doing more harm than good.

For example, these projects found in the Alabama Coastal Restoration portal(28) would meet the criteria for recreational loss of use:

â€¢ Project 79 - Aloe Bay Harbour Town (Mobile County)
â€¢ Project 82 - Dauphin Island Audubon Bird Sanctuary Shoreline Restoration and Management (Mobile County)
â€¢ Project 102 - Alabama Audubon Coastal Bird Stewardship Program (Baldwin/Mobile County)
â€¢ Project 111 - Spanish Fort Ecological Park (Baldwin County)
â€¢ Project 174 - USA Coastal and Environmental Sciences Initiatives (Mobile County)
â€¢ Project 177 - Hog Bayou Campground (Mobile County)
â€¢ Project 188 - Coastal Sustainable Tourism Laboratory (Baldwin County)
â€¢ Project 199 - Bayfront Park Restoration Improvement (Mobile County)
â€¢ Project 200 - Chickasabouge Park Habitat Restoration and Enhancement (Mobile County)
â€¢ Project 210 - Infrastructure Improvements of existing park and green spaces (Mobile County)
â€¢ Project 233 - D'Olive Creek Property Purchase, Habitat Study, Nutrient Removal Research/Education Facility (Baldwin County)
â€¢ Project 240 - Delta Port Marina Oysterman Support Dock (Mobile County)
â€¢ Project 266 - Perdido Watershed Access Improvement (Baldwin County)

In addition to these specific projects, other recreational projects that would meet the needs of the community include land acquisition for public access, living shoreline and artificial reef projects, fishing access - piers and boat launches, fishery programs and other park enhancement and educational opportunities across Alabama's coastal zone.

In Early Restoration, the Trustees stated that it is challenging to choose a "recreational use ... restoration project...large enough to provide a significant contribution towards compensating for the recreational use losses" in Alabama.(29) We wholly disagree, and the above-listed project proposals demonstrate that there are a variety of options to restore recreational use losses. Moreover, many of these projects would compensate for loss of use by a broader, and more diverse users. However, if the Trustees truly believe that no appropriate project or suite of projects exists at this time that would appropriately to compensate for the lost recreational uses experienced in Alabama, then a no-action alternative is the appropriate choice at the current moment.

III. Conclusion

We recognize that the Trustees have invested significant time and resources throughout the NRDA restoration process and appreciate your efforts. While we understand the desire to fund and implement projects on the ground, the current analysis is incomplete and legally inadequate. This is clearly contrary to the spirit and the letter of NEPA. Let's ensure that we do what is right and just for the Gulf Coast.

Thank you for the opportunity to comment. If you have any questions, or if you would like to discuss these comments further, please contact Jordan Macha, Senior Policy Analyst for the Gulf Restoration Network, at jordan@healthygulf.org or (512) 675-0076.

Sincerely,
Cynthia Sarthou
Executive Director
Gulf Restoration Network

1) The Gulf Restoration Network is a diverse coalition of individual citizens and local, regional, and national non-profit organizations committed to uniting

Correspondence ID: 54
and empowering people to protect and restore the resources of the Gulf of Mexico.
2) 40 C.F.R. Â§ 1502.14.
3) See Draft Restoration Plan (RP) and Environmental Impact Statement (EIS) at 5-13, Table 5-2. (Dec 2016)
4) See Draft RP-EIS at 2.2.1.1. (Dec 2016)
5) 40 C.F.R. Â§Â§ 1502.15, 1508.7, 1508.8.
6) See 40 C.F.R. Â§ 1508.8
7) Case 1:15-cv-00191-CB-C (S.D. Ala.)
8) See PEIS-ERP at section 11.7.6.9.5. (Oct 2014)
9) See Draft RP-EIS at 2-23. (Dec 2016)
10) See Draft RP-EIS at 3-12. (Dec 2016)
11) 33 U.S.C. Â§ 2706(c).
12) 15 C.F.R. Â§ 990.53(c)(2).
13) 15 C.F.R. Â§ 990.53(c)(2).
14) PEIS-ERP at section 11.6.2, p. 55. (Oct 2014)
15) PEIS-ERP at section 11.6.3, p. 56. (Oct 2014)
16) 15 C.F.R. Â§ 990.53(c)(2).
17) See e.g., Gulf State Park Hotel and Conference Center Initiative FAQ, questions 1, 2 and 18, available at http://www.auburn.edu/communications_marketing/gulfstatepark/faq.html ("Our plans are to build a first-class facility that will bring dollars and jobs to Alabama and be a great addition to our State Parks. Alabama's Gulf State Park is one of our state's greatest economic and environmental assets." "We have the opportunity to bring a first-class hotel to Alabama." â€¦"The lease payments from the developer will yield considerable cash flow to DCNR. . . Also, there will be additional revenue from increased lodging taxes, increased sales taxes and increased jobs. The total economic benefit of the project is expected to bring in approximately $65 million annually and produce nearly $3 million each year in total tax collections."). See also, Gulf State Park Convention Center project submission, http://www.gulfspillrestoration.noaa.gov/restoration/give-us-your-ideas/view-submitted-projects/; Strategic Advisory Group, Events Center Feasibility Study: Alabama Gulf Coast, Final Report (30 July 2001).
18) Office of the Governor, June 28, 2016 Press Release, supra ("'The Legislature has had difficulty adequately funding the state park system, and the fees Gulf State Park will bring in once it has been redeveloped will be a godsend to financially beleaguered parks throughout the state,' Bentley said.")
19) Coastal Recovery Commission Infrastructure Subcommittee, Gulf Coast Convention Center (5 Feb 2011) at p. 3, available at http://crcalabama.org/wp-content/uploads/2011/02/05Gulf-State-Park-Convention-Center.pdf.
20) 15 C.F.R. Â§ 990.10 ("The goal of the Oil Pollution Act of 1990 (OPA), 33 U.S.C. 2701 et seq., is to make the environment and public whole for injuries to natural resources and servicesâ€¦").
21) The only part of the rebuilt Lodge and Conference Center available to members of the public who are not guests at the hotel is a "publicly accessible interpretive landscape that includes preservation of an existing wetland and remnant scrub dune, creation of an inter-dunal swale for storm-water management, and creation of secondary and scrub dune habitat."
22) See Draft RP-EIS at 3-5. (Dec 2016)
23) See Draft RP-EIS at 3-6. (Dec 2016)
24) Ibid.
25) See Draft RP-EIS at C-9. (Dec 2016)
26) See Draft RP-EIS at C-61. (Dec 2016)
27) NOAA, Gulf Spill Restoration Project Portal, see Gulf State Park. http://www.gulfspillrestoration.noaa.gov/restoration/give-us-your-ideas/view-submitted-projects/.
28) Alabama Department of Conservation and Natural Resources. Project Suggestion Portal http://www.alabamacoastalrestoration.org/ProjectPrint.aspx
29) PEIS-ERP, Section 11.6.3, p. 57. (Oct 2016)

Correspondence ID: 55
Address: Grand Bay , AL 36541
United States of America
Outside Organization: Unaffiliated Individual
Affiliation:
Received: Jan,30,2017 19:56:25
Correspondence Type: Web Form
Correspondence: The information provided by the Trustee and TIGS in the draft restoration plan and EIS alternatives are vague, lack clear definition of methodology utilized, and appears to randomly eliminate numerous projects closest to the nexus of injury.

Fundamentally, the Gulf State Park Lodge and Convention Center is an economic development project and does not restore damaged and/or harm caused by the Deep Water Horizon explosion.

The Gulf State Park Lodge and Convention Center fails to meet the basic requirements for a loss of use project and should be rejected and determined ineligible for Alabama's recreational use NRDA funds.

We feel that the following projects should be comparatively analyzed;
Project 177
Project 333
Project 334

Correspondence ID: 56
Address: Mobile , AL 36695
United States of America
Outside Organization: Unaffiliated Individual
Affiliation:
Received: Jan,30,2017 20:05:39
Correspondence Type: Web Form

Correspondence ID: 56
Correspondence: I am a property owner on Dauphin Island and I am opposed to this proposed development. I feel it would create a congestion on the Island in an area where there is already adequate public beach acces. There also be an unfair adverse effect on the quality of life for the property owners in this vicinity.

Correspondence ID: 57
Address: Mobile, AL 36606
United States of America
Outside Organization: Unaffiliated Individual
Affiliation:
Received: Jan,30,2017 20:07:23
Correspondence Type: Web Form
Correspondence: If this project even begins to go forward it will be tied up in litigation for years...count me in as lead plaintiff. Complete disregard for tax paying residents of this quiet residential area.

Correspondence ID: 58
Address: Dauphin Island, AL 36528
United States of America
Outside Organization: Unaffiliated Individual
Affiliation:
Received: Jan,30,2017 20:19:35
Correspondence Type: Web Form
Correspondence: This will cause too much traffic for the area, more theft, safety issues, loss of property value. It may have a parking lot, but all we will see is the same effect as down athe Billy Goat hole. Cars and trucks with trailer'so lining the streets. No telling what the trash situation will be like.

Correspondence ID: 59
Address: Mobile , AL 36607
United States of America
Outside Organization: Unaffiliated Individual
Affiliation:
Received: Jan,30,2017 20:28:00
Correspondence Type: Web Form
Correspondence: I've had the privilege of growing up on the island since I was a little boy. Over the years, I've seen the results of developing public access on the island. In my opinion it's had nothing but a negative effect on the privacy, fishing, and most importantly the beauty of a natural island. Not to mention the type of people, traffic, theft and trash that accumulates from this type of situation. It's not fare to the property tax payers. It's not fare for the ones who truly love the island. This kind of stuff makes me want to move to Bay St. Louis/Pass Christian to get away from public situations, where the fishing is still not over populated and the property owners don't have to deal with the public people getting in the way of what you love the most. The way Dauphin Island used to be.

Correspondence ID: 60
Address: Coden, AL 36523
United States of America
Outside Organization: Unaffiliated Individual
Affiliation:
Received: Jan,30,2017 20:32:32
Correspondence Type: Web Form
Correspondence: The Gulf State Park Lodge and Convention Center is an Economic Development project that does not address Alabama's natural-resource injury from the BP/Deepwater Horizon oil disaster. It also fail to meet the basic requirements for a loss of use and should not be considered and determined ineligible for Alabama's recreational use NRDA funds. The following projects should be comparatively analyzed; Project 177, Project 199, Project 200, Project 333 and Project 334.

Correspondence ID: 61
Address: Mobile, AL 36695
United States of America
Outside Organization: Unaffiliated Individual
Affiliation:
Received: Jan,30,2017 20:38:36
Correspondence Type: Web Form
Correspondence: We are not in favor of this proposal. We are property owners directly in front of the proposed parking lot. We do not want increased traffic. This will greatly devalue oir property.

Correspondence ID: 62
Address: Dauphin Island, AL 36528
United States of America
Outside Organization: Dauphin Island Real Estate, Inc. Unaffiliated Individual
Affiliation: OffcialRep
Received: Jan,30,2017 20:46:05
Correspondence Type: Web Form
Correspondence: I am the owner of Dauphin Island Real Estate, Inc. on Dauphin Island, Alabama. Our company manages approximately 80 properties and we specialize in listing and selling property on Dauphin Island. I personally own four pieces of property - one of which is a vacation rental home in

Correspondence ID: 62
close proximity to parcels A, B and C. As a business owner and property owner, I am opposed and very concerned about the possibility of a public boat launch and the ridiculous amount of public parking so close to residential areas. The Bayou Heron area (sites B & C) would be much better suited as a kayak and canoe access point: much more suited to our eco-tourism interests, not parking lots and launching ramps for large power boats! Bayou Heron (called in the proposal document "Bayou Second" for some unknown reason to anyone) is a very shallow and constantly changing body of water that would require frequent and expensive maintenance dredging in order to allow large vessels to navigate this area. In addition, Dauphin Island simply does not have a boating access problem, having well maintained, state of the art launching facilities. Continuous dredging and the associated spoil disposal issues will have a catastrophic impact to the very sensitive adjacent salt marsh habitat - areas used for nesting by a myriad variety of marsh birds such as Clapper and Black rails, Wilson's plovers and American oystercatchers to name a few.

I am also extremely concerned that so many property owners were not made aware of this project, especially since it will have a lasting and negative impact on quality of life, property values and the overall environment Dauphin Island itself. Very few Dauphin Island residents and property owners even knew about this!

It is my understanding that these funds are meant for conservation of our natural resources and are certainly not meant to diminish the quality of our precious natural resources. In my business I hear a great deal from those who travel from all across the United States to vacation here and who sometimes even purchase properties because of the uniqueness of the natural resources our island, and the fact that there are not many places left like this little island. I fully believe in public access for all, but not at the expense of our ecosystem, as well as the degradation of adjoining properties. In my travels I have found that most areas try to make access as natural as possible to blend in with the environment and have as little impact as possible.

Some of my objections to this proposal are as follows:

Dauphin Island designated as a Globally-important birding area is an established and very popular eco-tourism destination. The complexion of the area will completely change. The traffic will increase significantly and I feel that there is a safety issue as well. There is a bike trail adjacent to the proposed area, which is heavily used by both children and adults. It is already quite challenging during the busy season with the traffic and with 250 or so cars entering and exiting would certainly make this situation much more dangerous. Parcels B and C will simply become parking lots.

The rentals properties located close to these parcels would definitely see a decrease in property value rental income due to the increase in traffic and aesthetic degradation in this area. Please keep in mind the rental properties bring business to restaurants, charter boats, gift shops, and the island's tax base. The lodging tax collected from vacation rentals is the main contributing asset to the budget of the Town. Visitors to these properties contribute a great deal to the economy of the island.

Maybe the best solution, in lieu of a tasteful and environmentally-friendly canoe/kayak access point, would be to scrap the Middle Dauphin Island in its entirety and redirect the monies for land acquisition of sensitive properties and the funding of perpetual conservation easements. The town cannot even stopped from allowing the clear-cutting of virgin maritime forests on our wooded eastern end!

Thanks you very much for your consideration.

Sincerely,
Cathy Havard, President
Dauphin Island Real Estate, Inc.

cathyhav@earthlink.net
251-510-8042 - Cellular

Correspondence ID: 63
Address: mobile, AL 36608
United States of America
Outside Organization: Unaffiliated Individual
Affiliation:
Received: Jan,30,2017 20:48:01
Correspondence Type: Web Form
Correspondence: I am a property owner on Dauphin Island.I appose the proposed parking lot and boat ramp being consider in the mid island location.My concern is for homes located adjacent to this building project and its impact on their privacy.This would have the potential for interrupting the peace and quiet we all enjoy .

Thank you

Thomas McGee

Correspondence ID: 64
Address: Dauphin island, AL 36528
United States of America
Outside Organization: Unaffiliated Individual
Affiliation:
Received: Jan,30,2017 20:57:34
Correspondence Type: Web Form
Correspondence: There is too much traffic on the small canal. Having problems now with boaters not knowing rules and no wake. Canal is too narrow and needs dredging. Neighbors thought they were buying in residential area, not public area.

Correspondence ID: 65
Address: Dauphin island, AL 36528
United States of America
Outside Organization: Unaffiliated Individual
Affiliation:
Received: Jan,30,2017 21:03:02
Correspondence Type: Web Form
Correspondence: This proposed development will totally change this quiet neighborhood by increasing traffic on the water and road, noise, trash and crime. I believe that Bayou Heron is unique as a safe place where children / families swim, kayak and fish. The traffic on the road and on the water will change the area we love. Also, there is already a ramp available to the the public in the area. As a long time property owner I am opposed.

Correspondence ID: 66
Address: Dauphin Island , AL 36528
United States of America
Outside Organization: Home Owner Unaffiliated Individual
Affiliation: OffcialRep
Received: Jan,30,2017 21:11:30
Correspondence Type: Web Form
Correspondence: I oppose the boat launch. It will put strangers in my yard and lower my property value.

Correspondence ID: 67
Address: Dauphin Island, AL 36528
United States of America
Outside Organization: Unaffiliated Individual
Affiliation:
Received: Jan,30,2017 21:15:28
Correspondence Type: Web Form
Correspondence: I oppose.

Correspondence ID: 68
Address: Mobile, AL 36609
United States of America
Outside Organization: Unaffiliated Individual
Affiliation:
Received: Jan,30,2017 21:20:58
Correspondence Type: Web Form
Correspondence: I do not want boat launch and parking lot built so close to my second home on Cadillac avenue. We have children that swim in the canal and ride bikes on Cadillac avenue and this will bring too much traffic to our atra

Correspondence ID: 69
Address: Mobile, AL 36544
United States of America
Outside Organization: Unaffiliated Individual
Affiliation:
Received: Jan,30,2017 21:23:53
Correspondence Type: Web Form
Correspondence: As the immediately adjacent property owner of 52 years located at 302 Pineda St., I would like to strongly voice my opposition to the proposed public boat ramp. This would MOST certainly decrease the value of my property and make it an unpleasant place to have a vacation home. This has always been a very quiet and friendly part of Dauphin Island. This proposal will cause entirely too much traffic for this area, as well as safety issues for home owners and create more opportunities for the loss of personal property. I would have had no knowledge of this proposal if a concerned neighbor had not contacted me tonight (1-30-17). Please reconsider the effects that this boat ramp as well as the parking will have on this beautiful part of the island. At 77 years old this is a most disturbing development for me and my family. How could we ever continue to use and enjoy our piece of paradise here on the island if this is approved?
This is my sister's email address because I do not have an email (fcarter451@gmail.com). You may reach me by telephone on my cell at 251-635-6612 if needed.

Correspondence ID: 70
Address: Dauphin island , AL 36528
United States of America
Outside Organization: Unaffiliated Individual
Affiliation:
Received: Jan,30,2017 21:35:07
Correspondence Type: Web Form
Correspondence: The proposed mid island park, beach access and public launch would cause way too much congestion for the local traffic in that area. Please relook at this project and leave the area zone as residential only. Adding 100 parking spaces would cause a tremendous strain on the local vehicle and foot traffic. There are definite safety concerns to take in consideration.
Thank you,
Brian Knotts

Correspondence ID: 71
Address: Dauphin island , AL 36528
United States of America
Outside Organization: Unaffiliated Individual
Affiliation:
Received: Jan,30,2017 21:41:25
Correspondence Type: Web Form
Correspondence: I am opposed to this project due to decrease in property value, increase in theft and noise .
A public boat ramp will allow for traffic and noise all through the night .
It will turn a quiet residential area into a high traffic commercial area.

Correspondence ID: 72
Address: Mobile, AL 36619
United States of America
Outside Organization: Unaffiliated Individual
Affiliation:
Received: Jan,30,2017 21:42:33
Correspondence Type: Web Form
Correspondence: I am a property owner at 1906 Cadillac Avenue, Dauphin Island, Alabama. I am opposed to the proposal to install a public boat launch on Cadillac Avenue and to the proposal for a parking lot. The proposed launch site is in the middle of an established residential area. A boat launch would greatly reduce property values for this area. The noise created by this activity, which normally begins before daylight, would be very disturbing to this neighborhood. The body of water at this proposed site is too narrow and shallow to accommodate the amount of traffic that this facility would attract. This area is home to a great number of birds and waterfowl. Heavy boat traffic would be detrimental to their habitat. The proposed parking lot is not conducive to the quiet neighborhood that currently exists on Cadillac Avenue. A parking lot and boat launch in this neighborhood will bring an enormous amount of traffic both on the street and on the water endangering the small children that play in the water and ride their bikes in this area. THIS A QUIET FAMILY NEIGHBORHOOD! PLEASE DO NOT RUIN IT.

Correspondence ID: 73
Address: Dauphin Island, AL 36528
United States of America
Outside Organization: Unaffiliated Individual
Affiliation:
Received: Jan,30,2017 22:18:30
Correspondence Type: Web Form
Correspondence: NO..NO...NO. to the boat launch and public parking in this area of the island. You will destroy what makes the island so beautiful by continuing to rape the land and make an eye sore of cement parking plus trucks, boat trailers and cars littering this beautiful spot. Those poor property owners near this site will be subject to this plus traffic, litter, noise, etc., etc. This has to be the dumbest plan the island has ever come up with. I hope this does not happen. Don't ruin this island for $$$$$$. Disgusting!!!!!

Correspondence ID: 74
Address: Dauphin Island, AL 36528
United States of America
Outside Organization: Dauphin Island Bird Sanctuaries, Inc. Unaffiliated Individual
Affiliation: OffcialRep
Received: Jan,30,2017 23:47:10
Correspondence Type: Web Form
Correspondence: My name is Ralph Havard. I am resident of Dauphin Island and serve as president of Dauphin Island Bird Sanctuaries, Inc. (DIBS). Established in 1982, we are a 501(c) 3 non-profit corporation with the mission of acquisition and protection of environmentally important stop over habitat for both neotropical migratory birds as well as for our resident bird species on Dauphin Island and adjacent mainland Mobile County coastal areas. Dauphin Island is designated as a Globally-important Bird Area, one of the top five in the United States. The entire island is a bird sanctuary. Eco-tourism is a primary component of the island's economy.

Section A
We are in agreement that the protection of the gulf beach (Section "A" in the Middle Dauphin Island Plan is very important. This is a pristine beach with well-developed dune vegetation and a narrow central lagoon/marsh system. It is an important nesting area for colonial nesting species such as least tern and Black skimmer as well as snowy plover and other ground nesting birds such as Common nighthawk. It is also important wintering habitat for piping plovers, red knots and many other wintering shorebird species. Both Loggerhead and Kemp's Ridley sea turtles regularly nest in this area. In the project report there was no recognition of colonial nesting activity in this area, or of any proposals regarding protection of nesting colonies from human intrusion. A fishing pier constructed on this property will either be destroyed by the first hurricane of will be covered by the sand that is presently landlocking the current fishing pier. And that sand is headed toward the project beach quite rapidly. Our organization supports the acquisition and protection with a conservation easement of this entire property. We also support the educational opportunities offered to the public by a nicely planned, low-key facility.

Sections B and C
The Salt Creek/Bayou Heron/Bayou Second is a very shallow and constantly changing body of water that would require frequent and expensive maintenance dredging in order to allow large vessels to navigate this area. Continuous dredging issues and the associated spoil disposal issues will have a catastrophic impact to the very sensitive adjacent salt marsh habitat - areas used for nesting by a myriad variety of marsh birds such as Clapper and Black rails, Wilson's plovers and American oystercatchers to name a few. The sensitive salt marshes would suffer damage due to a large influx of powerboats. In addition, putting a project of this scope in an established residential neighborhood not zoned for this type of use would lower property values. The homeowners would likely support a kayak/canoe launching area - much better suited for the area. Parking for 200 cars seems way out of proportion to actual needs.

Thanks for your consideration.

Correspondence ID: 74
Yours truly,

Ralph W. Havard,
President, DIBS, Inc.

Correspondence ID: 75
Address: Mobile, AL 36602
United States of America
Outside Organization: Mobile Baykeeper Non-Governmental
Affiliation: OffcialRep
Received: Jan,30,2017 00:00:00
Correspondence Type: Letter
Correspondence: January 30, 2017
NOAA Gulf of Mexico Disaster Response Center
Attn: Alabama Recreational Use Restoration Plan
7344 Zeigler Blvd.
Mobile, AL 36608
RE: Draft Recreational Use Restoration Plan I
Dear Alabama Trustee Implementation Group:
I am writing on behalf of the board, officers and more than 4,000 members of Mobile Baykeeper to present comments on the Recreational Use Restoration Plan. Mobile Baykeeper has been actively involved in the BP Oil Disaster and the resulting opportunities for restoration for nearly seven years and, while we have some reservations about the projects proposed, we are excited to see restoration being funded to move forward.
We are incredibly grateful to the teams at Alabama Department of Conservation and Natural Resources, Geological Survey of Alabama, EPA, and the Departments of Commerce - NOAA, Agriculture, and Interior - Fish & Wildlife and National Parks. You are doing incredible work teasing out opinions versus facts, politics versus community and so much more. Your work is vitally important for our community, economy and environment and we remain in your debt for your countless hours of service.
Below you will find overall comments that should be attached to each project and then a few notes on the projects specifically.
Overall, we ask that each project take the environment into account at the most basic level. Here are a few items that should be incorporated into each and every project:
1) All new pavement should be permeable;
2) Access by the public should not require the use of an automobile. Walkways and trails rather than parking lots are a much better way to provide public access as well as respond to the impacts from an oil spill;
3) Every facility built should qualify for the highest possible LEED certification;
4) Every attempt should be made to prioritize electricity needs being minimal to the point of being "off the grid". For example, solar panels and geo-thermal heat pumps, etc. should be utilized everywhere possible;
5) Every project should be fiscally responsible with long-term costs and/or additional phase costs being covered in advance of approval; and
6) Do NO HARM! While this should be obvious with this source of funding, it bears repeating. No funded project should have any environmental impacts. If that cannot be accomplished, a fund should be established to cover mitigation, offsets, etc. that is paid in advance of any project being approved

Below you will find additional points that should be addressed before each project is finalized:
1) Gulf State Park Lodge and Associate Public Access Amenities Project: Mobile Baykeeper remains disappointed in this project as a means to directly compensate for lost use of beaches. Very importantly, this project does more to address economic losses rather than human use which is what should be directly offset with NRDA funds. Economic losses are not recoverable under this source of funding. Limiting access to the beaches and land through a potentially cost-prohibitive hotel eliminates the rationale for funding this project via NRDA funds.
It is also important to point out that the alternatives analysis is still sorely lacking after being required via the courts. That analysis does not take additional options into account leaving the state and Alabama's taxpayers open to yet another round of lawsuits. While we continue to support streamlining permitting and review processes to ensure all agencies are working together to move the best projects forward and forward quickly, skirting the laws that protect the environment, natural resources and even these limited funds available for restoration must remain the top and most important priority for the state of Alabama.
The cumulative and indirect impacts analysis appears to be minimally reviewed in the analysis:
â€¢ There will be an increase in automobile traffic - How will that be handled?
â€¢ There will be an increase in foot traffic on critical beach habitat - How will that be offset?
â€¢ Additional cars and people will increase the threat to wildlife - How will that be abated?
The increase in cost and reduction in scope leaves the concern of where will the funding for the conference center be found?
If all of these opinions repeated multiple times do not compel you to pick a different project for the largest portion of NRDA funding ($56,300,000 of $70,675,000), we ask that you build this project to the top level of LEED certification and make it generate power that goes back into the grid in Gulf Shores. Do everything to make this project give back to the environment rather than taking anything else.
2) Fort Morgan Pier Rehabilitation: The cost for this project appears incredibly high especially compared to newspaper reports about its original costs. Please explain in detail the rationale for the increased cost. Otherwise, it is definitely a need and will replace lost access.
3) Laguna Cove Little Lagoon Natural Resource Protection: This is an excellent project that protects land, creates public access and promotes connectivity to wetlands and the important back waters of Little Lagoon.
4) Bayfront Park Restoration and Improvement (E&D only): While this project is less expensive than the others, it isn't clear why there is a need to spend one million dollars for an evaluation and design plan with no surety for funds being available to implement the plan (build out the project). This is the type of project Mobile County should fund in advance of asking NRDA to fund the implementation. The park already exists therefore no additional access opportunities are being created. This project also does not improve access; it simply funds a study to determine if there is a good way to increase or improve access.
5) Dauphin Island Eco-Tourism and Environmental Education Area: The maps associated with this project make it difficult to see what is to be built. In particular, it appears that support of this project could require the filling of several acres of wetlands which would run counter to the intent of the NRDA funding. There simply needs to be a clearer picture of what environmental impacts could result from the proposed building. It is imperative that we're not just "minimizing environmental impacts" as defined in section 3.7.1, but creating zero impacts.
The land acquisition is vital to ensure protection against development and the amenities appear to be excellent for promoting public use of the land and connecting them to coastal resources.
6) Mid-Island Parks and Public Beach Improvements (Parcels B and C): The maps associate with this project indicate that you'll be creating parking spaces

Correspondence ID: 75
on the beach at Dauphin Island. While cars definitely provide an ability to access a site, they do very little to actually protect, enhance or encourage visiting a beach. Parking spaces should be limited to those areas north of the site between the two roads rather than on the beach.
The land acquisition is an excellent choice and could be critical to avoid future development as well as promote access.
In closing, Mobile Baykeeper greatly appreciates the opportunity to comment on these projects. We appreciate the Trustee Implementation Group's accessibility, willingness to answer questions, respond to concerns and more. Your commitment to the public involvement and engagement is imperative and we're grateful you keep the door propped open for us. We also commend you for being thorough in the vast majority of reviews and look for some clarifications in the final draft.
We hope these comments are received in the spirit intended - helpful. We appreciate the efforts of the team of reviewers, developers, etc. who have made coastal restoration a priority. If you have any questions or need additional information, please don't hesitate to contact me.
Sincerely,
Casi (kc) Callaway
Executive Director & Baykeeper

Correspondence ID: 76
Address: Dauphin Island, AL 36528
United States of America
Outside Organization: Town of Dauphin Island Town or City Government
Affiliation: OffcialRep
Received: Jan,17,2017 00:00:00
Correspondence Type: Transcript
Correspondence: Commissioners, thank you very much. As mayor and on behalf of the town council, we want to welcome both you and the rest of the trustees here to Dauphin Island, the Sunset Capitol of Alabama. We appreciate you all taking the opportunity to come down and host a meeting here within our community. I want to extend thanks to Dr. Valentine and his staff for affording us use of his facility here.

One thing I would like to say, as an elected official and a lifelong resident of Dauphin Island, the oil spill impacts to our barrier island community were considerable, even more so than what we've seen in hurricanes in past years. The impacts, along with us being a frontline community essentially, were significant, to say the least, and the impacts also essentiall put us out of business.

Most of the people that come to an island community want to come here to utilize the resources that we have, the boating, beaching, swimming, fishing, all of those things, and all of those things from one day to the next were taken away. So with the Restoration Plan that you all are presenting here tonight, I think it goes a long way in trying to re-establish those accesses and user-friendliness, if you will, of the resources on the island. And I just want to stand here and say that I rise in support of the proposal that's been placed forward here tonight, and I would encourage others to do so as well.

The fact that we are essentially the playground, if you will, for all of Alabama, certainly within the region, we have a lot to offer and a lot of that is ecotourism at this point. And, again, I listed a lot of those. Birding is another big opportunity as well. So I think this plays right in to what we have to offer as an island community. We appreciate you all recognizing that as well and trying to do what you can to ensure that the folks that continue to come to enjoy, those of us who live here and those that visit here will be able to do so and access the resources that are so critical to our community and the region.

So with that, again, I really appreciate you all being here. We're very fortunate to have you join us and I just want to thank you for doing that. And as you said, I do have to bow out and go to a council meeting. But, again, thank you all for coming, and I'm sure you'll have a very productive meeting. Thank you.

Correspondence ID: 77
Address: Montgomery, AL 36130
United States of America
Outside Organization: House District 105 State Government
Affiliation: OffcialRep
Received: Jan,17,2017 00:00:00
Correspondence Type: Transcript
Correspondence: Okay. I think my comments are about how the effects of the oil spill has devastated this House District 105. You know, we were on the frontline here in Dauphin Island on the beach, the beach of Gulf Shores, but what so many times has gotten missed - - and you guys are probably not from this area. But so many times what's gotten missed is the fishing communities Bayou La Batre and Coden, those fisheries, those guys were out of work for one year. It was devastation in this area. There was a lot of money that had come down, but that was just a like a quick fix. So many times we see in government, it was here and it was gone. And then we had to live with the disaster of people trying to move to other jobs, jobs that they had no qualifications in. I mean, it was a huge process down here to try to get those folks into work.

But I would just ask that this board and the other boards that are over these BP funds remember the damages that were done in that community also. Appreciate what you guys are doing. I know it's a tough task. A lot of times you take abuse instead of getting commended for what you do. But I just wanted to make those comments, you know.

And one other thing, which I know it has absolutely nothing to do with what you guys are doing, but a lot of times we run into things with the Corps of Engineers or maybe even NOAA or different ones, EPA, you know. We're sitting here, we're living on a barrier island and we feel mistreated because we can pump sand up on an island to protect a beach mouse or a turtle or something like that, but we can't pump sand up on the west end of Dauphin Island to protect people's homes, protect their property. There is an economic impact. We're losing revenue - - we're losing ad valorem revenue because the island is gone and people were paying taxes on that. Well, they're not going to pay taxes on something that's not there anymore.

That's my comments and thank y'all very much for letting me speak.

Correspondence ID: 78
Address: Mobile, AL 36602
United States of America
Outside Organization: Mobile Baykeeper Unaffiliated Individual
Affiliation: OffcialRep
Received: Jan,17,2017 00:00:00
Correspondence Type: Transcript
Correspondence: Thank you. And you got me even though I said maybe, right?

I'm Casi Callaway. I'm the Director of the Mobile Baykeeper, and I'm always so grateful that y'all are here. And I also - - I really want to pile on to the comments of how excited we are that y'all are moving this forward, having the - - Alabama be out there first. But also, I think you beat your time line by two months, so that's really awesome and we're really excited that this is moving. I've got more questions than I have problems, I guess, this time, so that's maybe good.

On your Gulf State Park Project, you list it at $56 million, but in the list you also say that you're doing dune restoration and wetlands restoration. And I wonder if the $56 million actually includes that, but it is on the sheet, so I was assuming that was more for lodging, so I kind of want to better understand that. It's probably well spelled out in the 532-page document I have not yet completed.

The other questions that I have are really - - I don't really understand the map for the Dauphin Island Project on the education facility. I can't tell exactly where that is and exactly what you're going to do with it/to it and there are a lot of wetlands there.

So I want to automatically trust y'all to do it correctly, but I think the single most important comment I need to make here is, include the environment as you do some great project.
Make sure that you're not filling in wetlands. Make sure you're not adding an impact where your job is to produce access and create more beneficial areas and especially areas that you can actually learn from and through, which I think that site is particularly one.

Secondarily, when you're saying 100 parking spots per site on the second Dauphin Island project, do you seriously mean to put new parking on the beach, that beachfront access that has nothing but beach on it? So we want to discourage you from using beachfront areas for parking. Use across the street. Let's do that one right.

I think - - and the last one that is a big question is what the Bayshore Project will be. I'm sorry to poke all the Mobile projects. But the Bayshore Project, is there funding for Phase II or for implementation that is not NRDA? What if NRDA finds that that's not the best use of funding? So what would they do? Will we have lost a million dollars on a project?

I know y'all think those things through, but again, I want to encourage you to make sure the public understands exactly how you're thinking that through because to us it looks like an idea that you're now going to do a plan for something that you may or may not have funding or an opportunity - - or anyone with opportunity to complete. So I think those are things that we are always going to want to see.

Again, you know, we are - - we want to again commend you for moving quickly through these processes but still allowing public comment. I do think I missed the deadline for when the written comments are. Can you tell me?
MR. FRANKLIN: January 31st.
MS. CALLAWAY: Okay. Perfect. Sorry. Thank you.

And, again, I just want to say thank you all for being here and being consistent and keeping the door open for us to have a conversation. Thank you.

Correspondence ID: 79
Address: Dauphin Island, AL 36528
United States of America
Outside Organization: Unaffiliated Individual
Affiliation:
Received: Jan,17,2017 00:00:00
Correspondence Type: Transcript
Correspondence: Yes. Hello. I live down here on Dauphin Island. I went to school at the sea lab. I worked for the BP oil spill, cleanup, made, you know, some good money. But - - and I know about the environmental impact and all that kind of stuff.
But anyway, the point being is, Baldwin County is the biggest growth county in the country, I think. But why is Dauphin Island and Mobile getting more money? I mean, they're spending $56 million over there, or whatever it is, to get a condominium complex built, and we don't even have a fishing pier over here. I mean, it's ridiculous.

And I know about the guy that drowned over at Fort Morgan, and that belongs to Fort Morgan Port Authority, and the lawyers made a bunch of money and they closed it up. And I pick up people over there from Gulf Shores and Orange Beach to go fishing at Fort Morgan.

But the point being is, there's no recreational pier other than this little pier that we've got down here that goes out a hundred feet. There's no fishing pier down here. And why spend, you know, $60 million dollars over there when y'all can at least build a fishing pier over here for people from New York, Chicago, wherever, you know? I think it's absurd for the money to be spent over there for Baldwin County and not more money spent here. End of my story.

Anyway, I'm venting. Okay? Anyway, thank you for my comment.

Correspondence ID: 80
Address: Bayou La Batre, AL 36509
United States of America
Outside Organization: Unaffiliated Individual
Affiliation:
Received: Jan,17,2017 00:00:00
Correspondence Type: Transcript
Correspondence: My family founded Bayou La Batre, Joseph Bosarge, so we've been here a while. So I've been on the water all my life.

Just a few questions. You know, I built the ferry business and - - until the historical commission had took it from me, and they make a lot of money. At $3 million to build this pier, it will take a least - - if you charge $7 a person, it will take a half of million people to go to that pier to pay - - just to pay for it, not counting maintenance and everything else. So that money could be better spent. Of course, this is the historical commission. We know they have a lot of pull.

Okay. The pier that y'all are talking about, the Dauphin Island Ecotourism Environmental Project, the pier that's going to go out in the bay over here, there's no water there. It's so shallow, and who's - - have they got a dredging project in here to keep it dredged out, you know? And the Bayfront Park, a million dollars to do a study? If they would check with some of the other - - I think the sea lab put those - - now, they have tried several different environmental impact things. So instead of spending another millions dollars, why don't y'all just check with the sea lab people? And even the ones in Billy Goat Hole over here, I've put these out here, these ones for the environmental impact there. There's a lot of research already been done.

What I don't understand is everybody drives on the island every day and they don't see Little Dauphin Island. I haven't seen it. Has it been mentioned in any project? Little Dauphin Island is disappearing. And I watched the - - I live right beside the conservation office. I watched the conservation boat run aground in the channel day before yesterday because the state's in charge of dredging it, but the state doesn't have any money to dredge it. And there's a lot of boats, the Lady Ann, all the fishing boats that come out of Dauphin Island - - the channel needs to be dredged. They put up some little bitty stakes out there now to show the boats where to go. It's just a joke because we need - - we have beacons.

I sit on my front porch and watch boats run aground every day out there because the channel is not properly maintained, and - - but when Little Dauphin goes, which is deteriorating - - if y'all do a study on it, do the last 20 years and see how much it's deteriorated. And you can - - I know we can't go on Dauphin Island - - Little Dauphin because an environmental company - - business bought it. But out in Galveston, Texas, they went right outside the island and put concrete debris and riprap and they're protecting that island. We don't have to touch Little Dauphin. It's protected already. But they're saying they want to keep it natural and natural is disappearing. So I would say Little Dauphin Island should be one of the main concerns. Thank you.

Correspondence ID: 81
Address: Montgomery, AL 36130
United States of America
Outside Organization: Department of Conservation and Natural Resources State Government
Affiliation: OffcialRep
Received: Jan,17,2017 00:00:00
Correspondence Type: Transcript
Correspondence: Thank you. I'm Chris Blankenship, the director of marine resources for the Department of Conservation and Natural Resources.

Our responsibility with the State is to manage the fisheries so that we have a good fisheries here in the state. I do want to say thank you for the public access from the piers and some of the places where people can fish. People that don't have boats can have access to these great fisheries.

But I also wanted to let you know that on behalf of the department of - - a division of marine resources, we've committed and our intent would be on the Mid-Island project to be able to leverage that with some sport fish restoration money that we receive every year and some saltwater fishing license money to put a boat ramp in or some public access on that site to allow for additional access to the great fisheries we have here in Alabama. Thanks.

Correspondence ID: 82
Address: Fairhope, AL 36532
United States of America
Outside Organization: Weeks Bay Foundation Non-Governmental
Affiliation: OffcialRep
Received: Jan,17,2017 00:00:00
Correspondence Type: Transcript
Correspondence: Okay. Yael Girard, director of the Weeks Bay Foundation in Baldwin County. First off, thank y'all for having this public meeting, and thank you for addressing recreational at all in these plans. I really believe that people only care about the things they understand and they really only truly understand the things they experience. The best way for them to experience these resources is to get out there, to get out on piers, get out on the beaches and to be able to see the wetlands that we're trying to protect, so thank y'all for taking that into consideration.

That being said, I want to echo Casi's remarks on doing things right the first time, making sure that in our construction we're looking at permeable pavements, responsible storm water management, solar when that's a possibility, native plant usage in any landscaping that's going to be done around parking lots and things like
that and local sourcing of construction materials that are sustainable.

In addition, I'm very thankful that the Laguna Cove Project alternative is being considered. I have seen plans for the homesites on that property and it was pretty gross. There were numerous boat slips also that were slated to be put in there. And for that to be Alabama beach mouse habitat and be considered for that sort of development is really irresponsible, so thank you for considering it. The loss of that beach and habitat would be detrimental to Little Lagoon, which is an area that is changing very quickly and already seeing a lot of resource lost, so thank y'all very much.

Correspondence ID: 83
Address: N/A, AL N/A
United States of America
Outside Organization: Unaffiliated Individual
Affiliation:
Received: Jan,18,2017 00:00:00
Correspondence Type: Transcript
Correspondence: Great. Thank you very much.

My name is Trent Farris and I'm just a citizen here in Baldwin County. I'm not a public speaker, but I am a wildlife biologist and ecologist. And I've been living in the Gulf Shores area for 22 years this past October. I am raising kids in this community.

And I'm fortunate to be one of the few private individuals that holds a federal permit to actually handle the endangered Alabama beach mouse that this plan is taking into consideration.

And I've been involved with a lot of projects at the Gulf State Park and also out at the Bon Secour Wildlife Refuge, both in a wildlife capacity and ecological capacity, both on dunes and behind the four dunes back in the forest areas.

And so since I've been trapping mice for so long, I've seen the population fluctuate over time for different things. I've seen hurricanes. We've seen named storm events, we've seen forest fires, we've seen oil spills.

And through all of that, the population fluctuates based on things that are occurring in the environment. What I've seen lately since this plan is - - I'm a boots-on-the-ground guy, so I'm speaking from experience and I know.

I've been trapping out there, pre-development and while development is going on now, for the State Park. And I've seen that slowly the population of the beach mice have been going up since these plans - - the ecological aspect of these plans have been implemented such as the dune restoration and dune enhancements out there.

Plants have been planted, which are beneficial. Non-native invasives have been removed, which is beneficial. There's been predator control, which has been beneficial.

So I'd just like to say I am definitely in favor of the Draft Restoration Plan and the Environmental Impact Statement and particularly Gulf State Park Lodge and associated public access amenity site.

So I think it's a good thing. I am actually seeing benefits in the environment and I'm very excited and pleased to see this going forward. I'm glad to be a part of it.

Thank you very much.

Correspondence ID: 84
Address: Orange Beach, AL 36561
United States of America
Outside Organization: City of Orange Beach Unaffiliated Individual
Affiliation: Member
Received: Jan,18,2017 00:00:00
Correspondence Type: Transcript
Correspondence: My name is Phillip West. I'm with the City of Orange Beach. I'm also going to speak as a citizen of Alabama today as well and as a dad.

We lost the lodge years ago. I'm speaking specifically in support of that component of the project because I think the plan is generally well received. That has probably been one of the most contentious elements of it, so I did want to focus my time on that part of the plan.

We are great users - - our family is great users of the state parks throughout the southeast and the country. Here in coastal Alabama, public access has always been a challenge, but we've been fortunate to have Fort Morgan and Gulf State Park.

But there was such a loss of access during the oil spill. I think - - it is appropriate to focus quite a bit on restoring that harm in the many different forms that the plan addresses, one of which is the lodge.

I think the lodge brings an opportunity not only for the area but for the people of Alabama to be proud of an amenity in an environment like Gulf State Park that meets the needs of a variety of different people.

When my wife and I first got married, we were hardcore back-country backpackers, then along came the kids. So our backpacks were traded in for campers and then cabins.

And sometimes when our elderly parents are down to visit or we meet at a state park somewhere else, the lodge type facility meets those needs.

It would be very difficult for a private developer to incorporate such a project with everything the State Park has to offer with the nature programs, with the other - - with the trails, with the nature centers, with the lakes, that I think it just really adds flexibility and offers people an option so they can enjoy our coastline even more.

So thank you for the hard work for the plan. I know you guys have been at it a long time. It's always good to see our staff and commissioner and his staff.

I know you worked hard, so we support it. We encourage and we can't wait to see it open, so thank you for the time and the opportunity.

Correspondence ID: 85
Address: Montgomery, AL 36130
United States of America
Outside Organization: Department of Conservation and Natural Resources State Government
Affiliation: OffcialRep
Received: Jan,18,2017 00:00:00
Correspondence Type: Transcript
Correspondence: My name is Chris Blankenship. I'm the director of the Marine Resources Division for the Department of Conservation and Natural Resources. I appreciate the opportunity to support some of the preferred projects.

Our responsibility of the Marine Resources Division is to manage the fisheries of the State of Alabama. And management of that fishery is allowing access to the fishermen.

There's several components of these projects that would allow fisherman without boats to have access, particularly the project in Dauphin Island, the pier project at Fort Morgan and then also at the Laguna Cove. All of those would be very good for people without vessels.

And the kayak fishing is the fastest growing segment of the saltwater fishing industry. And having the kayak launch at Laguna Cove would also provide access for those people. So it would also be the intent of the Marine Resources Division to use some of our sportfish restoration funds and saltwater license funds to build a boat ramp at the Mid-Island Park Project on Dauphin Island to leverage that acquisition of that property. That's a much-needed amenity that we need there on Dauphin Island.

Thank you.

Correspondence ID: 86
Address: Gulf Shores, AL 36547
United States of America
Outside Organization: City of Gulf Shores Town or City Government
Affiliation: OffcialRep
Received: Jan,18,2017 00:00:00
Correspondence Type: Transcript
Correspondence: Robert Craft, Mayor of the City of Gulf Shores.

There's a lot of - - for this city and being in the position we're in, a lot of wonderful additions to the city that this project brings to us, not the least of which is economics.

We've got meeting space at the scale that we've not had before and we're able to entertain and bring conventions and conferences from the State of Alabama and larger businesses here before going primarily to Florida.

So it's a great opportunity for us economically, but probably to me it's much more important in that it offers a diversity of tourism. We have eco-tourism available here that doesn't exist anywhere else in our area.

And the opportunities of the trails and the education program and the interpretive centers for our kids to understand how important and fragile this is a significant opportunity.

I think it's not just important for the kids that live here but it's important to the kids that visit here to understand all of these issues.

And also from another aspect from the City of Gulf Shores, it gives us a blueprint of how to develop properly and sensitive to environmental areas. And almost every area that we have here is sensitive for a lot of different reasons.

This is the blueprint of how to do it productively and correctly and make sure that the outcome is not just for money but for every other element that goes into it. So we feel like this brings a lot of value to us and more than just economic value.

The Laguna Cove opportunity on the other end of West Beach is also a very pristine piece of property that we're delighted to see it protected and delighted to see that it won't be developed and it will be maintained in the proper place it is now. We have too little of those lands.

The State Park being 6,000 acres of the way it was, the way this world was put together, it's a very important balance to the economic development in Gulf Shores and Orange Beach. To be able to show that and protect that is important to us.
And I want to thank you, and we are very much in support of all the projects mentioned here. And thank you for your time. Appreciate it.

Correspondence ID: 87
Address: Gulf Shores, AL 36547
United States of America
Outside Organization: Alabama Gulf Coast Convention and Visitors Bereau Town or City Government
Affiliation: OffcialRep
Received: Jan,17,2017 00:00:00
Correspondence Type: Transcript
Correspondence: Good evening. I'm Herb Malone. I'm president and CEO of the Alabama Gulf Coast Convention and Visitors Bureau doing business as Gulf Shores and Orange Beach Tourism.

I've been in the role of leadership and tourism in Gulf Shores, Orange Beach and Fort Morgan area for over 25 years. In that time, our organization has engaged ourselves, along with other groups around the bay, in helping to create and subsequently market and inform people of the project such as the Alabama Coastal Birding Trail that wraps all the way around Mobile Bay, including up into the Delta, down to both beaches and all in between the Alabama Civil War Trail. It tells the stories of our Civil War history again around the bay.

Correspondence ID: 87
And also we helped create the Alabama Coastal Connection which is both a state and national scenic byway that connects south Mobile County and Baldwin County.

I tell you that so you know our tourism organization really believes in sustainable tourism and protecting our environment.

We are one of the few tourism organizations in the country, may be the only one to my knowledge, that has an eco-tourism or nature tourism specialist on our staff - - she's here tonight - - thanks to a partnership with Mississippi-Alabama Sea Grant and Auburn University and us. So we've been doing that for a number of years.

I'd like to stand here and tell you without hesitation that I'm extremely in favor of all six of the projects you have here.

I'm not representing Dauphin Island, but I do have a lot of familiarity with Dauphin Island through these other projects. I have or I need to abstain on one of them, I think, and that is - - the Laguna Cove project is owned by a charitable foundation, which I happen to be an unpaid volunteer trustee of the board of that foundation. So I abstain from comment on that, but I am very much in favor of the others.

Our two coastal counties host each year - - there are 9,000,000 visitors to visit in this great coastal paradise that we have the privilege of living in.

In our side of the bay, the dollars spent here - - when the tourists go home, they've left behind 4 billion dollars. That's equivalent to - - the economists tell us somewhere in the neighborhood of 50,000 jobs.

So I'd like to say our organization - - although we're not a member organization, we represent those 50,000 employees who make their living off of - - from the tourists who come here and spend money as well as the local people who get out and spend money.

So the recreation is not only going to serve the people that live here in this area, the Alabamians, but the Americans that come here throughout the country to visit our great beaches and our locations.

I'm extremely familiar with the lodge project, the Gulf State Park Lodge project, thanks to all the great information Mr. Guy and his people have disseminated out into the public. We've watched that.

And the business we're in, it's our job to stay up with all the new things that are coming. We are very excited about all of it. It fills the great needs for everyone I mentioned earlier. And, again, with the exception of my abstention, I'm strongly in favor of five of your six projects.

Correspondence ID: 88
Address: N/A, AL N/A
United States of America
Outside Organization: Unaffiliated Individual
Affiliation:
Received: Jan,18,2017 00:00:00
Correspondence Type: Transcript
Correspondence: Thank you.

I'm Gary Ellis. I'm now retired. I grew a business for 30 years and recently retired, so I'm now a citizen. I'm a native of Baldwin County. I greatly appreciate, one, you having a meeting here and making it accessible to us.

We've all traveled to Mobile and traveled to other areas to public meetings in support of our community, so thank you for being in our hometown and welcome.

I want to touch on really the recognition and appreciation for the amount of work that's obviously gone into this. I mean, the 500-page report probably represents only a small part of the evidence of the amount of work that's gone into getting to where you are tonight sort of in the fourth quarter. I hope we can get all of this behind us and move forward.

Growing up as a child, I remember the Gulf State Park. And I remember as a business person here and what all it meant when it was thriving and going.

Gulf State Park, as you're well aware, goes way beyond the lodge and the lodging properties. It's the environment. It's Lake Shelby. It's just the whole product.

And it gives me a great bit of pride to know that this tragedy we went through ultimately will end up resulting in giving more public access not only to our citizens but our visitors. And that's great.

And thank you for helping restore part of our heart and our soul in this community. We're glad and hope it continues to move forward. Thank you.

Correspondence ID: 89
Address: Montgomery, AL 36130
United States of America
Outside Organization: State House District No. 95 State Government
Affiliation: OffcialRep
Received: Jan,18,2017 00:00:00
Correspondence Type: Transcript
Correspondence: Thank you very much.

I'm a member of the House of Representatives and I serve on the Alabama State (inaudible) committee and currently serve as chair.

I just think it's important to know that the members of that committee - - on every occasion when there was an opportunity to have a positive impact on the

Correspondence ID: 89
environment, on environmental education, from extending the trails to the student housing, the committee has voted unanimously on all of these proposed projects - - well, not "all six," but particularly the Gulf State Park. That's most of where the statewide interest has come.

Thank you for being here. I appreciate it.

Correspondence ID: 90
Address: Orange Beach, AL 36561
United States of America
Outside Organization: Mississippi-Alabama Sea Grant; Gulf Shores and Orange Beach Tourism Town or City Government
Affiliation: Member
Received: Jan,18,2017 00:00:00
Correspondence Type: Transcript
Correspondence: Good evening, I'm Chandra Wright. I am the Nature Tourism Specialist for the Mississippi-Alabama Sea Grant and Gulf Shores and Orange Beach Tourism.

I'm also a resident of Gulf Shores, Alabama. And I moved down here because I'm a scuba diver. And then the oil spill happened shortly after I moved down, so it became a very personal tragedy for me.

And I have been closely involved with the Gulf State Park Lodge project. To the extent that I was involved in some of the design (inaudible) that we have been doing developing the project, I cannot tell you how important it is to me personally for the project to be focused on doing this the right way.

I can't believe in the State of Alabama, as conservative as we are and as opposed to tree huggers as the State usually is, for this project to be so focused on doing this the right way.

So I want to commend the council for developing it that way. I appreciate the opportunity for this project to go forward. All of the projects that are involved in tonight are important for our coast.

I also work with the folks on Dauphin Island and from Mobile County to develop nature tourism, so I am fully supportive of all the projects.

All of the acquisition to preserve what's left of our undeveloped coastline is important not only for the public access but also for those endangered and protected species from the migrating birds to the sea turtles to the beach mouse.

So I want to thank you guys for doing that. I'm fully supportive of the project, so thank you very much.

Correspondence ID: 91
Address: Gulf Shores, AL 36547
United States of America
Outside Organization: Unaffiliated Individual
Affiliation:
Received: Jan,18,2017 00:00:00
Correspondence Type: Transcript
Correspondence: My name is Ike Williams. I'm a citizen of Gulf Shores and also a business owner. I just want to thank y'all for everything that y'all have done to see this project through.

I love this area. I love our beaches. That's why I'm down here. I hope to retire here. And these projects that you've got going on, I see the benefit and I'm just 100% in favor of it. I'll just keep it short and sweet, but I appreciate all the hard work y'all have done.

APPENDIX C

MONITORING PLANS

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GULF STATE PARK LODGE AND ASSOCIATED PUBLIC ACCESS AMENITIES PROJECT, ALABAMA

INTRODUCTION

Project Overview

The proposed Gulf State Park Lodge and Associated Public Access Amenities Project would provide funding to (1) complete the rebuilding of the Gulf State Park Lodge; and (2) develop a host of public access amenities, including an interpretive lobby, public education programs, public restrooms and shower facilities, public beach access from the lodge area, a tram system for access to the remainder of the park, a pedestrian path from the pier, bicycle share stations/program, and a meeting space/viewing area. These public access amenities would connect the lodge to other aspects of the park, create and enhance public use and enjoyment of the beach areas at Gulf State Park for visitors not staying at the lodge, and increase access to the non-beach areas within the park to all visitors. The lodge and conference center were proposed as part of the Gulf State Park Enhancement Project in Phase III Early Restoration, and construction of the lodge and conference center has already begun with the use of non-natural resource damage assessment (NRDA) funds.

Restoration Objectives and Performance Criteria

The overall objectives of the proposed project are to compensate for lost recreational use along the Alabama coast and to improve the public's accessibility and enjoyment of Alabama's coastal resources. The specific restoration objectives relevant for this monitoring plan are to: (1) ensure the Gulf State Park Lodge and Associated Public Access Amenities Project is constructed according to plans and permitting requirements; and (2) identify future changes in visitation associated with the new facilities and amenities.

Performance criteria will be used to determine restoration success or the need for corrective action (15 CFR 990.55(b)(1)(vii)). The specific performance criteria for this project are identified below.

- Performance Criterion #1: Gulf State Park Lodge and Associated Public Access Amenities Project is constructed according to plans and permitting requirements
- Performance Criterion #2: Identify future changes in visitation associated with the new facilities and amenities

Conceptual Model and Monitoring Questions

Table 1 outlines the conceptual model for the proposed restoration project, which forms the basis of this monitoring plan, and includes a summary of the project activities, the expected product or output of those activities, and the desired project outcomes.

Table 1: Conceptual Model for Restoration

Activity	Output	Short-term outcome	Long-term outcome
▪ Complete the rebuilding of the Gulf State Park Lodge. ▪ Develop and complete construction of a host of public access amenities.	▪ Construction of the Gulf State Park Lodge and public access amenities is completed and the amenities are used by the public.	▪ New and rebuilt infrastructure and amenities function as designed.	▪ The rebuilt Gulf State Park Lodge and public access amenities result in increased visitation.

This monitoring plan has been designed around the objectives and desired outcomes for this restoration project and is intended to address the following monitoring questions for each objective:

<u>Objective #1: Ensure the Gulf State Park Lodge and Associated Public Access Amenities Project is constructed according to plans and permitting requirements.</u>

- Was the project constructed according to plans and permitting requirements?

<u>Objective #2: Identify future changes in visitation associated with the new facilities and amenities.</u>

- Are there identifiable changes in visitation associated with the new facilities and amenities?

Roles and Responsibilities

The Alabama Trustee Implementation Group (AL TIG) would be responsible for monitoring during construction to ensure that the Gulf State Park Lodge and Associated Public Access Amenities Project is constructed according to plans and to ensure that construction activities comply with the full set of environmental permit conditions. Representatives from U.S. Fish and Wildlife Service would be present during construction to specifically ensure that all construction activities comply with permit conditions relating to federally listed species, including the Alabama beach mouse.

Following construction, Gulf State Park will be responsible for collecting and providing annual information on the total number of visitors to the rebuilt lodge, lodge occupancy rates, average length of stay, and the state of origin for visitors. In addition, information would be assembled on the number of visitors using the tram and bicycle sharing facilities. To the extent practical, visitor use and enjoyment of the park's natural resources would be assessed using existing Gulf State Park protocols for the gathering and evaluating visitor feedback (e.g. social media postings).

PROJECT MONITORING

The proposed monitoring for this restoration project, outlined below, is organized by project objective, with one or more monitoring parameters for each objective. For each of the identified monitoring parameters, information is provided on the monitoring methods, timing and frequency, sample size, and sites. In addition, performance criteria for each parameter are identified (if applicable), including example corrective actions that could be taken if the performance criteria are not met. The parameters listed below may or may not be tied to performance criteria and/or corrective actions.

Objective #1: Ensure the Gulf State Park Lodge and Associated Public Access Amenities Project is constructed according to plans and permitting requirements.

- Was the project constructed according to plans and permitting requirements?

  Parameter #1: Level of construction to terms of contract and permit requirements

  a. Method: on-site monitoring would be conducted during construction to ensure that the Gulf State Park Lodge and Associated Public Access Amenities Project is constructed according to plans and to ensure that construction activities comply with the full set of environmental permit conditions, including those relating to federally listed species
  b. Timing and frequency: monitoring would occur during all construction activities from start to completion; the project is expected to be completed within a two-year time frame
  c. Sample size: dependent on frequency and duration of construction activities
  d. Sites: Gulf State Park
  e. Performance criteria: Gulf State Park Lodge and Associated Public Access Amenities Project is constructed according to plans and permitting requirements
  f. Corrective action: resolution with contractor such that all contract terms and permit requirements are met

Objective #2: Identify future changes in visitation associated with the new facilities and amenities.

- Are there identifiable changes in visitation associated with the new facilities and amenities?

  Parameter #1: Amount of visitation

  a. Method: To document changes in recreational usage, the park would make available annual information on total number of visitors to the rebuilt lodge, lodge occupancy rates, average length of stay, and the state of origin for visitors. In addition, information would be assembled each year for at least five years on the number of visitors using the tram and bicycle share amenities and, to the extent practical, their use and enjoyment of the park's natural resources. As a broader measure of the impact on visitation of park enhancements, park managers also plan to assemble annual data on the total number of visitors to the park. This type of information has been collected extending back as far as the early 1990s and would provide a basis for long-term comparisons of park visitation, including comparisons to the time when the previous lodge was operating. For the improvements to the quality of the visitor experience, the park would use existing Gulf State Park protocols for the gathering and evaluating visitor feedback.
  b. Timing and frequency: annually for at least five years
  c. Sample size: equal to number of visitors annually
  d. Sites: Gulf State Park
  e. Performance criteria: identifiable future changes in visitation associated with the new facilities and amenities

MONITORING SCHEDULE

The schedule for the project monitoring is shown in Table 2, separated by monitoring activity. Execution monitoring will occur for the duration of construction activities, which will occur within a two-year timeframe. Post-execution monitoring will begin once construction of the rebuilt Gulf State Park Lodge and associated public access amenities has been completed and all amenities are available for public use. Post-execution monitoring will be recurring annually for at least five years to monitor visitor use.

Table 2: Monitoring Schedule

Monitoring Parameters	Monitoring Timeframe	
	Execution Monitoring (0–2 years)	Post-Execution Monitoring (Years 2–5+)
Level of construction to terms of contract and permit requirements	X	
Amount of visitation		X

REPORTING AND DATA REQUIREMENTS

Reporting will occur annually for at least five years. Data will include but are not limited to: the total number of visitors to the rebuilt lodge, lodge occupancy rates, average length of stay, state of origin for visitors, the number of visitors attending meetings at the facility, and, to the extent practical, their use and enjoyment of the park's natural resources and the total number of visitors to the park. Written reports will be prepared.

LAGUNA COVE LITTLE LAGOON NATURAL RESOURCE PROTECTION PROJECT MONITORING AND ADAPTIVE MANAGEMENT PLAN

INTRODUCTION

Monitoring, Adaptive Management, and Administrative Oversight was identified as one of the programmatic goals in the *Deepwater Horizon* oil spill Programmatic Damage Assessment and Restoration Plan and Programmatic Environmental Impact Statement (PDARP/PEIS). The *Deepwater Horizon* Natural Resource Damage Assessment (NRDA) Monitoring and Adaptive Management Framework (Chapter 5, Appendix E) provides a flexible, science-based approach to effectively and efficiently implement restoration over several decades to provide long-term benefits to the resources and services injured by the spill. Project monitoring and adaptive management is an important component of the overall Monitoring and Adaptive Management Framework. This Monitoring and Adaptive Management plan identifies the monitoring needed to evaluate progress toward meeting project objectives and to support adaptive management of the restoration project. This project is being implemented as restoration for the *Deepwater Horizon* oil spill NRDA, consistent with the PDARP/PEIS.

Project Overview

Under this project, the City of Gulf Shores would acquire in fee simple two undeveloped tracts of land, totaling approximately 53 acres, near Little Lagoon in Gulf Shores, Alabama, and develop and manage recreational amenities on the property. The two tracts are located near the Bon Secour National Wildlife Refuge and include large areas of coastal wetlands, with a total of approximately 6,100 feet of shoreline on Little Lagoon.

The planned acquisition includes development of recreational amenities (e.g., parking and walkways) that would facilitate public access to Little Lagoon and the surrounding lands. Sixty parking spaces, divided between two locations at the site, would be built, and lighting would be provided at the parking lot and walkways as needed. In addition, the alternative would construct a variety of additional recreational amenities to enhance visitor experiences. These amenities would include a pier, a kayak landing, a boardwalk, and restrooms. Educational signage focused on coastal resources would be placed around the site to promote environmental awareness and stewardship.

Restoration Goals and Project Restoration Objectives

The restoration goal and restoration type for this plan is to provide and enhance recreational opportunities by enhancing public access and enhancing recreational experiences. The specific restoration objectives relevant for this monitoring plan are to: (1) acquire the tracts; (2) construct and complete the project as scoped; and (3) provide all visitors access to the site.

Roles and Responsibilities

The Alabama Department of Conservation and Natural Resources (ADCNR) would work with the City of Gulf Shores staff and/or city contractors to ensure that the tracts are acquired and the project is constructed and completed as designed. The City of Gulf Shores staff or city contractors would document the use of the sites by the public.

Conceptual Model and Monitoring Questions

Table B- 7 outlines the conceptual model for this restoration, which forms the basis of this monitoring plan, and includes a summary of the project activities, the expected product or output of those activities, and the desired project outcomes.

Table B- 1: Conceptual Model for Restoration

Activity	Output	Short-term outcome	Long-term outcome
▪ Acquire tracts and construct and implement improvements and enhancements for the public's use.	▪ Tracts are acquired. ▪ Improvements and enhancements are complete.	New infrastructures function as designed.	▪ The public, including those with different abilities, are able to use the site after project completion. ▪ New infrastructure is maintained for lifespan of project.

This monitoring plan has been designed around the objectives and desired outcomes for this restoration project and is intended to address the following monitoring questions for each objective:

<u>Objective #1: Acquire tract.</u>

- Were the tracts acquired?

<u>Objective #2: Construct and complete the project as scoped.</u>

- Was the project constructed and completed as designed and contracted?

<u>Objective #3: Provide access and use by the public for the site.</u>

- Is the public using the site?

PROJECT MONITORING

The proposed monitoring for this restoration project, outlined below, is organized by project objective, with one or more monitoring parameters for each objective. For each of the identified monitoring parameters, information is provided on the monitoring methods, timing and frequency, sample size, and sites. In addition, performance criteria for each parameter are identified (if applicable), including example corrective actions that could be taken if the performance criteria are not met. The parameters listed below may or may not be tied to performance criteria and/or corrective actions.

<u>Objective #1: Tract was acquired.</u>

- Were the tracts acquired?
    a. Method: submission of executed acquisition documents, such as deed

<u>Objective #2: Construct and complete the project as designed.</u>

- Was the project constructed and completed as designed and contracted?

  Parameter #1: Construction of project completed in accordance to terms of contract.

  a. Method: review contractor reports, conduct on-site inspections, and compare to construction drawings

b. Timing and frequency: at least weekly and at end of project, unless otherwise provided by contract
c. Sample size: unknown, dependent on actual construction time
d. Sites: project site
e. Performance criteria: project is constructed and completed as designed and specified in the contract
f. Corrective action: resolution with construction contractor such that the terms of the contract are met

Objective #3: Provide access and public use of the site.

- Are members of the public of different abilities using the site?

  Parameter #1: Level of public use.

  a. Method: gate counts, visual observation, and/or use of automated counters
  b. Timing and frequency: post-construction gate counts, visual observations or automated counters will be used to estimate daily visitor use; counts will be conducted quarterly for five years post construction
  c. Sample size: one day per quarter for 5 years post construction
  d. Sites: Laguna Cove site
  e. Performance criteria: After construction, the public is using the site at a level consistent with its reasonably anticipated potential (described in Section 3.5.2).
  f. Corrective action: If the site is not being used to its potential, the TIG would ask the City of Gulf Shores to implement actions to encourage additional public use at the site (e.g., distribution of promotional brochures, organization of guided nature tours, etc.).

Additional Monitoring: The use and performance of the project will continue to be measured throughout the life of the project, however, less frequently and methodically than the first year of monitoring. The continued monitoring will occur in the course of regular management activities and all costs associated with monitoring, maintenance, and/or corrective actions after construction is accepted, will be the responsibility of City of Gulf Shores and are, therefore, outside the scope of this monitoring plan. Additional monitoring may also occur to satisfy compliance requirements and to help ensure that additional use of the site minimizes the potential effect to natural resources.

MONITORING SCHEDULE

The schedule for the project monitoring is shown in Table B- 8, separated by monitoring activity. Pre-execution monitoring will occur before project execution. Execution monitoring occurs when project has been fully executed as planned (Year 0). Performance monitoring will occur in the year following initial project execution.

Table B- 2: Monitoring Schedule

Monitoring Parameters	Monitoring Timeframe		
	Pre-Execution Monitoring	Execution Monitoring (initial)	Post-Execution Monitoring
		As-built (Year 0)	Years 1–5
Review contractor invoices and deliverables, including the completed project	X	X	
Observations or counts of visitors (TBD)			X

REPORTING AND DATA REQUIREMENTS

Once all data have been reviewed for accuracy and completeness, they will be submitted to the Restoration Project Database. Data will be made publicly available through the DIVER Explorer Interface.

Reporting will occur once at Year 0 and annually during Years 1–5. Reports will be in the form of brief narratives.

FORT MORGAN PIER REHABILITATION PROJECT MONITORING PLAN

INTRODUCTION

Monitoring, Adaptive Management, and Administrative Oversight was identified as one of the programmatic goals in the *Deepwater Horizon* oil spill Programmatic Damage Assessment and Restoration Plan and Programmatic Environmental Impact Statement (PDARP/PEIS). The *Deepwater Horizon* Natural Resource Damage Assessment (NRDA) Monitoring and Adaptive Management Framework (Chapter 5, Appendix E) provides a flexible, science-based approach to effectively and efficiently implement restoration over several decades to provide long-term benefits to the resources and services injured by the spill. Project monitoring and adaptive management is an important component of the overall Monitoring and Adaptive Management Framework. This Monitoring and Adaptive Management plan identifies the monitoring needed to evaluate progress toward meeting project objectives and to support adaptive management of the restoration project. This project is being implemented as restoration for the *Deepwater Horizon* oil spill NRDA, consistent with the PDARP/PEIS.

Project Overview

This proposed project involves rehabilitating, repairing, and improving the existing fishing pier at the Fort Morgan State Historic Site. The existing pier, which is more than 40 years old, fell into disrepair, and in 2014 the Alabama Historical Commission (AHC) closed it for safety reasons. The proposed alternative would rehabilitate the pier on its existing foundations, which would increase publicly available opportunities for pier-based fishing in Baldwin County. The rehabilitated pier would meet current building code requirements, comply with Americans with Disability Act (ADA)-accessible fishing guidelines, and add proper lighting and other features and amenities. Educational signage regarding fishing regulations, stewardship of coastal resources, and other related information would be placed at the site. No parking lot improvements would be needed because adequate parking is already available at the site. Existing entry fees to the Fort Morgan State Historic Site would apply to visitors using the fishing pier. The AHC would provide maintenance for the fishing pier, which would be funded using site entrance fees.

Restoration Goals and Project Restoration Objectives

The restoration goal and restoration type for this plan is to provide and enhance recreational opportunities by enhancing public access and enhancing recreational experiences. The specific restoration objectives relevant for this monitoring plan are to: (1) construct and complete the project as scoped; and (2) provide all visitors access to the site.

Roles and Responsibilities

Trustee staff, AHC staff, and/or their contractors would be responsible for ensuring that the project is constructed and completed as designed.

Trustee staff, AHC staff, and/or their contractors would document the use of the fishing pier by the public. AHC staff would provide maintenance for the fishing pier.

Conceptual Model and Monitoring Questions

Table B- 7 outlines the conceptual model for this restoration, which forms the basis of this monitoring plan, and includes a summary of the project activities, the expected product or output of those activities, and the desired project outcomes.

Table B- 3: Conceptual Model for Restoration

Activity	Output	Short-term outcome	Long-term outcome
▪ Construct and implement improvements and enhancements to the fishing pier for the public's use.	▪ Improvements and enhancements are complete and the fishing pier is used.	New infrastructures function as designed.	▪ The public, including those with different abilities, are able to use the pier after project completion. ▪ New infrastructure is maintained for lifespan of project.

This monitoring plan has been designed around the objectives and desired outcomes for this restoration project and is intended to address the following monitoring questions for each objective:

<u>Objective #1: Construct and complete the project as scoped.</u>

- Was the project constructed and completed as designed and contracted?

<u>Objective #2: Improve access and use by the public.</u>

- Is the public using the rehabilitated and improved fishing pier?

PROJECT MONITORING

The proposed monitoring for this restoration project, outlined below, is organized by project objective, with one or more monitoring parameters for each objective. For each of the identified monitoring parameters, information is provided on the monitoring methods, timing and frequency, sample size, and sites. In addition, performance criteria for each parameter are identified (if applicable), including example corrective actions that could be taken if the performance criteria are not met. The parameters listed below may or may not be tied to performance criteria and/or corrective actions.

<u>Objective #1: Construct and complete the project as designed.</u>

- Was the project constructed and completed as designed and contracted?

  Parameter #1: Level of construction to terms of contract

  a. Method: Contracting Officer/Contracting Officer Representative to review contractor reports, conduct on-site inspections, and compare to construction drawings
  b. Timing and frequency: approximately monthly and at end of project, unless otherwise provided by contract
  c. Sample size: approximately 10 (approximately once per month for about 10 months), unless otherwise provided by contract
  d. Sites: project site
  e. Performance criteria: project is constructed and completed as designed and specified in the contract

f. Corrective action: resolution with contractor such that the terms of the contract are met

Objective #2: Restore access to and enhance public use of the Fort Morgan State Historic Park fishing pier

- Is the public of different abilities using the rehabilitated fishing pier?

  Parameter #1: Level of public use

  a. Method: visual observation or automated counter
  b. Timing and frequency: following the re-opening of the fishing pier, visual counts of the number of persons on the fishing pier will be conducted two times per month on randomly selected week days and on one randomly selected Saturday per month
  c. Sample size: 36 visual counts per year for 5 years
  d. Sites: Fort Morgan State Historic Park fishing pier
  e. Performance criteria: After project completion, the public is using the pier at a level consistent with its reasonably anticipated potential ((described in Section 3.2.2).
  f. Corrective action: If the pier is not being used to its potential, the TIG would ask the Alabama Historical Commission to implement actions to encourage additional public use at the site (e.g., distribution of promotional brochures, organization of pier-based nature tours, etc.).

Additional Monitoring: The use and performance of the project will continue to be measured throughout the life of the fishing pier, however, less frequently and methodically than the first year of monitoring. The continued monitoring will occur in the course of regular management activities, and all costs associated with monitoring, maintenance, and/or corrective actions after construction is accepted, will be the responsibility of the AHC and are, therefore, outside the scope of this monitoring plan. Additional monitoring may also occur to satisfy compliance requirements and to help ensure that additional use of the site minimizes the potential effect to natural resources.

MONITORING SCHEDULE

The schedule for the project monitoring is shown in Table B- 8, separated by monitoring activity. Pre-execution monitoring will occur before project execution. Execution monitoring occurs when project has been fully executed as planned (Year 0). Performance monitoring will occur in the year following initial project execution.

Table B- 4: Monitoring Schedule

Monitoring Parameters	Monitoring Timeframe		
	Pre-Execution Monitoring	Execution Monitoring (initial)	Post-Execution Monitoring
		As-built (Year 0)	Years 1–5
Review contractor invoices and deliverables, including the completed project	X	X	
Visual counts of people using the fishing pier			X

REPORTING AND DATA REQUIREMENTS

Once all data have been reviewed for accuracy and completeness, they will be submitted to the Restoration Project Database. Data will be made publicly available through the DIVER Explorer Interface.

Reporting will occur once at Year 0 and annually during Years 1–5. Reports will be in the form of brief narratives.

DAUPHIN ISLAND ECO-TOURISM AND ENVIRONMENT EDUCATION AREA MONITORING PLAN

INTRODUCTION

Monitoring, Adaptive Management, and Administrative Oversight was identified as one of the programmatic goals in the *Deepwater Horizon* oil spill Programmatic Damage Assessment and Restoration Plan and Programmatic Environmental Impact Statement (PDARP/PEIS). The *Deepwater Horizon* Natural Resource Damage Assessment (NRDA) Monitoring and Adaptive Management Framework (Chapter 5, Appendix E) provides a flexible, science-based approach to effectively and efficiently implement restoration over several decades to provide long-term benefits to the resources and services injured by the spill. Project monitoring and adaptive management is an important component of the overall Monitoring and Adaptive Management Framework. This Monitoring and Adaptive Management plan identifies the monitoring needed to evaluate progress toward meeting project objectives and to support adaptive management of the restoration project. This project is being implemented as restoration for the *Deepwater Horizon* oil spill NRDA, consistent with the PDARP/PEIS.

Project Overview

Under this project, the Town of Dauphin Island would acquire 100 acres of privately held land near the middle of Dauphin Island—90 acres of salt marsh and water bottom plus 10 acres of upland habitat. Proposed visitor amenities include a bicycle path, boardwalks, a fishing pier, public restrooms, gazebos, and parking. Boardwalks would be placed above wetland habitat to allow visitors to access the site's salt water marshes while minimizing environmental impacts. The pier would create opportunities for fishing in the waters of Aloe Bay. Educational signage would be placed at strategic locations to improve public awareness of environmental resources and enhance learning opportunities.

Restoration Goals and Project Restoration Objectives

The restoration goal and restoration type for this plan is to provide and enhance recreational opportunities by enhancing public access and enhancing recreational experiences. The specific restoration objectives relevant for this monitoring plan are to: (1) acquire the tract; (2) construct and complete the project as scoped; and (3) provide all visitors access to the site.

Roles and Responsibilities

The Alabama Department of Conservation and Natural Resources (ADCNR) will work with the Town of Dauphin Island staff and/or town contractors to ensure that the tracts are acquired and the project is constructed and completed as designed. Town of Dauphin Island staff or town contractors would document the use of the sites by the public.

Conceptual Model and Monitoring Questions

Table B- 7 outlines the conceptual model for this restoration, which forms the basis of this monitoring plan, and includes a summary of the project activities, the expected product or output of those activities, and the desired project outcomes.

Table B- 5: Conceptual Model for Restoration

Activity	Output	Short-term outcome	Long-term outcome
▪ Acquire tract and construct and implement improvements and enhancements for the public's use.	▪ Tract is acquired. ▪ Improvements and enhancements are complete and site is used.	▪ New infrastructures function as designed.	▪ The public, including those with different abilities, are able to use the site after project completion. ▪ New infrastructure is maintained for lifespan of project.

This monitoring plan has been designed around the objectives and desired outcomes for this restoration project and is intended to address the following monitoring questions for each objective:

<u>Objective #1: Acquire tract</u>

- Was the tract acquired?

<u>Objective #2: Construct and complete the project as scoped.</u>

- Was the project constructed and completed as designed and contracted?

<u>Objective #3: Provide access and use by the public for the site.</u>

- Is the public using the site?

Roles and Responsibilities

ADCNR would work with the Town of Dauphin Island staff or town contractors to ensure that the tract is acquired and the project is constructed and completed as designed.

Town of Dauphin Island staff or town contractors would document the use of the site by the public.

PROJECT MONITORING

The proposed monitoring for this restoration project, outlined below, is organized by project objective, with one or more monitoring parameters for each objective. For each of the identified monitoring parameters, information is provided on the monitoring methods, timing and frequency, sample size, and sites. In addition, performance criteria for each parameter are identified (if applicable), including example corrective actions that could be taken if the performance criteria are not met. The parameters listed below may or may not be tied to performance criteria and/or corrective actions.

<u>Objective #1: Tract was acquired.</u>

- Was the tract acquired?
    a. Method: submission of executed acquisition documents, such as a deed

<u>Objective #2: Construct and complete the project as designed.</u>

- Was the project constructed and completed as designed and contracted?

  Parameter #1: Level of construction to terms of contract.

    a. Method: review contractor reports, conduct on-site inspections, and compare to construction drawings

b. Timing and frequency: at least weekly and at end of project, unless otherwise provided by contract
c. Sample size: unknown, dependent on actual construction time
d. Sites: project site
e. Performance criteria: project is constructed and completed as designed and specified in the contract
f. Corrective action: resolution with construction contractor such that the terms of the contract are met

Objective #3: Provide access and public use of the site.

- Are members of the public with different abilities using the site?

  Parameter #1: Level of public use.

  a. Method: gate counts, visual observation, and/or use of automated counters
  b. Timing and Frequency: post-construction gate counts, visual observations or automated counters will be used to estimate visitor use; counts will be conducted quarterly for five years post construction
  c. Sample size: one day per quarter for five years post construction.
  d. Sites: project site
  e. Performance criteria: After project completion, the public is using the site at a level consistent with its reasonably anticipated potential (described in Section 3.7.2).
  f. Corrective action: If the site is not being used to its potential, the TIG would ask the Town of Dauphin Island to implement actions to encourage additional public use at the site (e.g., distribution of promotional brochures, organization of guided nature tours, etc.).

Additional monitoring may also occur to satisfy compliance requirements and to help ensure that additional use of the site minimizes the potential effect to natural resources.

MONITORING SCHEDULE

The schedule for the project monitoring is shown in Table B- 8, separated by monitoring activity. Pre-execution monitoring will occur before project execution. Execution monitoring occurs when project has been fully executed as planned (Year 0). Performance monitoring will occur in the year following initial project execution.

Table B- 6: Monitoring Schedule

Monitoring Parameters	Monitoring Timeframe		
	Pre-Execution Monitoring	Execution Monitoring (initial)	Post-Execution Monitoring
		As-built (Year 0)	Years 1–5
Review contractor invoices and deliverables, including the completed project	X	X	
Observations or counts of visitors (TBD)			X

REPORTING AND DATA REQUIREMENTS

Once all data have been reviewed for accuracy and completeness, they will be submitted to the Restoration Project Database. Data will be made publicly available through the DIVER Explorer Interface.

Reporting will occur once at Year 0 and annually during Years 1–5. Reports will be in the form of brief narratives.

DAUPHIN ISLAND MID-ISLAND PARKS AND PUBLIC BEACH IMPROVEMENTS PROJECT MONITORING PLAN

INTRODUCTION

Monitoring, Adaptive Management, and Administrative Oversight was identified as one of the programmatic goals in the *Deepwater Horizon* oil spill Programmatic Damage Assessment and Restoration Plan and Programmatic Environmental Impact Statement (PDARP/PEIS). The *Deepwater Horizon* Natural Resource Damage Assessment (NRDA) Monitoring and Adaptive Management Framework (Chapter 5, Appendix E) provides a flexible, science-based approach to effectively and efficiently implement restoration over several decades to provide long-term benefits to the resources and services injured by the spill. Project monitoring and adaptive management is an important component of the overall Monitoring and Adaptive Management Framework. This Monitoring and Adaptive Management plan identifies the monitoring needed to evaluate progress toward meeting project objectives and to support adaptive management of the restoration project. This project is being implemented as restoration for the *Deepwater Horizon* oil spill NRDA, consistent with the PDARP/PEIS.

Project Overview

Under this project, the Town of Dauphin Island would acquire and develop infrastructure to support shoreline recreational activities on three adjacent parcels of land, a total of approximately 10 acres. These parcels would collectively offer visitors to Dauphin Island dune walkover access to an expanded public beach area on the Gulf of Mexico, additional shoreline access parking, and adjacent restroom facilities. Additionally, educational signage focused on coastal resources would be placed at the sites to promote environmental awareness and stewardship.

Restoration Goals and Project Restoration Objectives

The restoration goal and restoration type for this plan is to provide and enhance recreational opportunities by enhancing public access and enhancing recreational experiences. The specific restoration objectives relevant for this monitoring plan are to: (1) acquire the tracts; (2) construct and complete the project as scoped; and (3) provide all visitors access to the site.

Roles and Responsibilities

The Alabama Department of Conservation and Natural Resources (ADCNR) will work with the Town of Dauphin Island staff and/or town contractors to ensure that the tracts are acquired and the project is constructed and completed as designed. Town of Dauphin Island staff or town contractors will document the use of the sites by the public.

Conceptual Model and Monitoring Questions

Table B- 7 outlines the conceptual model for this restoration project; forms the basis of this monitoring plan; and includes a summary of the project activities, the expected product or output of those activities, and the desired project outcomes.

Table B- 7: Conceptual Model for Restoration

Activity	Output	Short-term outcome	Long-term outcome
▪ Acquire tracts and construct and implement improvements and enhancements for the public's use.	▪ Tracts are acquired. ▪ Improvements and enhancements are completed.	New infrastructure functions as designed.	▪ The public, including those with different abilities, are able to use the site after project completion. ▪ New infrastructure is maintained for lifespan of project.

This monitoring plan has been designed around the objectives and desired outcomes for this restoration project and is intended to address the following monitoring questions for each objective:

Objective #1: Acquire tracts.

- Were the tracts acquired?

Objective #2: Construct and complete the project as scoped.

- Was the project constructed and completed as designed and contracted?

Objective #3: Provide access and use by the public for the site.

- Is the public using the site?

PROJECT MONITORING

The proposed monitoring for this restoration project, outlined below, is organized by project objective, with one or more monitoring parameters for each objective. For each of the identified monitoring parameters, information is provided on the monitoring methods, timing and frequency, sample size, and sites. In addition, performance criteria for each parameter are identified (if applicable), including example corrective actions that could be taken if the performance criteria are not met. The parameters listed below may or may not be tied to performance criteria and/or corrective actions.

Objective #1: Tract was acquired.

- Was the tract acquired?
    a. Method: Submission of executed acquisition documents, such as a deed.

Objective #2: Construct and complete the project as designed.

- Was the project constructed and completed as designed and contracted?

  Parameter #1: Construction of project completed in accordance to terms of contract.

  a. Method: review contractor reports, conduct on-site inspections, and compare to construction drawings
  b. Timing and frequency: at least weekly and at end of project, unless otherwise provided by contract
  c. Sample size: unknown, dependent on actual construction time
  d. Sites: project site
  e. Performance criteria: project is constructed and completed as designed and specified in the contract

f. Corrective action: resolution with construction contractor such that the terms of the contract are met

Objective #3: Provide access and public use of the site.

- Is the public of different abilities using the site?

  Parameter #1: Level of public use.

  a. Method: gate counts, visual observation, and/or use of automated counters
  b. Timing and frequency: post-construction gate counts, visual observations, or automated counters will be used to estimate daily visitor use; counts will be conducted quarterly for five years post construction
  c. Sample size: one day per quarter for five years post construction
  d. Sites: project site
  e. Performance criteria: After project completion, the public is using the site at a level consistent with its reasonably anticipated potential (described in Section 3.9.2).
  f. Corrective action: If the site is not being used to its potential, the TIG would ask the Town of Dauphin Island to implement actions to encourage additional public use at the site (e.g., distribution of promotional brochures, organization of guided nature tours, etc.).

Additional Monitoring: The use and performance of the project will continue to be measured throughout the life of the project, however less frequently and methodically than the first year of monitoring. The continued monitoring will occur in the course of regular management activities, and all costs associated with monitoring, maintenance, and/or corrective actions after construction is accepted, will be the responsibility of Town of Dauphin Island and are, therefore, outside the scope of this monitoring plan. Additional monitoring may also occur to satisfy compliance requirements and to help ensure that additional use of the site minimizes the potential effect to natural resources.

MONITORING SCHEDULE

The schedule for the project monitoring is shown in Table B- 8, separated by monitoring activity. Pre-execution monitoring will occur before project execution. Execution monitoring occurs when project has been fully executed as planned (Year 0). Performance monitoring will occur in the year following initial project execution.

Table B- 8: Monitoring Schedule

Monitoring Parameters	Monitoring Timeframe		
		Execution Monitoring (initial)	Post-Execution Monitoring
	Pre-Execution Monitoring	As-built (Year 0)	Years 1–5
Review contractor invoices and deliverables, including the completed project	X	X	
Observations or counts of visitors (TBD)			X

REPORTING AND DATA REQUIREMENTS

Once all data have been reviewed for accuracy and completeness, they will be submitted to the Restoration Project Database. Data will be made publicly available through the DIVER Explorer Interface.

Reporting will occur once at Year 0 and annually during Years 1–5. There are no known data requirements. Reports will be in the form of brief narratives.

APPENDIX D

PROJECT ELIGIBILITY SCREENING DETERMINATIONS

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Table 1. Federal Portal Projects

Row Number	Project ID	Project Title	Specific Recreation Project Proposed	Recreation Major Objective	Ecological with Significant Recreation Objectives	Primarily Ecological	Economic Development	Planning/ R&D/ Monitoring	Infrastructure	Recreational Nexus to Spill	Primary Recreational Activity Type	Estimated Cost
36	11772	Perdido Pass Seawall Replacement	Yes	Yes						Yes	Shoreline Use	7,359,816
148	990	Visitors Center at Bon Secour National Wildlife Refuge	Yes	Yes						Yes	Shoreline Use	3,500,000
151	879	Dauphin Island Eco-Tourism and Environment Education Area	Yes	Yes						Yes	Shoreline Use	3,000,000
169	10168	Dauphin Island Park and Beach Board (Audubon Bird Sanctuary)	Yes	Yes						Yes	Shoreline Use	
175	431	Cedar Point	Yes	Yes						Yes	Shoreline Use	
180	704	Lagoon Pass Parking	Yes	Yes						Yes	Shoreline Use	1,600,000
181	728	10th Street Access	Yes	Yes						Yes	Shoreline Use	1,200,000
185	660	Cedar Point Restoration and Enhancement Project	Yes	Yes						Yes	Shoreline Use	10,000,000
191	631	Gulf Place Development	Yes	Yes						Yes	Shoreline Use	2,500,000
203	396	Nearshore and Snorkeling Reef Project	Yes	Yes						Yes	Shoreline Use	500,000
229	5107	Dauphin Island Causeway Habitation Restoration and Public Access	Yes	Yes						Yes	Shoreline Use	9,000,000
230	11050	Dauphin Island Campground Expansion	Yes	Yes						Yes	Shoreline Use	
231	11051	Dauphin Island Park and Beach Board (Public Beach Parking)	Yes	Yes						Yes	Shoreline Use	
236	4053	Gulf Highlands/Gulf Shores AL Public Beach	Yes	Yes						Yes	Shoreline Use	35,000,000
71	11619	Restoration Barrier Island	Yes		Yes					Yes	Shoreline Use	
89	11509	Orange Beach/Gulf State Park/Gulf Shores Beach Restoration	Yes		Yes					Yes	Shoreline Use	14,700,000
95	11503	Town of Dauphin Island Beach and Barrier Island Restoration Project Alternative 3	Yes		Yes					Yes	Shoreline Use	28,506,000
97	11500	South Shoreline of Dauphin Island	Yes		Yes					Yes	Shoreline Use	
184	701	Dauphin Island Parkway, Bayfront Park, and Heron Bay Cut-Off Shoreline and Habitat Restoration and Public Access Enhancements	Yes		Yes					Yes	Shoreline Use	5,000,000
195	594	Town of Dauphin Island Beach and Barrier Island Restoration Project	Yes		Yes					Yes	Shoreline Use	68,000,000
262	10051	Restore Our East End Beaches	Yes		Yes					Yes	Shoreline Use	

Row Number	Project ID	Project Title	Specific Recreation Project Proposed	Recreation Major Objective	Ecological with Significant Recreation Objectives	Primarily Ecological	Economic Development	Planning/ R&D/ Monitoring	Infrastructure	Recreational Nexus to Spill	Primary Recreational Activity Type	Estimated Cost
130	1238	Wolf Bay Wetland Nature Preserve A Coastal Resource Recovery Land Acquisition Project	Yes		Yes					Yes	Shoreline Use	3,000,000
265	10150	Bon Secour National Wildlife Refuge	Yes		Yes					Yes	Shoreline Use	
123	11223	Habitat Acquisition and Conservation for Neotropical Migratory Birds	Yes		Yes					Yes	Shoreline Use	1,560,000
125	595	Town of Perdido Beach Shoreline Restoration Project	Yes		Yes					Yes	Shoreline Use	6,000,000
206	390	Dauphin Island Parkway Salt Marsh, Finfish and Shellfish Habitat Restoration	Yes		Yes					Yes	Shoreline Use	10,800,000
217	340	Pilot Town Acquisition and Finfish and Shellfish Habitat Restoration	Yes		Yes					Yes	Shoreline Use	8,100,000
199	422	Shoreline Restoration on Ft. Morgan Peninsula - Pine Public Access Boat Ramp	Yes		Yes					Yes	Shoreline Use	13,500,000
76	11601	Boat Ramp	Yes	Yes						Yes	Boating	
106	11480	State-owned and Operated Public Boat-Launch Facility on Old River	Yes	Yes						Yes	Boating	2,200,000
211	394	Public Boat Launch Facility	Yes	Yes						Yes	Boating	2,200,000
212	395	Boat-Accessible Public Restroom Facility for Boggy Point Boat Launch	Yes	Yes						Yes	Boating	350,000
260	8105	Increased Public Access to City Docking Facilities	Yes	Yes						Yes	Boating	2,500,000
127	11157	100-1000: Community Education and Outreach	Yes	Yes						Yes	Education/Stewardship	82,230
190	10055	Waters to the Sea: Discovering Alabama	Yes	Yes						Yes	Education/Stewardship	900,000
60	11659	Improving Public Access to Alabama Coastal Waters	Yes	Yes						Maybe	Boating	902,721
79	11602	Fish River and Weeks Bay Boat Launches and Parking Access	Yes	Yes						Maybe	Boating	
27	11885	Advancing Estuarine Research and Education at the Weeks Bay Reserve	Yes	Yes						Maybe	Education/Stewardship	2,939,200
33	11785	Improving Public Access to Alabama Coastal Waters-Viewpoint Park Public Access	Yes	Yes						Maybe	Education/Stewardship	810,000
86	11513	Dog River Scenic Blueway	Yes	Yes						No	Shoreline Use	430,000
87	11517	Clean, Healthy, Resilient Dog River: Secondary Litter Traps	Yes	Yes						No	Shoreline Use	240,000

Row Number	Project ID	Project Title	Specific Recreation Project Proposed	Recreation Major Objective	Ecological with Significant Recreation Objectives	Primarily Ecological	Economic Development	Planning/ R&D/ Monitoring	Infrastructure	Recreational Nexus to Spill	Primary Recreational Activity Type	Estimated Cost
88	11512	Clean, Healthy, Resilient Dog River: Moore Creek Litter Trap	Yes	Yes						No	Shoreline Use	80,000
147	1010	Fairhope Beach Shoreline Enhancement & Water Quality Project	Yes	Yes						No	Shoreline Use	420,000
197	409	Bicycling Trail Connecting Foley to the Graham Creek Nature Preserve	Yes	Yes						No	Shoreline Use	400,000
201	423	Access Road and Trails for Foley's Graham Creek Nature Preserve	Yes	Yes						No	Shoreline Use	630,000
202	407	Land Expansion for Foley's Graham Creek Nature Preserve	Yes	Yes						No	Shoreline Use	2,527,900
222	10108	City of Spanish Fort Land Acquisition Project	Yes	Yes						No	Shoreline Use	15,000,000
4	12274	Mobile Bay Park Project	Yes	Yes						No	Shoreline Use	50,000,000
159	9054	Dog River Scenic Blueway - Put-in/Take-out Canoe/Kayak Launch Sites	Yes	Yes						No	Boating	430,000
198	408	Interpretive Educational Center for Foley's Graham Creek Nature Preserve	Yes	Yes						No	Education/Stewardship	870,000
96	11501	GulfQuest: National Maritime Museum of the Gulf of Mexico	Yes	Yes						No	Education/Stewardship	7,000,000
110	11470	Old Plantation Park	Yes	Yes						No	Public Park	
6	12275	Africatown Historical Restoration	Yes	Yes						No	Historical	1,000,000
34	5113	Coastal Land Acquisition in Alabama	No	Yes						Yes	Shoreline Use	125,000,000
2	12282	Conservation Educational Outreach Program (CEOP)	No	Yes						Yes	Education/Stewardship	3,750,000
3	12280	Restoration Education Environment Preservation Training Wildlife Program (R.E.E.P.)	No	Yes						Yes	Education/Stewardship	3,000,000
9	12084	Grommet Island Style Beach Park for Physically Disabled Citizens	No	Yes						Maybe	Shoreline Use	1,800,000
70	11620	Leasing Commercial Red Snapper IFQ Shares to Restore the Gulf	Yes		Yes					Yes	Fishing	
73	11618	Reef Fish Restoration	Yes		Yes					Yes	Fishing	
74	11618	Reef Fish Restoration	Yes		Yes					Yes	Fishing	
75	11617	Reef Fish	Yes		Yes					Yes	Fishing	

Row Number	Project ID	Project Title	Specific Recreation Project Proposed	Recreation Major Objective	Ecological with Significant Recreation Objectives	Primarily Ecological	Economic Development	Planning/ R&D/ Monitoring	Infrastructure	Recreational Nexus to Spill	Primary Recreational Activity Type	Estimated Cost
32	11834	FishSmart: Building Sustainability in the Snapper and Grouper Recreational Fisheries and Associated Industry in the Gulf of Mexico	Yes		Yes					Yes	Fishing	20,000,000
37	11771	Fowl River Shore and Island Restoration and Stabilization	Yes		Yes					Maybe	Boating	6,500,000
183	666	Safe Harbor Marsh Restoration	Yes		Yes					Maybe	Fishing	822,375
118	11392	Gallops Creek	Yes		Yes					No	Shoreline Use	4,000,000
187	677	Coastal Watershed Property Acquisition in Mobile County	Yes		Yes					No	Shoreline Use	9,000,000
261	9061	Acquisition of Wetlands for Habitat Enhancement and Public Access for the City of Satsum	Yes		Yes					No	Shoreline Use	3,000,000
239	2137	Bandalong Litter Traps in the Dog River Watershed of Mobile, Alabama	Yes		Yes					No	Boating	450,000
232	2112	Magnolia Springs Habitat Restoration	Yes		Yes					No	Fishing	500,000
8	12095	Western Shore Mobile Bay/Fowl River Nature & Education Center	Yes		Yes					No	Education/Stewardship	20,000,000
92	11506	City of Fairhope- Fly Creek Restoration (Project #3)	Yes		Yes					No	Public Park	19,000,000
161	797	Fly Creek Restoration	Yes		Yes					No	Public Park	19,000,000
48	5119	Lower Alabama River Diadromous Fish Passage, Multiple Counties, Alabama	NA		Yes					No	Fishing	1,500,000
210	370	Robinson Island Restoration Project	NA			Yes				NA		
7	11793	Erosion Prevention, Marsh Creation and Land-Building	NA			Yes				NA		
13	12003	Coastal Ecosystem Health: American Oystercatcher as an Indicator of Exposure and Effects of Pollutants on Breeding Birds on the Gulf Coast	NA			Yes				NA		4,800,000
16	11973	Dock and Sea Wall Reef Ball® Habitat	NA			Yes				NA		3,000,000
18	11967	Channel Marker Reef Ball Micro-Habitats	NA			Yes				NA		15,000,000
65	11434	Spill Oil Picking Up System	NA			Yes				NA		3,000,000
68	11559	Finish the Cleanup Undersea	NA			Yes				NA		
69	11622	Oil Remediation	NA			Yes				NA		
72	11625	Treat Subsurface Contamination	NA			Yes				NA		

Row Number	Project ID	Project Title	Specific Recreation Project Proposed	Recreation Major Objective	Ecological with Significant Recreation Objectives	Primarily Ecological	Economic Development	Planning/ R&D/ Monitoring	Infrastructure	Recreational Nexus to Spill	Primary Recreational Activity Type	Estimated Cost
78	11598	A low-cost solution for a cleaner gulf	NA			Yes				NA		
112	11421	Gulf of Mexico Hatchery and Fisheries Restoration Consortium	NA			Yes				NA		60,000,000
131	2144	Giving Gulf Wetlands a Future	NA			Yes				NA		
134	847	Blowout Preventer Backup Safety System (2nd project-Oil Containment Barrier Boom I & II)	NA			Yes				NA		1,000,000
135	866	SIPHON	NA			Yes				NA		
136	867	Mitigation of Polluted Waters through Filtration by Mussel Clusters	NA			Yes				NA		
137	887	The Gulf Restoration Fund	NA			Yes				NA		
164	5052	GOM Marine Sanctuaries	NA			Yes				NA		
165	5106	Bird Friendly City Initiative	NA			Yes				NA		
167	440	Case Manager/Shrimper	NA			Yes				NA		
168	2144	Giving Gulf Wetlands a Future	NA			Yes				NA		
170	207	Saving the Gulf Coast one bale at a time.	NA			Yes				NA		250,000
172	359	Bioremediation of Estuaries and oil affected Intertidal areas	NA			Yes				NA		
174	466	Ocean floor Recovery Project	NA			Yes				NA		
177	705	Coastal Land and Marsh Protection	NA			Yes				NA		
179	712	N&P pollution control, and restoring clean water	NA			Yes				NA		
267	10153	Headwaters Coastal Forest Protection - Baldwin County, AL & Escambia/ Santa Rosa Counties, FL	NA			Yes				NA		
12	11986	The Marinovich Proposal	NA			Yes				NA		
17	11966	Expand and Improve Gulf of Mexico Marine Mammal Stranding Response and Science Capacity	NA			Yes				NA		45,000,000
19	11947	10-Year enhancement for improving Gulf of Mexico Sea Turtle Stranding Network response and science capacity	NA			Yes				NA		1,000,000
31	11851	alternate lighting for oil platforms	NA			Yes				NA		
35	5098	Alabama Oyster Shell Recycling Program	NA			Yes				NA		6,400,000
38	5111	Alabama Coastal Forest Restoration Project	NA			Yes				NA		3,000,000

Row Number	Project ID	Project Title	Specific Recreation Project Proposed	Recreation Major Objective	Ecological with Significant Recreation Objectives	Primarily Ecological	Economic Development	Planning/ R&D/ Monitoring	Infrastructure	Recreational Nexus to Spill	Primary Recreational Activity Type	Estimated Cost
39	11768	Wetland Habitat Restoration in Upper Mobile Bay	NA			Yes				NA		60,000,000
40	894	Eastern Mobile Bay and Bon Secour Bay Coastal Resiliency and Habitat Restoration	NA			Yes				NA		16,500,000
41	893	Western Mobile Bay and Portersville Bay Coastal Resiliency and Habitat Restoration	NA			Yes				NA		15,000,000
42	892	Grand Bay Coastal Resiliency and Habitat Restoration	NA			Yes				NA		7,500,000
43	11744	Swift Tract Coastal Resiliency and Habitat Restoration	NA			Yes				NA		5,250,000
44	5099	Mobile Causeway Hydrologic Restoration Project, Mobile and Baldwin Counties, AL	NA			Yes				NA		70,000,000
45	5105	Enhancing oyster reef restoration in coastal Alabama: Oyster farming as a restoration multiplier	NA			Yes				NA		13,000,000
46	11741	Salt Creek Marsh Restoration	NA			Yes				NA		
47	56	100-1000: Restore Coastal Alabama	NA			Yes				NA		150,000,000
49	11715	Sanitary Sewer Collection System Rehabilitation	NA			Yes				NA		4,400,000
50	11714	Water Supply and Distribution Improvements	NA			Yes				NA		2,300,000
53	11688	Laguna Cove , Little Lagoon- A Resource Protection Project	NA			Yes				NA		3,000,000
55	11680	Introduction and Evaluation of New Designs of Propellers and Nozzles in the Gulf Shrimp Fishery for Enhanced Efficiency and Fuel Economy	NA			Yes				NA		750,000
56	11678	Development and Distribution of Gear Technology to Improve Fuel Economy and Reduce Bycatch in the Gulf Shrimp Fishery	NA			Yes				NA		1,500,000
57	11676	Multi-Function Vessel -- Aquatic Weed Harvester, Marine Trash Skimmer, Oil/Muck Dredge	NA			Yes				NA		1,500,000
59	11667	Fill borrow pits on north side of Dauphin Island	NA			Yes				NA		5,565,000
77	11623	Shoreline, Marsh Restoration and Recovery	NA			Yes				NA		

Row Number	Project ID	Project Title	Specific Recreation Project Proposed	Recreation Major Objective	Ecological with Significant Recreation Objectives	Primarily Ecological	Economic Development	Planning/ R&D/ Monitoring	Infrastructure	Recreational Nexus to Spill	Primary Recreational Activity Type	Estimated Cost
80	368	South Baldwin Wildlife Rescue and Rehabilitation Facility	NA			Yes				NA		5,500,000
82	11582	BP Funded Coastal Restoration Project - Cat Island , Alabama	NA			Yes				NA		
84	11531	Shrimp Restoration	NA			Yes				NA		
85	11519	Alligator Bayou Bridge Project	NA			Yes				NA		
91	11507	Gulf Shores Oil Removal	NA			Yes				NA		
93	11505	City of Fairhope- Public Beach's Water Quality Treatment (Project #1)	NA			Yes				NA		4,500,000
94	11504	Titi Swamp Wetland Purchase and Preserve (Project #2)	NA			Yes				NA		500,000
98	11486	Oyster Reef Rebuilding in Grand Bay- Priority 1	NA			Yes				NA		
99	11493	Oyster Reef Rebuilding off east and west of Cedar Point - priority five	NA			Yes				NA		
100	11492	Oyster Reef Rebuilding in Bon Secour Bay (in the eastern part of Mobile Bay)- priority six	NA			Yes				NA		
101	11491	Oyster Reef Rebuilding off north and south of the mouth of east and west East Fowl River - priority four	NA			Yes				NA		
102	11490	Oyster Reef Rebuilding in east and west Heron Bay - priority three	NA			Yes				NA		
103	11488	Oyster Reef Rebuilding in Portersville Bay outside the mouth of West Fowl River - priority two	NA			Yes				NA		
114	11413	Long-Term Recovery of Gulf Shorebirds and Waterbirds	NA			Yes				NA		71,900,000
116	11411	Addressing Marine Debris to Expedite Recovery along the Gulf Coast	NA			Yes				NA		10,000,000
117	11410	Restoration of Tidal Flow to Meadows Tract	NA			Yes				NA		1,000,000
120	11275	Seagrass Restoration and WQ Management in Old River Estuary	NA			Yes				NA		12,000,000
121	11242	Deep Seafloor Habitat Restoration	NA			Yes				NA		11,825,000
122	11225	Oyster Reef Reestablishment in Portersville Bay and Mobile Bay, Alabama	NA			Yes				NA		5,000,000

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124	11222	Coordinated Strategy for Sea Turtle Recovery in the Gulf	NA			Yes				NA		58,600,000
126	11164	Meadows Addition- A Resource Protection Project	NA			Yes				NA		750,000
128	1212	D'Olive Creek Watershed Restoration	NA			Yes				NA		42,723,000
129	1240	Seagrass Restoration and WQ Management in Cotton Bayou	NA			Yes				NA		12,000,000
133	842	Proposed Emergency Seagrass Restoration	NA			Yes				NA		500,000
141	904	Restoring critical habitats in the Gulf of Mexico Marine Protected Area Network	NA			Yes				NA		50,000
143	650	Mechanically Produced Thermocline (Hurricane Barrier)	NA			Yes				NA		82,500,000
144	1085	Building a better Gulf Floor	NA			Yes				NA		
145	1084	Andrew Benton Tract- Protection and Restoration of Coastal Alabama - A Coastal Resource Recovery Land Acquisition Project	NA			Yes				NA		2,000,000
146	1058	Blue Crab Trap Removal	NA			Yes				NA		10,000,000
149	943	THREE MILE CREEK REPAIR/MAINTENANCE	NA			Yes				NA		1,500,000
152	850	Black Belt Prairie Restoration Project	NA			Yes				NA		1,700,000
153	888	100:1000 Restore Coastal Alabama	NA			Yes				NA		
154	807	Restoration and protection: Marsh Island, AL	NA			Yes				NA		7,000,000
155	827	Restoration and protection: Swift Tract Weeks Bay NERR, AL	NA			Yes				NA		3,000,000
156	848	Buttahatchie River Restoration Project	NA			Yes				NA		11,686,300
158	805	Callaway Land Acquisition	NA			Yes				NA		4,000,000
162	777	Titi Swamp Wetland Purchase and Preserve	NA			Yes				NA		500,000
163	438	Deployment of New Turtle Excluder Devices in Shrimp Fisheries	NA			Yes				NA		10,800,000
166	2138	Repair/maintenance of Three Mile Creek	NA			Yes				NA		1,500,000
171	2106	BioRestore®	NA			Yes				NA		300,000

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186	659	Shell Belt Road and Coden Belt Road Shoreline Restoration and Preservation	NA			Yes				NA		2,000,000
189	646	Swift Tract Addition- A Resource Protection Project	NA			Yes				NA		309,200
193	541	BayWinds Living Shoreline	NA			Yes				NA		70,000
194	601	Restoring Finfish of Importance to the Northern Gulf of Mexico	NA			Yes				NA		5,000,000
196	419	Shoreline Restoration near Skunk Bayou-Mobile Bay - Eastern Shore	NA			yes				NA		25,000,000
200	411	Gulf Shores/Orange Beach/Gulf State Park Beach Restoration	NA			Yes				NA		14,700,000
204	399	South Baldwin Wildlife rescue and Rehabilitation Facility	NA			Yes				NA		2,500,000
205	369	Coastal Alabama Habitat Restoration Brookley Marsh Island Project, Mobile, Alabama	NA			Yes				NA		15,000,000
207	366	Coastal Alabama Habitat Restoration - Arlington Cove Project, Mobile, Alabama	NA			Yes				NA		4,000,000
208	367	Coastal Alabama Habitat Restoration - Bayou Heron, Dauphin Island, Alabama	NA			Yes				NA		8,000,000
209	389	Orange Beach/Gulf State Park/Gulf Shores Beach Restoration	NA			Yes				NA		14,700,000
213	351	Seagrass Restoration and WQ Management in Old River Estuary	NA			Yes				NA		12,000,000
214	357	Coastal Alabama Habitat Restoration - Portersville Bay Islands	NA			Yes				NA		8,000,000
215	4083	Property Acquisitions for Protecting the Big Creek Lake/Converse Reservoir	NA			Yes				NA		4,500,000
216	358	Coastal Alabama Habitat Restoration - Mobile Bay Bird Islands	NA			Yes				NA		10,000,000
219	10105	Perdido Watershed Water Quality Improvement	NA			Yes				NA		1,500,000
221	5110	Robinson Island Restoration	NA			Yes				NA		150,000
224	4082	Develop Wildlife Recovery and Rehab within Coastal Alabama	NA			Yes				NA		
225	5105	Sustaining Alabama's Working Waterfront through Oyster Aquaculture	NA			Yes				NA		12,500,000

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228	5090	Island Wildlife Habitat Enhancement	NA			Yes				NA		150,000
233	2135	Montlimar Creek, Eslava Creek, Boltons Branch Repair/Maintenance	NA			Yes				NA		3,200,000
242	2146	Eco Restoration/Dredging of Langan Park Lake (Municipal Park)	NA			Yes				NA		8,000,000
245	2147	Eco Restoration/Dredging of Dog River and Tributaries	NA			Yes				NA		30,000,000
251	2143	Spring Creek Drainage Repair/Upgrade additional phases	NA			Yes				NA		12,000,000
264	10107	City of Chickasaw Wetland Restoration and Water Quality Improvement Project	NA			Yes				NA		7,500,000
266	10151	Grand Bay National Wildlife Refuge	NA			Yes				NA		
51	11712	Dauphin Island Emergency Response Personnel Storm Shelter	NA						Yes	NA		3,200,000
52	11710	Wastewater Treatment Facility Rehabilitation	NA						Yes	NA		6,800,000
61	11651	Stormwater Media Campaign	NA						Yes	NA		160,000
62	11626	Bypassing of Dredged Sands from the Mobile Ship Channel	NA						Yes	NA		5,000,000
109	11473	Shoreline Restoration on Ft. Morgan Peninsula and Pine Public Access Boat Ramp	NA						Yes	NA		13,500,000
111	11469	University of South Alabama Medical Center	NA						Yes	NA		4,300,000
160	776	Fairhope Public Beach's Water Quality Treatment	NA						Yes	NA		4,500,000
218	342	Rehabilitation of Sanitary Sewer Mains - Foley, Alabama	NA						Yes	NA		1,250,000
227	4072	The Renovation of Mobile, Alabama's Antiquated Storm Water Treatment Methods to Meet Modern EPA Standards	NA						Yes	NA		
234	2142	Reconstruct US 90 (Government Street) Multiple Sections 1) 0.53 miles - Pinehill to Dauphin Island Pkwy, 2) 1.42 miles - West St. to Broad St., 3) 0.93 miles Broad St. to Water St.	NA						Yes	NA		16,000,000
238	4076	Little Stickney Drainage Repair/Upgrade	NA						Yes	NA		2,000,000

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240	2149	Reconstruct Old Shell Road Multiple Phases 1) East of I-65 to Catherine Street; 2) West of I-65 to University Blvd.	NA						Yes	NA		12,400,000
241	5057	Reconstruct/Repair 21 Fire Stations throughout the City of Mobile	NA						Yes	NA		42,000,000
243	2148	Drainage Improvements in the Southern Drain Watershed	NA						Yes	NA		4,000,000
244	4098	Restoration of the Former Ziebach WWTF Property Near Mobile Bay	NA						Yes	NA		1,000,000
246	5053	Reconstruct Dauphin Street (Fulton street to Broad Street)	NA						Yes	NA		5,500,000
247	2141	Reconstruct US 98 (Springhill Ave.) I-65 to Broad St. (multiple sections)	NA						Yes	NA		26,900,000
248	4090	Reconstruct Broad St./Beauregard St. - U. S. 90 to Water St.	NA						Yes	NA		7,700,000
249	2145	Florida St. Drainage Repair/Upgrade additional phases	NA						Yes	NA		4,500,000
250	4088	Reconstruct Ann St. (Springhill Ave. to Kentucky St.)	NA						Yes	NA		6,400,000
252	5059	Construct new Police Headquarters	NA						Yes	NA		20,000,000
253	4093	City Wide Bridge/Culvert Maintenance Project	NA						Yes	NA		4,700,000
254	4091	Map City of Mobile Drainage Systems	NA						Yes	NA		2,000,000
255	4081	Carlisle Area Drainage Repair/Upgrade additional phases	NA						Yes	NA		1,000,000
256	4092	Construct new Public Works facility	NA						Yes	NA		20,000,000
257	5060	Construct a City of Mobile Regional Recycling Center	NA						Yes	NA		8,000,000
258	5068	Renovation of Mobile, Alabama's Storm Water Treatment Methods to Meet Modern EPA Standards	NA						Yes	NA		1,000,000,000
259	5056	Reconstruct Baltimore St.	NA						Yes	NA		2,500,000
263	10054	Alabama Port and Heron Bay Sewer Improvements	NA						Yes	NA		3,500,000
226	54	Safe Harbour	NA						Yes	NA		9,000,000

Row Number	Project ID	Project Title	Specific Recreation Project Proposed	Recreation Major Objective	Ecological with Significant Recreation Objectives	Primarily Ecological	Economic Development	Planning/ R&D/ Monitoring	Infrastructure	Recreational Nexus to Spill	Primary Recreational Activity Type	Estimated Cost
140	905	Exploratory committee to examine the possibility of a class action civil law suit against British Petroleum	NA					Yes		NA		
21	11925	WorldWide consortium for any dangerous manufacturing processes	NA					Yes		NA		
26	11591	Northern Gulf of Mexico Super Project	NA					Yes		NA		120,000,000
63	10104	Quantitative Fish and habitat assessment and monitoring, using scientific acoustics	NA					Yes		NA		45,000
83	11546	Increase the pace, quality and permanence of voluntary land and water conservation through the Partnership for Gulf Coast Land Conservation	NA					Yes		NA		1,000,000
113	11412	Gulf of Mexico Hatchery and Fisheries Restoration Consortium	NA					Yes		NA		60,000,000
150	921	Informed Restoration: Assessing the uptake of Deepwater Horizon-derived heavy metals and organic contaminants by coastal molluscan species in the Gulf of Mexico	NA					Yes		NA		90,000
173	365	Vessels of opportunity	NA					Yes		NA		
178	740	Habitat Mapping for Improved Stock Assessments and Developing an Integrated Habitat Restoration Approach for Marine Habitats	NA					Yes		NA		
1	12028	Economics and The Gulf Coastal States	NA					Yes		NA		5,000,000
5	12134	"BP" The Blue Print for Restoring the Gulf's Fisheries	NA					Yes		NA		8,000,000
10	12046	Conduct tagging and tracking of large marine vertebrates in the Gulf of Mexico to monitor their status, distribution, and changes in habitat use	NA					Yes		NA		3,500,000
11	11987	Capacity Building, Disaster Preparedness, and Sustaining Fishing Communities in the Gulf after the BP Oil Spill	NA					Yes		NA		500,000
14	12004	Conservation and evaluation of limiting factors for American Oystercatchers along the Gulf Coast	NA					Yes		NA		5,800,000
15	12002	Fisheries Oceanography of the Northern Gulf of Mexico (FONGOM)	NA					Yes		NA		7,500,000

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20	739	BP Deepwater Horizon Oil Spill Restoration Evaluation and Monitoring Program	NA					Yes		NA		
22	11840	A Gulf-wide multi-year research project to determine best practices for minimizing barotrauma effects on red snapper following capture and release	NA					Yes		NA		2,000,000
23	11865	Supplement and expand fishery-independent surveys	NA					Yes		NA		150,000,000
24	11863	Increase amount of assessments for potentially impacted finfish species	NA					Yes		NA		150,000,000
25	11891	Gulf of Mexico Fishery Management Restoration Priorities	NA					Yes		NA		
28	11656	GSMFC Cooperative Regional Monitoring Project	NA					Yes		NA		27,578,000
29	11609	Upgrades to the Electronic Logbook Program for the Offshore and Inshore Commercial Shrimp Fishery for a 5-Year Period	NA					Yes		NA		6,650,000
30	11610	Gulf of Mexico Ecosystem Assessment: The Role of and Possible Oil Spill Impacts to Menhaden as a Keystone Species	NA					Yes		NA		
54	11685	Continued Shrimp Fishing Effort Data Collection Through the Use of an Electronic Logbook System in the Gulf of Mexico	NA					Yes		NA		500,000
58	11661	Project Space Mop	NA					Yes		NA		200,000,000
64	11419	Gulf of Mexico Hatchery and Fisheries Restoration Consortium	NA					Yes		NA		60,000,000
67	11523	5-Year Increase in Gulf of Mexico Fishery Observer Coverage for Monitoring Marine Mammals, Sea Turtles, and Bluefin Tuna	NA					Yes		NA		6,500,000
81	11541	Replacement for the Research Vessel Tom McIlwain	NA					Yes		NA		1,500,000
90	11508	Ecosystem restoration research upgrades	NA					Yes		NA		3,000,000
104	11484	Upgrades to the Marine Science Hall	NA					Yes		NA		3,000,000
105	11482	Marine Environmental and Science Consortium Research Vessel Request	NA					Yes		NA		3,500,000

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107	11478	Fisheries Oceanography of Coastal Alabama: Restoration and Sustainability	NA					Yes		NA		1,500,000
108	11476	Wave and Currents Flume for Gulf Coast Marine Processes Research	NA					Yes		NA		1,500,000
115	11415	Increasing Research Capacity in the Weeks Bay National Estuarine Research Reserve	NA					Yes		NA		2,084,830
132	1094	Enhancements to marine private recreational fishing surveys	NA					Yes		NA		
138	871	Fisheries Oceanography of Coastal Alabama (FOCAL)	NA					Yes		NA		7,500,000
139	923	The Development of The Advanced Real Time GNSS and Physical Atmosphere and Ocean Observing System within the Gulf of Mexico	NA					Yes		NA		16,000,000
142	667	Enhancements to marine charter for-hire fishing surveys	NA					Yes		NA		5,000,000
176	633	Low-cost, 10km-range Oil Spill Sensor and Spread-predictive Sensor Deployment	NA					Yes		NA		350,000
182	741	Acquisition of a $1.5M Wave-Current Flume for Gulf Coast Marine Processes Research	NA					Yes		NA		1,500,000
188	648	Increased Catch and Effort Reporting for the Gulf of Mexico's Marine Recreational Fishery Based on 1-month waves	NA					Yes		NA		10,000,000
192	635	Gulf of Mexico Community-based Restoration Partnership	NA					Yes		NA		1,500,000
220	8114	Water Quality Monitoring for Protecting Fish and Shellfish Resources in South Mobile County	NA					Yes		NA		2,620,000
235	2103	Integrated Approach to Wetland Damage Assessment, Vegetation Monitoring, and Restoration Tracking in the Gulf of Mexico	NA					Yes		NA		3,000,000
237	4070	Response and recovery of the periphyton in the near-shore habitats of the Gulf of Mexico	NA					Yes		NA		850,000
66	11422	New Marketing Tool for BP to Generate Sales For Local Merchants and Consumers Along Gulf Coast	NA				Yes			NA		

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119	11330	Implement High Speed Passenger Ferry Service on Mobile Bay	NA				Yes			NA		10,000,000
157	863	Gulf State Park Convention Center	NA				Yes			NA		
223	2102	Eat Alabama Wild Seafood	NA				Yes			NA		1,000,000
224	12497	Gulf Coast Marine Life Center in Gulf Shores, AL	NA					Yes		NA		13,608,750
225	12463	A Coastal Wildlife Rescue and Research Center Project *construct and maintain the first waterfowl and sea/shore birds implementing the Coast natural history/habitat	NA			Yes				NA		1,500,000
226	12462	A way to clean some of oil out of the gulf	NA			Yes				NA		
227	12340	Buyout of Longliners' Use of the Gulf of Mexico During the Bluefin Tuna Spawning Season	NA			Yes				NA		10,000,000
228	12330	Gulf Accesses-Land Formation	NA			Yes				NA		

Table 2. State Portal Projects

Row Number	Project ID	Project Title	Site-Specific Recreation Project Proposed	Recreation Major Objective	Ecological with Significant Recreation Objectives	Primarily Ecological	Economic Development	Planning/ R&D/ Monitoring	Infrastructure	Recreational Nexus to Spill	Primary Recreational Activity Type	Estimated Cost
1	132	Gulf Highlands	Yes	Yes						Yes	Shoreline Use	$35,000,000.00
2	151	Repairs to the Fort Morgan Fishing Pier	Yes	Yes						Yes	Shoreline Use	$1,000,000.00
3	199	Bayfront Park Restoration and Improvement	Yes	Yes						Yes	Shoreline Use	$4,000,000.00
4	295	Mid-Island Parks	Yes	Yes						Yes	Shoreline Use	$6,264,000.00
5	226	Alabama Artificial Reef Plan	Yes	Yes						Yes	Fishing	$42,128,583.00
6	97	Alabama Artificial Reef Plan - Phase I	Yes	Yes						Yes	Fishing	$8,236,000.00
7	152	Promotions for Fort Morgan State Historic Site	Yes	Yes						Yes	Tourism Promotion	$200,000.00
8	188	Coastal Sustainable Tourism Laboratory	Yes	Yes						Yes	Tourism Promotion	$1,102,519.00
9	194	The World-Beater® All-Beach 10K	Yes	Yes						Yes	Tourism Promotion	$1,386,000.00
10	250	Promotion of Year-Round Tourism Opportunities on Alabama's Gulf Coast	Yes	Yes						Yes	Tourism Promotion	$3,000,000.00

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11	296	Promotion of Year-Round Tourism Activities on Dauphin Island, with emphasis on the "off-season"	Yes	Yes						Yes	Tourism Promotion	$2,500,000.00
12	273	Development of a Comprehensive Ecotourism Effort to Provide Jobs and Economic Stability for the Communities of South Mobile County	Yes	Yes						Yes	Tourism Promotion	$500,000.00
13	214	Old Fowl River/Mobile Bay/SaltAire Nature Preserve	Yes	Yes						No	Shoreline Use	$3,980,400.00
14	266	Perdido Watershed Access Improvement	Yes	Yes						No	Shoreline Use	$109,670.00
15	126	Fairhope's Coastal Environmental Education Network (CEEN)	Yes	Yes						No	Shoreline Use	$49,000,000.00
16	200	Chickasabogue Park Habitat Restoration and Enhancement	Yes	Yes						No	Shoreline Use	$6,000,000.00
17	227	Escatawpa River Trail System	Yes	Yes						No	Shoreline Use	$4,000,000.00
18	228	Mobile County Blueway Trail Development	Yes	Yes						No	Shoreline Use	$8,000,000.00
19	235	Perch Creek Blueway Trail and Park	Yes	Yes						No	Shoreline Use	$2,982,500.00
20	158	Graham Creek Nature Preserve Expansion	Yes	Yes						No	Shoreline Use	$650,000.00
21	177	Hog Bayou Campground and RV Plaza	yes	Yes						No	Shoreline Use	$3,900,000.00
22	134	GulfQuest Galleries (Exhibits and Programs)	Yes	Yes						No	Education/stewardship	$6,000,000.00
23	135	GulfQuest Blockbuster Exhibitions	Yes	Yes						No	Education/stewardship	$4,000,000.00
24	210	Infrastructure Improvements of existing park and green spaces, including conversion of an existing vacant railroad easement to a pedestrian and bike path	Yes	Yes						No	Public Park	$10,000,000.00
25	127	City of Prichard Land Acquisition Project	Yes	Yes						No	Public Park	$2,540,000.00
26	175	Historic Africatown Welcome Center	Yes	Yes						No	Historical	$3,450,000.00
27	176	Proposed Meaher Family Home	Yes	Yes						No	Historical	$4,300,000.00
28	92	West End Beach and Barrier Island Restoration Project	Yes		Yes					Yes	Shoreline Use	$58,601,000.00
29	110	Laguna Cove Little Lagoon Natural Resource Protection	Yes		Yes					Yes	Shoreline Use	$3,000,000.00
30	170	Our Road Tract Acquisition	Yes		Yes					Yes	Shoreline Use	$7,498,000.00
31	205	BLM Fort Morgan "Our Road" Acquisition	Yes		Yes					Yes	Shoreline Use	$7,498,000.00
32	224	Dauphin Island Acquisition	Yes		Yes					Yes	Shoreline Use	$2,400,000.00
33	79	Aloe Bay Harbour Town			Yes					Yes	Shoreline Use	$14,346,382.00

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34	82	Dauphin Island Audubon Bird Sanctuary Shoreline Restoration and Management	Yes		Yes					Yes	Shoreline Use	$9,525,000.00
35	86	Cotton Bayou – Perdido Islands Beneficial Use Restoration	Yes		Yes					Yes	Shoreline Use	$1,247,334.00
36	104	Habitat Acquisition and Conservation for Neotropical Migratory Birds	Yes		Yes					Yes	Shoreline Use	$891,217.00
37	297	Improving Coastal Water Quality through implementation of Clean Marina Standards	Yes		Yes					Yes	Boating	$752,000.00
38	109	Habitat enhancement of marine fisheries off coastal Alabama	Yes		Yes					Yes	Fishing	$7,592,500.00
39	272	Lillian Park Beach Habitat and Shoreline Protection Improvements	Yes		Yes					No	Shoreline Use	$679,500.00
40	106	Mobile Bay Preservation and Restoration; Lower Fly Creek Reach Project	Yes		Yes					No	Shoreline Use	$14,700,000.00
41	159	Wolf Creek Park Expansion	Yes		Yes					Yes	Shoreline Use	$325,000.00
42	233	D'Olive Creek Property Purchase, Habitat Study, and Nutrient Removal Research/Educational Facility	Yes		Yes					No	Education/stewardship	$975,000.00
43	168	Three Mile Creek Lower Watershed Land Acquisition and Planning	Yes		Yes					No	Public Park	$12,150,000.00
44	189	Perch Creek Nature Trail at McNally Park	Yes		Yes					No	Public Park	$1,500,000.00
45	234	Expansion of Helen Wood Park and Preserve	Yes		Yes					No	Public Park	$2,380,000.00
46	238	Brookley Bayfront Preserve	Yes		Yes					No	Public Park	$7,000,000.00
47	111	Spanish Fort Ecological Park	Yes		Yes					No	Public Park	$21,250,000.00
48	66	Marine Mammal Conservation and Recovery in the Gulf of Mexico through support of the Alabama Marine Mammal Stranding Network	NA			Yes				NA		$1,200,294.00
49	67	Little Point Clear Unit - land protection	NA		Yes					Yes	Shoreline Use	$6,000,000.00
50	68	Habitat enhancement, restoration, and preservation of beach and dune systems of coastal Alabama	NA			Yes				NA		$4,395,000.00
51	70	Establishment and evaluation of protected oyster spawning aggregates in Mississippi Sound	NA			Yes				NA		$240,671.00
52	73	Fish River Watershed Restoration Project	NA			Yes				NA		$8,500,000.00

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53	74	Restoration of the Diamondback Terrapin, a Keystone Species in the Salt Marshes of Alabama	NA			Yes				NA		$421,715.00
54	77	Half-Shell High School: Oyster Restoration in the Mississippi Sound	NA			Yes				NA		$478,000.00
55	78	Lower Perdido Bay Restoration	NA			Yes				NA		$1,664,217.00
56	83	Oyster Restoration in Coastal Alabama	NA			Yes				NA		$478,000.00
57	85	Oyster Bay Wetlands Preservation and Enhancement Project	NA			Yes				NA		$8,021,180.00
58	88	Floodplain conservation easements	NA			Yes				NA		$5,000,000.00
59	89	Dauphin Island- Aloe Bay Beneficial Use Restoration	NA			Yes				NA		$2,444,952.00
60	91	Fill Borrow Pits Dug in 2010 to Protect Against Oil Spill Damage	NA			Yes				NA		$5,600,000.00
61	96	Bon Secour Wetlands Preservation and Habitat Protection Project	NA			Yes				NA		$3,017,924.00
62	98	Stormwater Quality Rehabilitation Project	NA			Yes				NA		$500,000.00
63	99	Upper Wolf Bay Savanna and Marsh Acquisition for Conservation	NA			Yes				NA		$3,000,000.00
64	101	Alabama Cooperative Aquatic Animal Health Network	NA			Yes				NA		$3,750,000.00
65	102	Alabama Audubon Coastal Bird Stewardship Program (AACBSP)	NA			Yes				NA		$1,603,801.00
66	103	Gulf Coast Wildlife Recovery & Interpretive Center: Feasibility, Planning and Preliminary Design Phase (Phase I)	NA			Yes				NA		$275,000.00
67	105	Benton Tract	NA			Yes				NA		$2,500,000.00
68	113	Little Point Clear Unit - Bon Secour National Wildlife Refuge - Three Rivers tract acquisition	NA		Yes					Yes	Shoreline Use	$4,750,000.00
69	124	Shoreline and marsh rehabilitation in the Northeast Point-aux-Pines Peninsula (Bayou La Batre, Alabama)	NA			Yes				NA		$683,040.00
70	128	Development of a sustainable groundwater management plan to support long-term economic growth in Baldwin County	NA			Yes				NA		$980,000.00
71	129	Harrod Tract Addition to the Weeks Bay Reserve	NA			Yes				NA		$2,700,000.00

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72	144	Enhancing Oyster Restoration Efforts in Coastal Alabama	NA			Yes				NA		$2,500,000.00
73	145	Mobile Causeway Hydrologic Restoration Project	NA			Yes				NA		$42,030,941.00
74	150	Upper Mobile Bay Marsh Creation Project	NA			Yes				NA		$22,000,000.00
75	154	Sustainable Gulf Coast Oyster Restoration and Coastal Protection using Central Oyster Hatcheries and Gulf State Remote Setting Sites	NA			Yes				NA		$132,000,000.00
76	160	Regional Sediment Management/Beneficial Use and Small Scale Habitat Restoration	NA			Yes				NA		$5,925,000.00
77	164	Mobile County Conservation Acquisition	NA			Yes				NA		$4,000,000.00
78	165	Yancey Branch Watershed Restoration	NA			Yes				NA		$5,484,817.00
79	167	D'Olive Creek Watershed Land Acquisition	NA			Yes				NA		$900,000.00
80	186	Biopolymer Based Materials for the Removal of Harmful Metals from Mobile Bay Water	NA			Yes				NA		$563,003.00
81	191	Stormwater Wetland Construction in Big Creek Lake Watershed	NA			Yes				NA		$1,200,000.00
82	203	Using Off-Bottom Oyster Farming to Restore Alabama Oyster Reefs	NA			Yes				NA		$4,326,631.00
83	204	City of Foley Regional Stormwater Wetland	NA			Yes				NA		$1,515,600.00
84	225	Grand Bay Land Acquisition	NA			Yes				NA		$762,810.00
85	229	Distribution of flows and flow-rates through the Mobile-Tensaw River Delta	NA			Yes				NA		$800,000.00
86	232	Oyster Bay Restoration Feasibility Study	NA			Yes				NA		$600,000.00
87	236	Wastewater Reuse Project for the City of Daphne and the Eastern Shore of Mobile Bay	NA			Yes				NA		$950,000.00
88	247	Aloe Bay/Mississippi Sound Water Quality Enhancement Project	NA			Yes				NA		$7,992,000.00
89	251	Spanish Fort Estates Erosion Mitigation and Battlefield Preservation	NA			Yes				NA		$8,940,000.00
90	254	Bon Secour River Headwater Restoration	NA			Yes				NA		$6,177,160.00
91	274	Sediment Reduction Program	NA			Yes				NA		$59,474,528.00
92	279	Enhancement and Stabilization of Priority Coastal Shoreline on Fowl River	NA			Yes				NA		$1,950,000.00

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93	285	Enhancement and Stabilization of Priority Coastal Habitat on Fowl River and a Study of Coastal Marsh Health and Recovery	NA			Yes				NA		$7,000,000.00
94	286	Sea Turtle Conservation and Recovery in the Gulf of Mexico through Development of a Sea Turtle Health Surveillance Network	NA			Yes				NA		$1,020,000.00
95	287	Expansion of the Orange Beach Wildlife Rehabilitation and Education Center	NA			Yes				NA		$183,500.00
96	290	Coastal Avian Rescue & Rehabilitation Center	NA			Yes				NA		$850,000.00
97	292	Lightning Point Acquisition and Restoration Project (AL)	NA			Yes				NA		$12,320,785.00
98	293	Magnolia River Preservation Project – Holmes Property	NA			Yes				NA		$3,233,500.00
99	87	Improved Bypassing of Beach Sands Dredged from the Mobile Ship Channel	Yes			Yes				NA		$2,400,000.00
100	84	Environmental Restoration of Cotton Bayou and Terry Cove Canals	NA			Yes				NA		$500,000.00
101	172	Alabama State Port Authority Automotive/RO-RO Terminal	NA				Yes			NA		$65,000,000.00
102	218	Redevelop City Docks	NA				Yes			NA		$31,814,000.00
103	237	Safe Harbor Dock Facility for Coastal Alabama	NA				Yes			NA		$4,150,000.00
104	240	Delta Port Marina Oystermen Support Dock	NA				Yes			NA		$7,450,000.00
105	241	Alabama Gulf Seafood Marketing Program	NA				Yes			NA		$2,875,000.00
106	242	Alabama Gulf Coast Recovery Council Older Worker Program	NA				Yes			NA		$431,928.00
107	162	Coffee Island and South Point aux Pins - Coastal Habitat Restoration, Analysis and Design	NA					Yes		NA		$4,093,700.00
108	179	Conservation, Preservation and Protection of Hog Bayou, Mobile County	NA					Yes		NA		$2,150,000.00
109	248	Assessment of injury to bay, sound, and estuary dolphin stocks in Alabama to support restoration and recovery	NA					Yes		NA		$2,600,000.00

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110	288	Linking water quality, marine food web dynamics, and ecosystem health in Alabama: Improving seafood safety and human health	NA					Yes		NA		$2,986,322.00
111	71	Enhanced Fisheries and Ecosystem Monitoring in Alabama's Marine Waters and the Gulf of Mexico	NA					Yes		NA		$9,306,000.00
112	81	Independent External Peer Review of Dauphin Island's West End Beach Restoration Project	NA					Yes		NA		$250,000.00
113	90	Alabama Coastal Restoration Program	NA					Yes		NA		$6,900,000.00
114	93	Dauphin Island Beach Nourishment Feasibility Study	NA					Yes		NA		$250,000.00
115	100	Dauphin Island Sea Lab Research Building	NA					Yes		NA		$7,000,000.00
116	107	Gulf Coast Environment Research Station	NA					Yes		NA		$9,000,000.00
117	108	Expansion of Auburn University Shellfish Laboratory	NA					Yes		NA		$3,000,000.00
118	112	Identification, Prioritization, and Quantitative Assessment of Ecosystem Benefits of Restoration Actions within the Perdido and Perdido Bay Watersheds	NA					Yes		NA		$2,575,000.00
119	130	Alabama Real-Time Coastal Observing System	NA					Yes		NA		$2,876,241.00
120	136	Coastal Industrial Base Analysis and Impact of Jobs Lost	NA					Yes		NA		$1,129,000.00
121	146	Mobile Bay High Frequency Radar Network	NA					Yes		NA		$2,703,298.00
122	147	Infrastructure advancement for Marine Observations in Coastal Alabama (IMOCA)	NA					Yes		NA		$2,652,901.00
123	153	Gulf of Mexico Alliance Restoration Coordination	NA					Yes		NA		$2,337,500.00
124	156	Characterization and Delineation of Significant Sand Resource Areas Essential for Beach Restoration, Offshore Alabama	NA					Yes		NA		$922,500.00
125	157	Development and operation of an apparatus to monitor the fate and transport of volatile organic contaminants in aquatic ecosystems.	NA					Yes		NA		$135,000.00

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126	161	Comprehensive weather, water, and sediment-influx monitoring in Mobile and Baldwin County using terrestrial- and riverine-based sensing systems.	NA					Yes		NA		$2,431,863.00
127	166	Comprehensive Coastal Monitoring and Community Engagement Network (COCO)	NA					Yes		NA		$7,926,889.00
128	169	Tracking the Ecological and Engineering Performance of Alabama's Early Coastal Restoration Projects: a Centralized, Comprehensive Monitoring Program	NA					Yes		NA		$5,500,000.00
129	180	The Earth Solutions Lab at the University of South Alabama	NA					Yes		NA		$7,426,750.00
130	181	Effects of Disturbance and Habitat Degradation on Community Resilience, Food Web Dynamics, and Ecosystem Integrity in the Mobile-Tensaw Delta	NA					Yes		NA		$544,476.00
131	182	Assessment and Protection of the Mobile/Tensaw Delta and the coastal streams of Alabama	NA					Yes		NA		$176,179.00
132	184	Alabama Harmful Algal Bloom (ALHAB) Program Initiative	NA					Yes		NA		$7,075,937.00
133	187	USA Center of Environmental Resiliency and Training (USA-CERT)	NA					Yes		NA		$4,700,000.00
134	190	Mitigating Barotrauma in Red Snapper and Other Reef Fishes: A Means to Expedite Population Recovery and Increase Recreational Fishing Season Length	NA					Yes		NA		$1,381,555.00
135	198	Development for a Regional Strategic Plan for the Coastal Alabama Region	NA					Yes		NA		$562,500.00
136	217	Planning for Economic Diversification of Bayou la Batre and Surrounding Area	NA					Yes		NA		$500,000.00
137	231	Sediment geochemistry investigation of the Mobile-Tensaw River Delta	NA					Yes		NA		$216,300.00
138	243	Planning Assistance and Infrastructure Development for the USA Environmental and Marine Sciences Building	NA					Yes		NA		$3,486,150.00
139	246	Development of a laboratory facility for monitoring and characterizing tar balls washing along Alabama's beaches	NA					Yes		NA		$3,000,000.00

Row Number	Project ID	Project Title	Site-Specific Recreation Project Proposed	Recreation Major Objective	Ecological with Significant Recreation Objectives	Primarily Ecological	Economic Development	Planning/ R&D/ Monitoring	Infrastructure	Recreational Nexus to Spill	Primary Recreational Activity Type	Estimated Cost
140	253	Development of a community-based tar ball and beach recovery monitoring program	NA					Yes		NA		$3,500,000.00
141	267	NEW STREAM-GAGING STATION ON FISH RIVER AT COUNTY ROAD 32	NA					Yes		NA		$87,250.00
142	275	Testing for BP Oil on the Alabama Coast	NA					Yes		NA		$7,000,000.00
143	280	Survey and shoreline change analysis of Mobile Bay and Mississippi Sound, Baldwin and Mobile Counties, Alabama	NA					Yes		NA		$352,609.00
144	281	Sediment characterization and geochemistry distribution within Mobile Bay and Mississippi Sound, Baldwin and Mobile Counties, Alabama	NA					Yes		NA		$755,304.00
145	282	Current and wave analysis study of Gaillard Island in Mobile Bay, Mobile County, Alabama	NA					Yes		NA		$169,180.00
146	291	Aloe Bay Harbour Town	NA					Yes		NA		$2,183,485.00
147	294	Toward Valuation of the Mobile Bay	NA					Yes		NA		$120,000.00
148	155	Sanitary Sewer Construction Project	NA						Yes	NA		$2,000,000.00
149	196	Mobile County Soccer & Aquatic Center Complex	NA						Yes	NA		$40,000,000.00
150	163	Mobile County Emergency Operations Center	NA						Yes	NA		$15,000,000.00
151	174	USA Coastal and Environmental Sciences Initiative (USA-CES)	NA						Yes	NA		$45,065,774.00
152	183	Big Creek Lake Reservoir Spill Containment Structure	NA						Yes	NA		$23,000,000.00
153	185	Low Pressure Sewer System To Replace On-Site Systems in Sensitive Riverine Areas	NA						Yes	NA		$1,100,000.00
154	192	Waterline Crossing to Serve as an Emergency Backup Line to Spanish Fort Area	NA						Yes	NA		$6,800,000.00
155	193	Pumps to Supply Emergency Backup Water Source	NA						Yes	NA		$2,700,000.00
156	201	Southeast Mobile County Sanitary Sewer/Oyster Reefs Protection Project	NA						Yes	NA		$6,148,750.00
157	202	Household Hazardous Waste Collection Day Program	NA						Yes	NA		$2,000,000.00
158	209	Bayou La Batre US 98 Express	NA						Yes	NA		$265,000,000.00

Row Number	Project ID	Project Title	Site-Specific Recreation Project Proposed	Recreation Major Objective	Ecological with Significant Recreation Objectives	Primarily Ecological	Economic Development	Planning/ R&D/ Monitoring	Infrastructure	Recreational Nexus to Spill	Primary Recreational Activity Type	Estimated Cost
159	211	Drainage and Sewer Infrastructure Improvements of facilities along West Turner Road and Dunlap Circle	NA						Yes	NA		$15,000,000.00
160	212	City of Chickasaw Sewer Rehabilitation Project	NA						Yes	NA		$1,300,000.00
161	213	Reuse Water System for the City of Foley and Blue Collar Country Sports and Entertainment Complex	NA						Yes	NA		$3,500,000.00
162	215	Dauphin Island Wastewater Treatment and Outfall Improvements	NA						Yes	NA		$19,386,000.00
163	216	Dauphin Island Water Supply	NA						Yes	NA		$7,700,000.00
164	219	CHARLIE DMMA Rehabilitation and Bayou Coden Maintenance Dredging	NA						Yes	NA		$1,315,000.00
165	220	DELTA DMMA Rehabilitation and Bayou La Batre Maintenance Dredging	NA						Yes	NA		$3,165,000.00
166	221	Enhanced Nutrient Removal at the Saraland Wastewater Treatment Facility	NA						Yes	NA		$2,600,000.00
167	222	City of Saraland	NA						Yes	NA		$6,985,000.00
168	223	Northwest Satsuma Water and Sewer Project	NA						Yes	NA		$1,454,929.00
169	230	Compressed Natural Gas (CNG) Filling Station to Support Economic Development and Reduce Carbon Footprint	NA						Yes	NA		$1,000,000.00
170	239	Biofiltration for Wastewater Corrosion Control and Elimination of Sanitary Sewer Overflows	NA						Yes	NA		$100,000.00
171	245	Baldwin Beach Express	NA						Yes	NA		$202,500,000.00
172	249	Fairhope Soccer Complex	NA						Yes	NA		$2,412,410.00
173	252	Cambron Headcut Repair	NA						Yes	NA		$620,000.00
174	255	Extension of Effluent Force Main from Bayou La Batre WWTF	NA						Yes	NA		$12,000,000.00
175	256	City of Saraland Potable Water Expansion Project	NA						Yes	NA		$2,054,038.00
176	257	Saraland Water Service Water Meter Upgrade and Replacement	NA						Yes	NA		$1,134,747.00

Row Number	Project ID	Project Title	Site-Specific Recreation Project Proposed	Recreation Major Objective	Ecological with Significant Recreation Objectives	Primarily Ecological	Economic Development	Planning/ R&D/ Monitoring	Infrastructure	Recreational Nexus to Spill	Primary Recreational Activity Type	Estimated Cost
177	258	Shine Road Water Well and Pump Station	NA						Yes	NA		$4,500,000.00
178	259	Iron and Manganese Removal - Sand Filtration - Existing Wells	NA						Yes	NA		$5,000,000.00
179	260	Water Distribution System Upgrades	NA						Yes	NA		$4,000,000.00
180	261	Collection System/Lift Station Upgrades	NA						Yes	NA		$11,500,000.00
181	262	Bayou La Batre WWTF-Class A/EQ Sludge Treatment	NA						Yes	NA		$3,000,000.00
182	263	Bayou La Batre WWTF - Odor Control Upgrade	NA						Yes	NA		$1,000,000.00
183	264	Bayou La Batre WWTF-Handicapped Elevator	NA						Yes	NA		$300,000.00
184	265	Bayou La Batre WWTF-Operations Elevated Walk	NA						Yes	NA		$300,000.00
185	276	Grand Bay Sewer Service Project	NA						Yes	NA		$3,480,068.00
186	277	Low Pressure Sanitary Sewer for Dauphin Island Parkway	NA						Yes	NA		$5,998,580.00
187	278	Perch Creek Area Sanitary Sewer Trunk Line Cured in Place Pipe (CIPP) Project	NA						Yes	NA		$5,998,590.00

Table 3. Alabama Department of Conservation and Natural Resources Projects

Row Number	Project ID	Project Title	Site-Specific Recreation Project Proposed	Recreation Major Objective	Ecological with Significant Recreation Objectives	Primarily Ecological	Economic Development	Planning/R&D/Monitoring	Infrastructure	Recreational Nexus to Spill	Primary Recreational Activity Type	Estimated Cost
3	ER2	Dauphin Island Main Public Beach and Bird Sanctuary Improvements	Yes	Yes						Yes	Shoreline Use	$862,500
4	ER3	Fort Morgan Fishing Pier Replacement and Boat Ramp Improvements	Yes	Yes						Yes	Shoreline Use	$2,875,000
5	ER4	Fort Morgan Peninsula Public Access Improvements at County and State Owned Sites	Yes	Yes						Yes	Shoreline Use	$1,380,000
6	ER5	Lightning Point Public Access Improvements	Yes	Yes						Yes	Shoreline Use	$1,840,000
7	ER6	Mobile Causeway Public Access Improvements	Yes	Yes						No	Shoreline Use	$1,092,500

Row Number	Project ID	Project Title	Site-Specific Recreation Project Proposed	Recreation Major Objective	Ecological with Significant Recreation Objectives	Primarily Ecological	Economic Development	Planning/R&D/Monitoring	Infrastructure	Recreational Nexus to Spill	Primary Recreational Activity Type	Estimated Cost
9	ER8	GSP Phase II & III Improvements	Yes	Yes						Yes	Shoreline Use	?
2	ER1	Dauphin Island Aloe Bay Boat Ramp	Yes	Yes						Yes	Boating	$862,500
8	ER7	Theodore Industrial Canal Boat Ramps	Yes	Yes						Yes	Boating	$575,000

Table 4. Notice of Intent Projects

Project ID	Project	Proponents	Met Initial Eligibility Screens	Carried Forward	Duplicate	Already Complete	Not Carried Forward	Reason for Not Carried Forward
NA	Little Lagoon Recreation Projects	Various	Yes	●				Need evaluation and possible combination into single project
NA	Land Acquisitions--Goat Island, Brookley Bayfront, Laguna Cove	Pelican Conservancy	Yes	●			●	Little Lagoon and Bayfront are on list of alternatives for RP/EIS. Others are outside geographic nexus.
NA	Mobile County Land Acquisition Projects (Perch Creek/Dog River and Three-mile Creek/Hickory Street)	City of Mobile	No				●	Outside geographic nexus
NA	Minimizing the effects of barotrauma on reef fish	Ocean Conservancy	No				●	Not shoreline use
NA	Recreational fisheries monitoring improves management and enhances recreationally important fish stocks	Ocean Conservancy	No				●	Not shoreline use
NA	Lionfish invasion response program	Ocean Conservancy	No				●	Not shoreline use
NA	Nature based education (kiosks, signage, programs, green infrastructure) and other lists of education opportunities	Baldwin County, Mobile Baykeepers and NWF	No				●	No specific project locations--other education projects currently on list of alternatives for RP/EIS

APPENDIX E

PROJECTED ANNUAL OPERATING COSTS FOR GULF STATE PARK PROJECT ELEMENTS SUPPORTED BY LODGE REVENUES

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ALABAMA'S GULF STATE PARK

Projected Annual Operating Costs for Gulf State Park Project Elements Supported by Lodge Revenues

February 28, 2017

	Operating Expenses	Management Fees**	Capital Reserves**	Insurance Reserves**
Interpretive Center	300,000	125,000	476,000	197,000
Learning Campus	500,000	175,000	372,000	213,000
Educational Programs	750,000	45,000		
Trails and Visitor Enhancements				
Asphalt Trails	50,000	75,000	79,502	
Elevated Boardwalks	100,000		520,000	
Interpretive Elements	45,000		275,000	
Interpretive Signage	10,000		20,000	
Wayfinding Signage	7,000		12,000	
Trailhead / Beach Parking	50,000		100,000	
Other	35,000		150,000	
Dune Restoration	10,000		50,000	
Environmental Protection	125,000			
Public Access Amenities Proposed in the RP/EIS	610,000	150,000	125,000	50,000
Subtotal	2,592,000	570,000	2,179,502	460,000
Expected Revenue Available to Support GSP Project Elements*	5,775,896			
Total OCMI Cost	5,801,502			
Surplus	(25,606)			

These costs represent the Gulf State Park Project Team's current best estimates based on the anticipated construction materials and use of the various project elements. These figures are subject to change based on the actual operation and maintenance needs for these elements.

* See Gulf State Park Lodge Facilities Market Feasibility Study prepared for the Alabama Department of Conservation and Natural Resources by Pinkowski & Company dated December 2014 (Pinkowski Report). The results of the study are summarized in the document on page 58 ("Cash available for debt service").

** "Management Fees" are the fees which are estimated to be incurred for the management, operation and maintenance of the lodge and other facilities. (Management fees for the hotel itself are not included in the table above because they are already captured in the "Expected Revenue Available to Support GSP Project Elements" final number above (See Pinkowski Report, p. 58).) "Capital Reserves" are an estimate of the reserves to be set aside annually for the repair or partial or entire replacement of the items listed above based

upon a number of industry-accepted variables, such as projected longevity or life of the materials used in construction and their exposure to the elements, frequency of storms and storm surges, and historical fluctuations in insurability and casualty insurance terms. Capital reserves will continue to be collected throughout the life of each element. It is possible that a capital reserve account could eventually exceed the cost of replacement. Statistically, however, subsequent replacements could be required more frequently and, therefore, such a capital account excess is not unusual or unnecessary. "Insurance Reserves" are an amount set aside for casualty and other insurance coverages for the facilities. The lodge, the interpretive center, the pedestrian crossovers, the public access amenities, and portions of the trails, including the elevated boardwalks, are subject to substantial damage or destruction from hurricanes, wind, surf, and storm surge. The premiums for insurance for such coastal areas, when available, varies wildly depending on the weather and its impacts and not just on this coast. While the designs contain significant and unprecedented resiliency features, these facilities cannot be built to withstand the brunt of the fiercest storms (which this coast has seen). In addition, even though a more "minor" storm might destroy lesser facilitates and not this one, the facility would likely still sustain some damage necessitating repairs and replacement. The design of the facilities allows them to be operated very efficiently, thus reducing their operating costs below what similarly sized other facilities may incur in operating costs. At the same time, the operating costs for the Interpretive Center will be more than a similarly sized facility not built to Living Building standards.

Prepared By: Amber Summers
Fiscal Manager

Approved By:
N. Gunter Guy, Jr.
Commissioner, ADCNR

APPENDIX F

MEMORANDUM REGARDING GULF STATE PARK PROJECT PLAN AND FUNDING

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ALABAMA'S
GULF
STATE PARK

Memorandum Regarding Gulf State Park Project Plan and Funding

February 28, 2017

In its Restoration Plan I and Environmental Impact Statement (RP/EIS), the Alabama Trustee Implementation Group (Alabama TIG) proposes the Gulf State Park Lodge and Associated Public Access Amenities Project as a "preferred alternative" to be funded through the allocation of natural resource damages (NRD) funds. This proposed project is part of a larger effort by the Alabama Department of Conservation and Natural Resources (ADCNR) to transform Gulf State Park (GSP) into an international model for environmentally and economically sustainable recreational use, according to the GSP Master Plan (2016), prepared by Sasaki Associates, Inc. for ADCNR.

This memorandum is prepared for the purpose of explaining the proposed budget and funding mechanisms for this park-wide effort, including the proposed funding for the construction of a lodge and conference center at GSP, in the event that NRD funds are allocated to the GSP Lodge and Associated Public Access Amenities Project through the RP/EIS and subsequent record of decision (ROD). As part of this explanation, this memorandum provides background on ADCNR's park-wide effort, as well as on those NRD funds previously allocated to support restoration at GSP during Phase III of *Deepwater Horizon* (DWH) Early Restoration. Additionally, the memorandum catalogues the funds spent as of February 28, 2017 on the park-wide effort, including the sources of those funds.

The Park-Wide GSP Project

Construction of a lodge and conference center at GSP are part of ADCNR's plan to transform GSP into an international model for sustainable recreational use according to the GSP Master Plan. This effort is generally referred to by the State of Alabama as the GSP Project. ADCNR proposes to fund the GSP Project, which has five key elements - enhancing the visitor experience, restoring the dunes, building an interpretive center, establishing a learning campus, and rebuilding a lodge – and an expected budget of $140,500,000, using three funding streams resulting from the DWH oil spill: (1) the State's economic damages settlement ($50,000,000), (2) BP grant money received by the State ($5,000,000), and (3) NRD funds managed by the DWH Trustees ($85,500,000).

This third category of funds – NRD funds managed by the DWH Trustees – includes funds allocated during Phase III of Early Restoration and those NRD funds proposed to be allocated to the GSP Lodge and Associated Public Access Amenities Project in the RP/EIS. As a result, the proposed budget for the GSP Project provided below (1) includes restoration elements selected for NRD funding in Phase III of Early Restoration and proposed for NRD funding in the RP/EIS, and (2) is ADCNR's proposal assuming the GSP Lodge and Associated Public Access Amenities Project is selected in the ROD.

The proposed budget for ADCNR's GSP Project is as follows:

Lodge and conference center, includes approximately $8,700,000 proposed for associated public access amenities in the RP/EIS:	$85,500,000
Interpretive center:	$7,200,000
Learning campus:	$10,800,000
Trails and visitor enhancements:	$12,600,000
Dune restoration work:	$500,000
Administrative costs and overhead:	$7,764,695
Remaining balance to be used for future park enhancements per the GSP Master Plan:	$16,135,305
TOTAL:	**$140,500,000**

The Phase III GSP Enhancement Project

The DWH Trustees originally proposed to fund a portion of the construction of a lodge and conference center at GSP as part of the GSP Enhancement Project, selected as part of Phase III of Early Restoration in June 2014.[1] The GSP Enhancement Project provided funding for additional restoration elements at the park, including an interpretive center, learning campus, dune restoration, and trails and other visitor enhancements. The total cost of the GSP Enhancement Project was $85,500,000, with $58,500,000 expected to be spent on partial construction of the lodge and conference center and $27,000,000 budgeted for the other restoration elements.

Following the DWH Trustees' selection of the GSP Enhancement Project in Phase III, the State of Alabama secured and allocated additional DWH funds to conduct work at GSP. Specifically, in 2015, the State of Alabama allocated $50,000,000 of the State's economic damages settlement from BP to the larger GSP Project, along with $5,000,000 in BP grant funds. A portion of these funds were allocated for partial construction of the lodge and conference center at GSP. Additionally, the State chose to enhance the budget available for the other Phase III restoration elements – the interpretive center, learning campus, dune restoration, and trails and other visitor enhancements – and allocated an additional $4,100,000[2] in State funds toward those components (which is reflected in the budget provided above).

The lodge and conference center component of the GSP Enhancement Project was challenged in *Gulf Restoration Network v. Jewell, et al.* (S.D. Alabama). On February 16, 2016, the court enjoined the use of the $58,500,000 in NRD funds budgeted for partial development of the lodge and conference center. Prior to the court order, $2,216,388.21 in Phase III Early Restoration funds was spent on lodge design, engineering, and construction management fees (see chart below).

[1] See Final Programmatic and Phase III Early Restoration Plan and Early Restoration Programmatic Environmental Impact Statement (Phase III ERP/PEIS), http://www.gulfspillrestoration.noaa.gov/restoration/early-restoration/phase-iii.

[2] Additional administrative funds and overhead would be needed to operate and maintain the enhancements to these components and those funds would come out of the general "Administrative Costs and Overhead" budget.

Proposed Budget for and Funds Spent to Date on the GSP Project

Since the court's February 16, 2016 order, no NRD funds have been spent on the planning or construction of a lodge and conference center at GSP.

The following chart illustrates funds spent on the GSP Project as of February 28, 2017, including the funds allocated to the GSP Enhancement Project in Phase III, and those State funds Alabama allocated to the project. As described above, the proposed budget reflected in the chart assumes that NRD funds would be allocated to the GSP Lodge and Associated Public Access Amenities Project in the RP/EIS.

	Phase III NRDA Early Restoration Funds (Lodge & Conference Center)	**Phase III NRDA Early Restoration Funds (Other)**	**Phase III NRDA Early Restoration Funds (Allocated Administrative Costs & Overhead)**	**Economic damages settlement**	**BP Grant Money**
Funding received to date for GSP Project:	**85,500,000.00**			**50,000,000.00**	**5,000,000.00**
NRDA received to date (breakdown):	**58,500,000.00**	**27,000,000.00**			
	Funds Spent to Date				
Lodge and conference center, includes ~$8,700,000 proposed for associated public access amenities:	2,216,388.21			16,282,531.51	576,994.29
Interpretive center:		960,997.64	847,036.21		
Learning campus:		834,651.57	847,036.21		
Trails and visitor enhancements:		6,845,991.43	961,657.14		
Dune Restoration work:		343,533.35	384,662.86		
Remaining balance to be used for future park enhancements per the master plan					229,241.85
Totals	**2,216,388.21**	**8,985,173.99**	**3,040,392.42**	**16,282,531.51**	**806,236.14**
	Balance of funds				
Balance	**56,283,611.79**	**14,974,433.59**		**33,717,468.49**	**4,193,763.86**

The costs and overhead have been allocated to each project element based on the GSP Project Team's best estimates and judgment based on their experience and time spent relative to each element. Work on these elements is progressing at different paces. Particular elements (e.g., dune restoration) are further along than others and, thus, more time has been spent up front on those elements. This was taken into consideration when allocating the administrative costs and overhead to date. Additionally, it is important to note that, because the $27,000,000 allocated to the non-lodge and conference center restoration elements in Phase III was not enjoined by the court in *Gulf Restoration Network v. Jewell*, Alabama is authorized to spend that $27,000,000 first on those restoration elements and their associated administrative costs and overhead. Once the $27,000,000 is exhausted, and if the GSP Lodge and Associated Public Access Amenities Project is approved for funding, Alabama will begin to use the additional State funds allocated to enhance the budget available for those Phase III restoration elements to fund their completion.

The number reflected under "BP Grant Money" for the lodge and conference center represents the general administrative costs and overhead allocated by the GSP Project Team to the lodge and conference center. While some of these funds were spent prior to the court's order on February 16, 2016 and, thus, could be added to the NRD funds spent on the lodge and conference center prior to the court's order, the GSP Project Team has chosen to assign all of the general administrative and overhead costs allocated to the lodge and conference center to non-NRD funds.

The number reflected under "BP Grant Money" for "Remaining balance to be used for future park enhancements per the master plan" represents the general administrative costs and overhead allocated by the GSP Project Team to the GSP Master Plan elements that are not part of the Phase III Early Restoration elements or the lodge and conference center.

As illustrated in the chart above, the balance of the GSP Enhancement Project funds enjoined by the court is $56,283,611.79. This is the balance of NRD funds that the Alabama TIG is proposing to allocate toward additional work at GSP in the GSP Lodge and Associated Public Access Amenities Project. Also, as illustrated in the chart above, no NRD funds have been spent on the planning or construction of the lodge and conference center at GSP since the court order and, since that time, all planning and construction of the lodge and conference center has been funded through State-controlled sources, i.e., the economic damages settlement and BP grant funds.

If the GSP Lodge and Associated Public Access Amenities Project proposed in the RP/EIS is selected in a ROD, approximately $47,600,000 in NRD funds would be allocated to partially construct the lodge at GSP, and approximately $8,700,000 in NRD funds would be allocated to the various public access amenities included in the project.[3] Under this scenario, an additional $10,717,468.49 in State funds, plus a share of administrative costs and overhead, would be needed to complete the lodge and conference center and would be provided by Alabama. This money would come from the economic damages settlement money and BP grant money already received by the State.

If the GSP Lodge and Associated Public Access Amenities Project is selected in a ROD, the State of Alabama would not use any of the budgeted $47,600,000 in NRD funds available for the lodge component to reimburse the State for the economic damages or any other funds spent by the State on the lodge and conference center. Further, ADCNR is aware that NRD funds cannot be used for either component of the project (the lodge or public access amenities) until a ROD has been issued for the Final RP/EIS, and pursuant to the terms of an order lifting the current stay on the use of the approximately $56,300,000 allocated toward partial construction of the lodge and conference center in Phase III of Early Restoration.

Alternative Funding – Likely Scenarios

If the GSP Lodge and Associated Public Access Amenities Project is not selected by the Alabama TIG, the State would need to obtain the remaining funds necessary to complete the lodge component from another source. Additionally, the State would likely not have the funds to implement the public access amenities component of the proposed project (approximately $8,700,000). The remaining funding for the lodge would likely be secured through a combination of additional allocation from the State's economic damages funds

[3] As described in Section 2.2.1.1 of the RP/EIS, the estimated cost of the public access amenities proposed by the TIG is approximately $8,700,000, leaving approximately $47,600,000 budgeted for the lodge component of the project. The actual cost of the amenities (and other project elements) will depend on bids obtained through Alabama's public bidding process. Thus, the actual costs could vary by as much as 30 percent above or below the cost estimates. In the event that the costs of the public access elements exceed $8,700,000, additional funds will be taken from the remaining approximately $47,600,000 budgeted for the lodge component so that all public access amenities are fully funded. Alternatively, in the event that the cost of these elements is less than $8,700,000, the additional funds remaining could be applied toward the lodge, once the public access amenities are fully funded.

and third-party financing. The future of the public access amenities component of the project would be uncertain under such a scenario because the anticipated revenues to be generated by the lodge rooms would be required to address that capital investment (i.e., for debt servicing). Even if the public access amenities were funded by a third party, they would likely be less available to the general public and cater more toward lodge guests.

The State has been evaluating and planning for the implementation of various alternative options for completing the lodge, and other GSP Project elements where possible, in the event that the GSP Lodge and Associated Public Access Amenities Project is not selected by the Alabama TIG.[4] Currently, the three most likely options would be to (1) reallocate economic damages funds and BP grant money to complete the lodge, and seek private funding for the balance of the budgeted amount; (2) seek private funding for the entire balance of the cost to complete construction of the lodge and keep the budgets for the remaining GSP Project elements as complete as possible; (3) issue bonds. The specific details of what each of these potential scenarios would look like are speculative and would depend on the marketplace and terms of any private funding. Some details, however, are fairly certain.

Under any alternative scenario, anything proposed under the current budget to be paid for with lodge revenues would likely either be eliminated or significantly reduced since at least a portion of those revenues would have to remain available for debt service to a third party. This would include eliminating or reducing the public access amenities and the enhanced O & M budget[5] for the Phase III elements included in the currently proposed project. The State would then have multiple options for financing, with the following currently considered the most likely.

Option One: Reallocate economic damages and BP grant money to complete the lodge and fund the remaining balance with third party funding. This would result in no funds available for future park enhancements pursuant to the master plan. It would also result in the reduction of the budget for the non-lodge and conference center Phase III Early Restoration elements back to the $27 million originally awarded in Early Restoration. This would mean a reduction in the quality and sustainability of materials, for example, from what would otherwise be available if the GSP Lodge and Associated Public Access Amenities Project were funded. This option would result in slightly less debt service for the State than Option Two, below.

Option Two: Keep the budget allocation as-is (subject to the elimination/reduction of revenue-funded items above) and seek funding for the balance of the lodge and, if possible, the associated public access amenities. This would keep funds in the budget for future park enhancements. It would also allow some additional funds to enhance the non-lodge and conference center Phase III Early Restoration elements, but not to the full extent of what would be available in the GSP Lodge and Associated Public Access Amenities Project because the State would need to leave room in that enhanced budget to fund any additional O & M necessary for any enhancements above the $27 million (which would be funded with lodge revenues under the GSP Lodge and Associated Public Access Amenities Project). With respect to the lodge and any public access amenities funded, the State would need to secure more funds from a third party than in Option One since it

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[4] As described in the alternative scenarios, if the GSP Lodge and Associated Public Access Amenities Project is not selected in a ROD by the Alabama TIG, the budget for the non-lodge and conference center restoration elements funded by the DWH Trustees in Phase III of Early Restoration - the interpretive center, learning campus, dune restoration, and trails and other visitor enhancements - will likely need to be pulled back to the $27 million originally awarded. This is a potential scenario that the State of Alabama has evaluated and planned for. Because particular elements (e.g., dune restoration) are further along than others, the original budget would most likely reflect the elimination of State-funded enhancements to the learning campus and interpretive center. However, these elements would remain fully consistent with the Phase III ERP/PEIS.

[5] Reducing or eliminating the enhanced O & M budget for the Phase III Early Restoration elements means that the frequency and quality of the O & M for these elements would be reduced resulting in, for example, fewer educational programs and less frequent maintenance. However, necessary O & M would still occur as budgeted and planned for in Phase III Early Restoration.

would not be putting additional funds toward the lodge. This would result in a higher amount of debt service.

Option Three: Bond issue. Bonds could be issued for the full amount needed to complete the lodge and conference center and, if possible, associated public access amenities (as discussed in Option Two), or for a smaller amount if economic damages funds and BP grant money are reallocated to complete the lodge and conference center (as discussed in Option One). A bond issue would be the most favorable to the State since the terms (i.e., interest rate) would likely be significantly lower than third party funding. However, the amount of funding available under this option is contingent on the availability of bonds to issue by the State. Thus, it is uncertain what public access amenities and O & M may be available in a final project funded through a bond issue.

All of these alternative options result in significantly reduced amenities available to the public than what would be available if the GSP Lodge and Associated Public Access Amenities Project is funded. Implementation of any of these alternative options would also delay completion of the lodge. However, if the GSP Lodge and Associated Public Access Amenities Project is not chosen by the Alabama TIG, the State would still move forward with completing the lodge at GSP since, although the amenities park-wide would be less than they could be with NRD funding, the lodge would still provide a benefit to the public and the State.

Dated: 2/28/17

Alabama Department of Conservation and Natural Resources

By: _____

N. Gunter Guy, Jr.
Commissioner, ADCNR

APPENDIX G

ALABAMA DEPARTMENT OF CONSERVATION AND NATURAL RESOURCES GULF STATE PARK LODGE FACILITIES MARKET FEASIBILITY STUDY

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PINKOWSKI
& COMPANY

DEPARTMENT OF CONSERVATION AND NATURAL RESOURCES

GULF STATE PARK

LODGE FACILITIES MARKET FEASIBILITY STUDY

GULF SHORES, ALABAMA

DECEMBER 2014

Prepared by:

Pinkowski & Company
6829 Eastridge Cove, Suite 201
Memphis, TN 38120
901/684-1080

December 30, 2014

Mr. N. Gunter Guy, Jr.
Commissioner
Department of Conservation and Natural Resources
State of Alabama
64 North Union Street, Suite 468
Montgomery, AL 36130

Dear Mr. Guy,

In accordance with your request we have completed our market feasibility study for the proposed development of a lodge and conference space to be located in the Gulf State Park in Gulf Shores, Alabama. This study included field research conducted in the Gulf Shores market area during July 2014 and subsequent analysis leading to our conclusions and recommendations.

As in all studies of this type, the estimated results are based upon competent and efficient management and presume no significant change in the hotel industry in the immediate area from that set forth in this report. The terms of our engagement are such that we have no obligation to revise this report to reflect events or conditions which occur subsequent to the date of the completion of our field work. However, we are available to discuss the necessity for revision in view of changes in the economic or market factors affecting the proposed project.

Since the estimated operating results are based on estimates and assumptions which are subject to uncertainty and variation, we do not represent them as results that will actually be achieved. This report has been prepared primarily for your internal use and guidance in determining the current and future market conditions in the area and to be used as the basis for any additional research and analysis on other facilities that could be added at the resort. Neither our name nor the material submitted may be included in any prospectus, or used in offerings or representations in connection with the sale of real estate, securities, or participation interests to the public.

This study does not include the possible impact of government restrictions or environmental factors on the proposed project unless expressly set forth in this report.

We would be pleased to hear from you if we can be of further assistance in the interpretation and application of our findings and conclusions. We appreciate the opportunity to be of assistance to you in this effort and the cooperation you and your associates extended to us during the course of our assignment.

Very truly yours,

ISHC

C. G. Pinkowski, ISHC
PINKOWSKI & COMPANY

GULF SHORES, ALABAMA
PROPOSED GULF STATE PARK LODGE
MARKET FEASIBILITY STUDY

We have completed our market feasibility study for the development of a proposed lodge and meeting space to be built as part of the redevelopment of the Gulf State Park located in Gulf Shores, Alabama. This study included field research conducted in the Gulf Shores market area during July 2014 and subsequent analysis leading to our conclusions and recommendations as presented in this report. This report was prepared for the State of Alabama Department of Conservation and Natural Resources.

The scope of our study was the determination of the current viability and market demand for a lodge and meeting facility and the estimated performance level that reasonably could be attained by the proposed facilities.

The proposed lodge will be part of an overall redevelopment plan for the state park that would include a new interpretive center, research and educational center, interpretive trails, and ecological restoration. The development of the lodge, meeting space and other facilities will help maximize the economic and environmental potential of the 6,150 acre state park and expand the growth in tourism in the market area as well as increasing public accessibility to the state park. These facilities will also have the opportunity to provide unique experiences based on the market demand for the emerging and rapidly increasing ecotourism market.

The new facility will be located on the site of the old lodge, which was destroyed by Hurricane Ivan in 2004 and is part of a larger $85.5 million project for improvements to Gulf State Park. The original lodge was located on 21.6 acres along the beach adjacent to the current Pier. NRDA (Natural Resource Damage Assessment) funds to be used for the project will allocate approximately $58.5 million towards the development of the lodge facilities out of the total $85.5 million allotted for the Gulf State Park enhancement project.

The development of the hotel and the related amenities will help achieve the following goals and objectives:

- Encourage environmental education and community involvement
- Become a tourism destination of choice within the southeast
- Promote a healthy and resilient Gulf Coast ecosystem
- Promote a healthy and resilient Gulf Coast economy
- Promote sustainable economic development
- Provide new and unique opportunities for the ecotourism market on the Gulf Coast

Specific focus areas were identified in the study to collectively achieve these goals and objectives. These focus areas will maximize the success in capturing the significant opportunities for development of the Gulf State Park. The following five focus areas were identified to restore lost recreational and habitat use services to the area:

- Interpretive Center – an interpretive center within Gulf State Park that will provide an opportunity to educate and inform the public about the unique natural environment present within the park.
- Research and Education Facility – the diverse set of ecosystems within the Park provides an opportunity for an environmental research and education facility to benefit Alabama K-12 students and post-secondary partnerships.
- Interpretive Trails – A robust and compelling trail system will enhance access and enjoyment for all visitors to Gulf State Park's natural resources.
- Ecological Restoration – Gulf State Park's sustainability depends on maintaining the natural environment, respecting the local community, and delivering a quality visitor experience. The ecological focus will be on dune restoration along the park's extensive undeveloped beachfront.
- Lodge and meeting space – Gulf State Park is available for the enjoyment of all Alabama residents and other visitors. The lodge and meeting space will provide increased sustainability to Gulf State Park and will demonstrate the ability of a high quality product to increase tourism to the state and local region.

Our assumptions and conclusions are based on a development scenario that the components originally anticipated as detailed in this report will be completed on a timely basis in conjunction with the development of the lodge and meeting facilities.

SCOPE OF THE ASSIGNMENT

The following analyses and projections were completed as part of this assignment. Based on our projections and estimates, while there may be demand for a larger facility in the future for the proposed Gulf State Park Lodge and Meeting Facilities, we recommend the development of a 350 room Lodge with 40,000 square feet of meeting space and the completion of the other components of the redevelopment effort as identified in this report.

- Plans and components of the park project were reviewed along with the potential for the transient demand for the proposed lodge.
- A review of the potential for association, small group and conference demand for the local market and the proposed lodge was completed.
- An estimate of demand based on an anticipated penetration of the transient and group markets for this type of property was prepared. These estimates are stated in room nights occupied and occupancy percentages for the first five years of operation for the project.

- Estimates were prepared of the anticipated average daily room rate in current value and inflated dollars for the first five years of operation for the proposed project. Actual room rates achieved at comparable hotels and hotels in the local market area were reviewed and analyzed as criteria for preparing our estimated average daily room rates for the subject property.
- A five year projection of operating results was prepared for the proposed hotel utilizing the anticipated average rates and occupancies projected for the subject property. Actual operating results achieved at comparable hotels, data from STR's 2014 Host Report, and comparable data from other similar hotels were utilized as bases for our projection of operating results for the proposed hotel. These projections include all revenues and expenses applicable and resulted in a "bottom line" of income before rent, depreciation, interest and taxes on income.

The following report summarizes the results of our research, analysis, conclusions and recommendations.

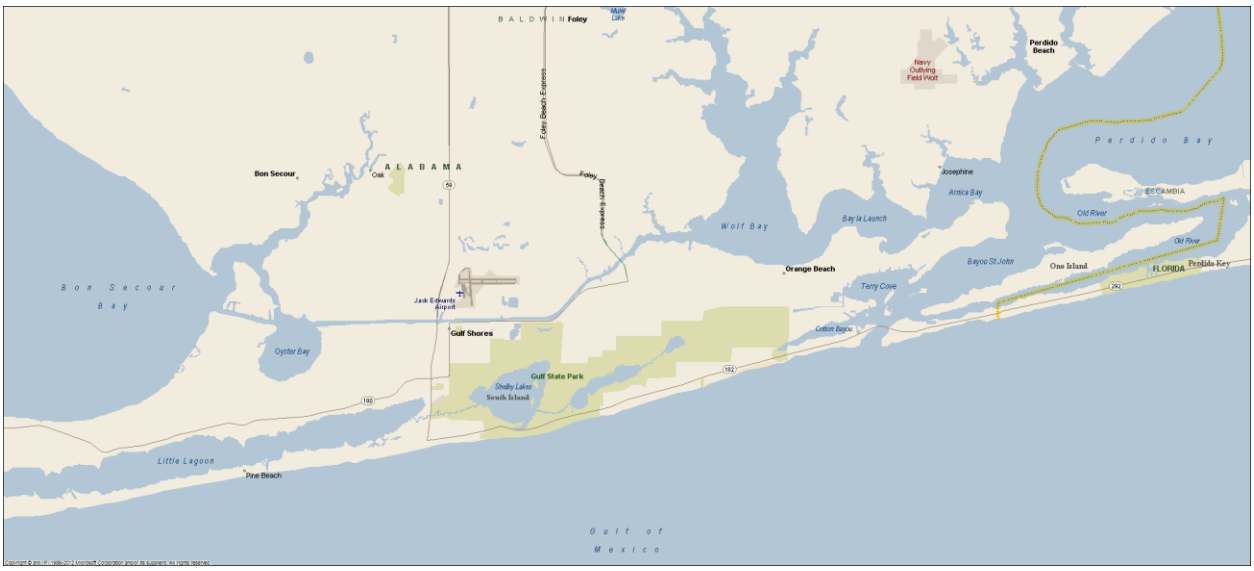
EXECUTIVE SUMMARY

The demand for overnight lodging accommodations along the Gulf Coast has increased over the past several years as a result of the continued interest in this area as a vacation destination and the increased development of facilities catering to travelers visiting the area. This area serves as a primary vacation destination and offers easy and convenient access to a majority of the southeastern United States. The area is primarily a drive in market for a population within a 400 to 500 mile arc of the coast.

The number of condominium developments has increased over the past ten years as more people have become interested in owning a vacation destination on the beach. A majority of these facilities have been placed in rental pools and the individual units have been rented on a short term basis to visitors seeking overnight accommodations in the market. In many cases, these units have replaced the typical hotel in accommodating this type of demand. As a result, there has been limited interest in developing new hotels in the area. In the Gulf Shores market area, hotels and motels account for about 17 percent of the total rooms available while condominiums represent the remaining 83 percent. Condominium units placed in rental pools typically require minimum stays, which can make them somewhat undesirable for certain visitors to the market.

The following maps illustrate the location of Gulf Shores and the proposed lodge within the larger market area and the local market:

General Location



Local Market Area

Assumptions

This report assumes the following conditions for this facility:

- ❑ Estimated opening date will be November 2018
- ❑ Development activity currently planned in the market area will proceed on a timely basis
- ❑ Current economic recovery will continue through the projection period

Recommendations

Based on our experience and research, we recommend the following facility components:

- The property should contain 350 guest rooms and suites.
- The proposed property should contain a mix of meeting space totaling 40,000 square feet.
- The development should include a signature restaurant in the hotel.
- Outdoor recreation facilities should include a variety of amenities that allow for different types of visitor experiences.
- A professional management company experienced in beachfront and ecotourism based resort management should manage the property.
- The property should be positioned where the brand for Gulf State Park Lodge is backed by a strong reservation system such as Marriott, Hilton, Starwood or Hyatt. This is similar to other quality lodges in Alabama such as the Renaissance Birmingham Ross Bridge Golf Resort and Spa.
- The proposed property should be a quality full service facility that increases public awareness and access to the state park and beach by complementing tourism trail such as the Robert Trent Jones Golf Trail.
- All phases of the proposed development should occur as planned.

Advantages

The subject property should have the following advantages:

- Proximity to the beach at Gulf State Park (only development on Park's beaches) and public area amenities
- Direct access to the interpretive trails of Gulf State Park
- Potential for ecotourism experiences inside Gulf State Park
- Proximity to the proposed Interpretive Center and Research and Education facilities in Gulf State Park
- Majority of the rooms should have a southern facing view of the Gulf
- High quality meeting and banquet facilities and services
- Variety of amenities, services and features offered at the facility
- Good visibility and easy access along the beachfront
- Hotel should be part of a regional lodge community that will utilize the hotel services and provide revenues beyond the limits of the hotel.
- Proximity to other amenities located within the Gulf State Park
- Established market recognition and customer data base due to the operation of the Gulf State Park
- Within one day's driving distance of over 25 million people
- Convenient access to area transportation routes

- Benefit from the influence of a national brand name in accommodating transient and group demand in the Gulf Shores and Orange Beach market

Disadvantages

The subject property will have the following disadvantages:

- Regional characteristics of potential group meeting demand/primary dependence on regional demand
- Variations with seasonality of leisure demand in the Gulf Shores market
- Lack of significant commercial demand base in the market
- Currently a significant portion of the demand for lodging is a "drive-in market", which might distract from off season fly-in convention business
- Large number of condominiums units available for transient demand in the market

Projections

Based on our analysis, we believe the development of the proposed lodge should be capable of achieving the following estimated operating performance during the first five full years of operation:

GULF STATE PARK
PROPOSED 350 ROOM LODGE
PROJECTED FINANCIAL PERFORMANCE

Year	Occupancy	ADR	Total Revenue	Cash Flow
2019 Projected	64%	$191.00	$29,667,092	$5,775,896
2020 Projected	65%	$197.00	$31,056,979	$5,847,857
2021 Projected	67%	$203.00	$32,980,659	$5,972,847
2022 Projected	68%	$209.00	$34,469,277	$6,288,281
2023 Projected	68%	$215.50	$35,523,335	$6,487,718

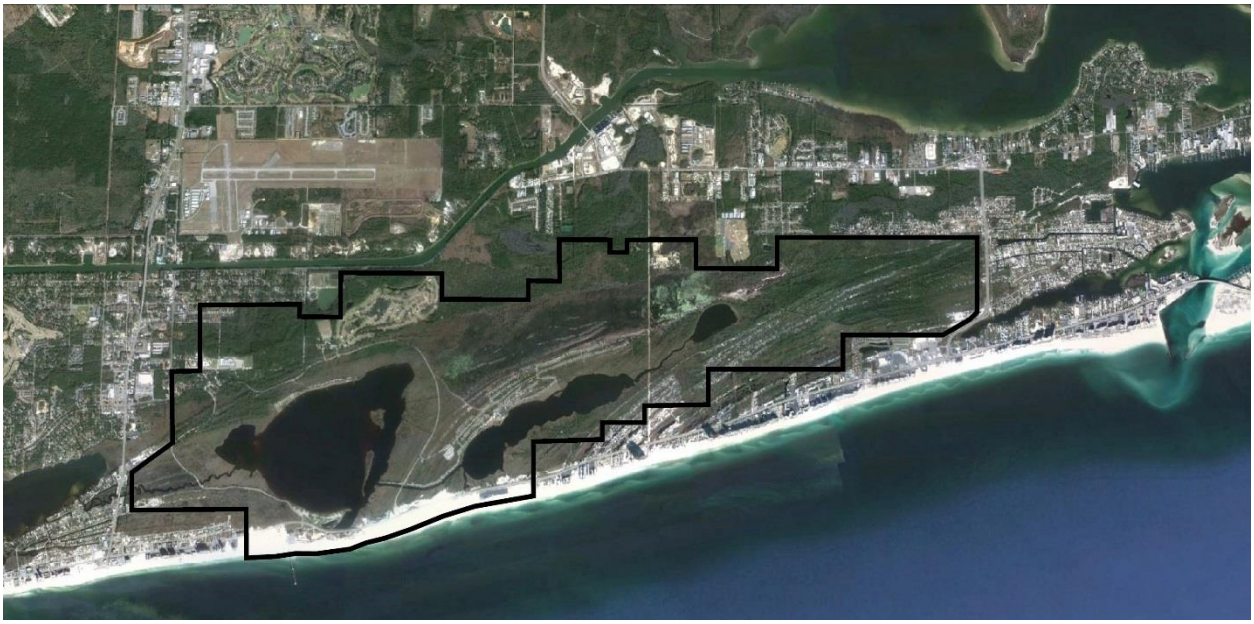
Source: Pinkowski & Company

DESCRIPTION OF PROPERTY

The proposed lodge and meeting facilities will be situated on 10 acres of a 21.6 acre tract located within the Gulf State Park. The property will be located on the south side of Highway 182, facing the Gulf of Mexico, on the site of the former 144 room hotel that was previously operated within the park.

The following aerial photos show the location of the former hotel at Gulf State Park, just east of the Gulf State Park Pier. The proposed hotel will be located on the same site.

The following aerial photo illustrates the boundaries of the park and its location along the Gulf of Mexico:



Gulf State Park preserves more than 6,000 acres of coastal scenery and wild habitat on the historic Alabama Gulf Coast. Adjoining the cities of Orange Beach and Gulf Shores, the park features spectacular views of natural lakes, preserved wilderness areas, and white sand beaches along the Gulf of Mexico. The beaches attract hundreds of shore birds, and alligators are abundant in the park's lakes and wetlands.

Gulf State Park's greatest asset is its white sand beaches. A total of 3.5 miles of beach in Orange Beach and Gulf Shores includes a remarkable 2 miles of contiguous, undeveloped beach in the main park area. Gulf State Park has been a popular family destination for many years. Visitors make use of the modern campground for RV's and tents, rental cottages, and nature trails, plus fresh and saltwater fishing and swimming. There are 496 campsites within the park's 11.5 square miles, all have electrical, water and sewage hookups. The park also includes an 18 hole golf course that is open seven days a week and includes a pro shop and snack bar.

The park draws a diverse population of visitors each year to walk, bike, surf, jog, bird watch, and enjoy the stunning natural setting. The park is an important part of Alabama's future as it will draw new tourists to the area and will represent a major redevelopment of existing facilities increasing the economic impact on the region.

Amenities are an important part of the multi-faceted destination Gulf State Park provides visitors to the area. Multiple amenities include natural features such as lakes, the beach and forests. In addition, man-made enhancements include the following:

1. Interactive Nature Center – the Gulf State Park Nature Center is a living museum of plants and animals that are native to the Gulf Coast region.

2. Campgrounds – Gulf State Park offers 496 site improved campgrounds with 11 modern bathhouses. The campground offers pull-thru sites, back-in sites, water front campsites and ADA accessible sites.

3. Pool and tennis court – a 5,000 square foot pool and children's splash pad, as well as numerous tennis courts, are located adjacent to the campgrounds.

4. Beaches – Gulf State Park has a total of 3.5 miles of beaches available in both Gulf Shores and Orange Beach. The main area within Gulf State Park is a contiguous two mile stretch accessed from the Beach Pavilion area.

5. Gulf State Park Pier – Gulf State Park's Pier opened July 23, 2009. The pier is the largest pier on the Gulf of Mexico at 1,540 feet long and 41,800 square feet. The pier features an indoor seating area, indoor retail as well as comfort stations at the midpoint of the pier. The pier has 2,448 feet of fishing space along the rails.

6. 18 hole Refuge Golf Course – The Gulf State Park Golf Course has been one of coastal Alabama's most popular attractions.

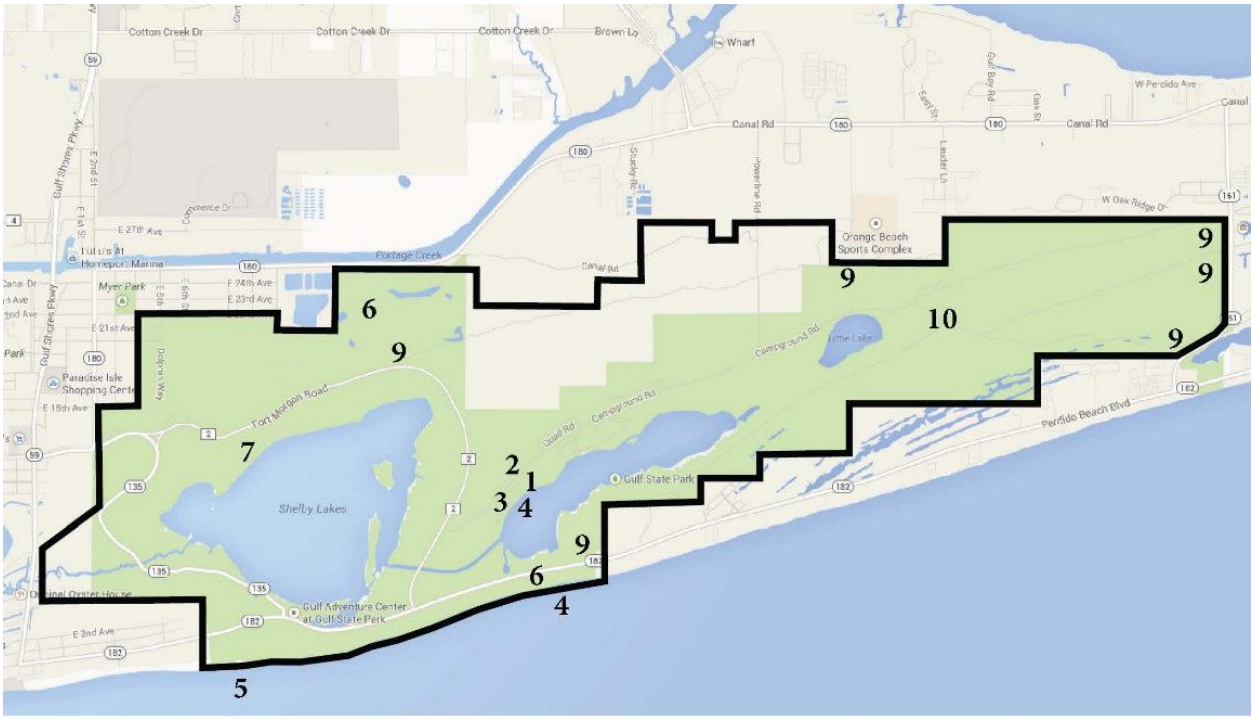
7. Cabins and Cottages – The park offers 11 cottages and 20 cabins. All cottages contain three bedrooms, three bathrooms two screened porches and a deck that overlooks Lake Shelby. These cottages are within walking distance of Gulf State Park Golf Course and two and a half miles from the snow white beaches. The 20 cabins offer one, two and three bedroom configurations and are located along Lake Shelby.

8. Freshwater Lakes – Lake Shelby, Middle Lake and Little Lake offer additional diversity in the park including swimming, fishing and other water recreational activities to park guests. The park also offers a covered pavilion for park guest gatherings on Lake Shelby.

9. Back Country Trails – The Hugh S. Branyon Backcountry Trails offer a variety of ways to experience the park from a pedestrian perspective that provide a unique view of its natural beauty. There are a total of 7.8 miles of trails within the park.

10. Bouldering Park, Pavilion and Butterfly Garden – A bouldering park, picnic pavilion, flower garden and restrooms are located at major trail intersections for visitors' use and enjoyment.

The following map illustrates the location of each of these features within the Gulf State Park:



A key part of the redevelopment effort at the park will be the addition of the Interpretive Center. Designed for educational purposes and with its high visibility due to its location next to Perdido Highway, this building will become the defining element of Gulf State Park for many visitors. The goal of this facility is to highlight the beauty and bountiful nature of Gulf State Park. Another role of the center will be to act as a stimulator of greater recreational use with the Park. The proposed facility will include:

- ❑ 3,500 square foot exhibit hall
- ❑ 2,000 square foot auditorium
- ❑ Interpretive dune walk
- ❑ Offices
- ❑ Conference room
- ❑ Interpretive kiosks
- ❑ Gift shop
- ❑ Parking

The proposed Interpretive Center will be an additional source of demand for the proposed hotel and meeting facilities as a result of its ability to attract new visitors to the area for tours, meetings and educational events.

Proposed Facilities

Based on our research and analysis and the guidelines outlined by State of Alabama Department of Conservation and Natural Resources, we recommend a 350 room lodge that includes the following mix of guest rooms and suites:

GULF STATE PARK
PROPOSED 350 ROOM LODGE
ROOM CONFIGURATION

Room Type	Number of rooms
King	120
Double/Queen	100
Extended Double/Queen	100
Suites	30
Total	350

Source: Pinkowski & Company

The standard guest rooms (king and double queen) should be 350 square feet, the extended double queen should be 400 square feet and suite rooms should be 700 square feet. The extended double queen room should be designed to accommodate families with features including expanded sleeping options such as bunk beds.

The guest rooms should feature a design that offers optimum guest comfort and reflects the product typically associated with a full service hotel. All rooms should be furnished with either a king bed or two queen beds, and should provide a distinctive feel with a welcome element of functionality. All room furnishings and finishes are to be well appointed, but with family friendly character and durability. The building's exterior, commons areas, meeting rooms, corridors and ground layout also should be in keeping with the high standards as established for every aspect of the development.

All guest rooms should include appropriate work space with excellent lighting, an ergonomically designed chair, multi-line telephone, high speed internet access, data ports and voice mail. Surge-suppressant electrical and high speed internet access outlets should be placed at desk level for convenience. All accommodations should contain an iron, ironing board, clock radio with audio input options, hairdryer, coffeemaker, 42" or larger LCD/flat screen television, cable television, mini bar and digital video on command system. All facilities, services and amenities should conform to recognized standards for a nationally branded hotel of this caliber and price range.

The proposed facility should be the cornerstone of the Gulf State Park and should reflect the character of the area as well as offer visitors a unique facility symbolizing the park.

The proposed hotel should be a unique facility in the Gulf Shores market because of its proximity to the inland park and associated ecotourism opportunities that caters to both transient and group demand. Our recommendation is that the lodge should have the following general facilities and services:

- Multi story structure, 350 guest rooms and suites, most with views of the Gulf of Mexico or views of the park
- Featured rooms with pristine gulf views
- Connection to the Gulf State Park interpretive trails
- Access to the Interpretive Center
- Programs associated with the Research and Education Center
- Signature restaurant
- Lobby bar with services to a roof-top observation area
- Group meeting space
- Access to the white sandy beach of the Gulf of Mexico
- Full service spa
- Fully-equipped fitness center
- Boutique specialty retail shop
- Access to the Gulf State Park golf course
- Shuttle services throughout the park
- Fully stocked mini refreshment center
- One day pressing and laundry service
- Bath amenities
- Multiple newspapers
- In-room magazines and reading material

Food and beverage facilities at the property should include:

- Full service three meal per day restaurant with 200 seats plus an outdoor deck
- Specialty restaurant with 100 seats
- Lounge with 100 seats
- Lobby bar with 50 seats
- Outdoor food and beverage facilities in a pavilion at the outdoor pool

Based on our research and analysis, there may be additional market demand for larger meeting facilities in the future. However for the proposed Gulf State Park Lodge and Meeting Facilities, we recommend 40,000 square feet of meeting and banquet space to include:

- Ballroom 10,000 square feet

- Junior Ballroom 6,000 square feet
- Meeting Rooms 13,500 square feet
- Boardroom 1,500 square feet (Boardroom and ante room)
- Prefunction 9,000 square feet

In addition, a covered Outdoor Pavilion of approximately 4,000 square feet should be considered for this location. This multipurpose space would augment the existing function space and allow for a variety of outdoor functions utilizing its beachfront location.

This function space should have features including:

- Ample storage space
- Variety of breakout rooms/sizes and configurations
- Latest high tech equipment and features

Other amenities at the hotel should include an outdoor pool area that would include multiple pools, lazy river water feature, tropical pool deck with ample seating area, outdoor pavilion, easy beach access, beach chair and umbrellas, and bike rentals.

AREA REVIEW

Gulf Shores, Alabama is located along the Gulf of Mexico in rapidly growing Baldwin County, Alabama. Traditionally regarded as tourist communities, Gulf Shores and Orange Beach have grown dramatically as more people have made these cities a permanent home. The natural amenities of the area have made it particularly attractive to retirees from throughout the United States. The area's population tends to fluctuate as "snowbirds" (northern resident retirees) spend winter months in the area. The area is a popular vacation spot, within a day's drive from a large geographic population. The beach and mild climate attracts visitors on a year round basis with visitation peaking during the spring and summer months.

Gulf Shores, Fort Morgan and Orange Beach form the Gulf Coast area of Baldwin County in the southwest portion of Alabama bordering the Gulf of Mexico. The rapidly growing area attracts residents, visitors and retirees with its beautiful beaches, mild climate and boundless business opportunities.

Tourism plays a major role in the local economies of Gulf Shores and Orange Beach. The 2010 BP oil spill severely affected both local real estate and beach tourism. Over the years, hurricanes have had a major impact in the trends in tourism along the Gulf Coast. These tropical storms are unpredictable and can cause major disruptions in the local tourist economy in the area. The location of Gulf State Park on the northern coast of the Gulf of Mexico makes it vulnerable to hurricanes. In September 1979, Hurricane Fredric leveled

most of the area. In September 2004, Hurricane Ivan caused extensive wind and flood damage. In 2005, while still cleaning up from Hurricane Ivan, Hurricane Katrina caused extensive damage and flooding at the Park.

Gulf Shores and Orange Beach are located at the southernmost tip of Alabama between Mobile, Alabama and Pensacola, Florida. The area is easily accessible from Interstates 65 and 10 in addition to US Highway 59 and the Beach Express (a limited access highway paralleling US 59). Their geographic borders include the Intracoastal Waterway to the north, the Gulf of Mexico to the south, Mobile Bay to the west and Perdido Bay to the east. Ocean fishing, beaches, boating cruises and especially golf are the major draws for the area. According to the 2013 Baldwin County Economic *Impact of Tourism* people visited the area and left behind $3.2 billion in travel related expenditures. Approximately 45,000 people were employed in travel related jobs and collect about $1.1 billion in wages. During 2013, Baldwin County generated the largest portion (28 percent) of the state of Alabama's lodging revenues with more than $16.3 million in lodging tax collections.

The city of Gulf Shores recently developed a strategic plan to focus the growth and design of the future of Gulf Shores. The "Small Town, Big Beach Vision 2025 for Sustainability" helps define the future for Gulf Shores by identifying strategies that will help the community become more sustainable. The five key components of the plan include:

- Action 1: Medical – provide direct access to quality wellness services and emergency care to citizens and visitors
- Action 2 : Education – Exposure to advanced levels of education and curriculum to support sustainable economic development
- Action 3: Gulf State Park Restoration – Enhancement of Gulf State Park to foster a synergistic and sustainable relationship between the park's habitats, ecology and economy
- Action 4:Waterway District – Create a vibrant waterway district with a unique sense of community and place that engages citizens and guests in an enriched experience of the local landscape, economy and culture
- Action 5: Gulf Beach District – Construction of a walkable, energetic beachfront district to attract tourism, stimulate local business and encourage business and residential relocation

Typically visitors drive to the area. Access to Gulf Shores and the coastal area of Alabama is facilitated by Interstates 10 and 65 as well as US 31, US 90, US 98 and State Highway 59. The local airport can accommodate charter and private aircraft, including jets; however, most visitors who choose to fly to the area arrive via Mobile Regional Airport or Pensacola Regional Airport both of which are located about 45 minutes away.

Visitors to the area generally come from within a 500 mile arc of the Gulf of Mexico. The following list includes cities where visitors to the area generally originate:

- Atlanta Georgia 349 miles
- Huntsville, Alabama 377 miles
- Memphis, Tennessee 487 miles
- Montgomery, Alabama 188 miles
- New Orleans, Louisiana 190 miles
- Nashville, Tennessee 467 miles
- Baton Rouge, Louisiana 246 miles
- Shreveport, Louisiana 450 miles
- Birmingham, Alabama 274 miles

Although the market is primarily a drive in market, the Orange Beach and Gulf Shores market is served by two primary airports – Pensacola International Airport and Mobile Regional Airport. The Pensacola International Airport is located east of Gulf State Park in Pensacola, Florida. The facility is the largest airport between New Orleans and Jacksonville and serves approximately 1 million passengers a year. The Mobile Regional Airport is located northwest of the Park near Pascagoula, Mississippi.

The area was a sleepy, rural beach just 25 years ago. Inland Baldwin County still contains rural farmland but in the past 15 years development in Gulf Shores and Orange Beach has changed the face of these two towns with the addition of thousands of condominiums, restaurants, and shops attracting millions of visitor each year. In addition, Foley, located approximately ten miles north of Gulf Shores has attracted millions of visitors and developed into a destination of its own because of the off-price mall, Tanger Outlet Mall. Hotels and restaurants have been developed to accommodate the increasing number of tourists who take advantage of the retail opportunities in Foley.

Baldwin County is the largest county in geographic area within the state of Alabama. The county lies between the two large Metropolitan areas of Mobile, Alabama and Pensacola, Florida. The area's population increased from 98,280 in 1990 to 184,375 in 2010. Gulf Shores had a population of 10,909 in 2013 and is expected to grow to 11,647 by 2018. The Gulf Shores labor force of 5,606 (2013) is projected to increase to 5,999 by 2018.

The Baldwin County economy is heavily service oriented, with service industries providing over 80 percent of all jobs in the market. The county's economy showed moderate growth between 2005 and 2011 as a result of the economic recession, hurricane and oil spill, with stronger growth during 2012, 2013 and 2014, resulting from the national economic recovery. The key employments statistics for the nation, state and county are summarized in the following table:

EMPLOYMENT STATISTICS

	Labor Force			Employment			Unemployment Rate		
	U.S.	Alabama	Baldwin County	U.S.	Alabama	Baldwin County	U.S.	Alabama	Baldwin County
YTD 6/2014	155,694,000	2,139,767	88,749	146,221,000	1,994,899	83,671	6.1%	6.8%	5.7%
YTD 6/2013	155,822,000	2,138,058	87,131	144,075,000	1,999,144	82,325	7.7%	6.5%	5.5%
2012	154,975,000	2,156,301	83,743	142,469,000	1,999,182	78,077	8.1%	7.3%	6.8%
2011	153,617,000	2,181,859	84,132	139,869,000	1,992,522	77,419	8.9%	8.7%	8.0%

Source: Alabama Dept of Labor

The following table is a listing of the largest employers in Baldwin County:

BALDWIN COUNTY, ALABAMA
MAJOR EMPLOYERS

Company	Product / Service	# of Employees
Tanger Outlet Center	Retail Groceries	1,500
South Baldwin Regional Medical Center	Healthcare	680
Brett Robinson	Real Estate Rentals	550
Columbia Southern University	Education	394
Perdido Beach Resort	Hotel	300
Walmart	Retail	241
Meyer Real Estate	Real Estate Rentals	235
Riviera Utilities	Utilities	223
City of Gulf Shores	Government	210
City of Orange Beach	Government	203
The Beach Club	Hotel	200
Baldwin EMC	Utilities	193

Source: alagulfcoastchamber.com

The following table contains a breakdown of employment by segment for Gulf shores as of the end of 2013:

EMPLOYMENT DISTRIBUTION
GULF SHORES, ALABAMA

Sector	2013 Total	2013 % of Total
Agriculture, Forestry, Fishing	73	0.9%
Mining	5	0.1%
Construction	446	5.2%
Manufacturing	117	1.4%
Transportation and Communications	344	4.0%
Wholesale Trade	38	0.4%
Retail Trade	3,045	35.7%
Finance, Insurance and Real Estate	1,628	19.1%
Services	2,398	28.1%
Public Administration	393	4.6%
Unclassified	32	0.4%
Total	8,519	100.0%

Source: Baldwin Economic Development Alliance

As detailed in the previous table, the employment in Gulf Shores mirrors that of Baldwin County with the largest employment sector being Retail Trade. The next largest employment sector is Services followed by Finance, Insurance and Real Estate.

The retail trade sector was the leading employer in Baldwin County with almost 20 percent of the total employment in the county. The next largest employment sectors in Baldwin County are Accommodations and Food Services with about 16 percent, Health Care and Social Assistance with almost 13 percent and Educational Services with about 10 percent.

According to tourism officials in Gulf Shores and Orange Beach, the market continues to grow as evidenced by the increase in taxable retail sales over the past several years. Between 2011 and 2013, retail sales have increased 15.1 percent. Year to date through the end of June 2014, retail sales have increased 4.8 percent over the same period in 2013. The following table details the breakdown of retail sales in Gulf Shores and Orange Beach for the period 2011 through June 2014:

GULF SHORES & ORANGE BEACH, ALABAMA
TAXABLE RETAIL SALES

	2011	Change	2012	Change	2013	Change	2014	Change
Dec	$27,566,472	10.0%	$30,192,550	9.5%	$32,095,319	6.3%	$34,463,776	7.4%
Jan	$25,179,841	7.2%	$27,715,128	10.1%	$30,901,670	11.5%	$36,026,977	16.6%
Feb	$32,756,282	16.9%	$38,133,707	16.4%	$38,055,063	-0.2%	$38,727,002	1.8%
Winter	$85,502,594	11.7%	$96,041,385	12.3%	$101,052,052	5.2%	$109,217,756	8.1%
Mar	$47,807,156	4.9%	$58,330,470	22.0%	$62,429,644	7.0%	$64,039,560	2.6%
Apr	$56,077,401	17.0%	$59,009,954	5.2%	$52,238,272	-11.5%	$63,479,809	21.5%
May	$60,016,048	17.1%	$64,165,585	6.9%	$71,773,719	11.9%	$63,280,609	-11.8%
Spring	$163,900,605	13.2%	$181,506,009	10.7%	$186,441,636	2.7%	$190,799,977	2.3%
Jun	$80,351,885	36.4%	$85,203,703	6.0%	$90,162,725	5.8%	$100,473,137	11.4%
Jul	$92,395,371	58.9%	$94,592,888	2.4%	$104,948,300	10.9%	$0	0.0%
Aug	$56,867,219	46.7%	$60,424,925	6.3%	$68,884,138	14.0%	$0	0.0%
Summer	$229,614,474	47.4%	$240,221,516	4.6%	$263,995,164	9.9%	$100,473,137	11.4%
Sep	$37,989,336	7.0%	$42,383,299	11.6%	$45,305,873	6.9%	$0	0.0%
Oct	$39,137,939	8.0%	$41,039,946	4.9%	$48,567,491	18.3%	$0	0.0%
Nov	$30,171,825	12.2%	$31,044,239	2.9%	$29,491,246	-5.0%	$0	0.0%
Fall	$107,299,099	8.8%	$114,467,483	6.7%	$123,364,611	7.8%	$0	0.0%
Total	$586,316,773	23.2%	$632,236,392	7.8%	$674,853,463	6.7%	$400,490,871	6.0%

Source: Gulf Shores & Orange Beach Tourism

The Gulf Shores and Orange Beach market draws visitors from across the southeastern United States. The following table identifies the top feeder markets by season for the period Fall 2012 through Summer 2013:

2012-2013 VISITOR PROFILE
TOP U.S. FEEDER MARKETS

Fall 2012 Core Market Origin		Winter 2013 Core Market Origin		Spring 2013 Core Market Origin		Summer 2013 Core Market Origin	
Market	%	Market	%	Market	%	Market	%
Birmingham	17.3%	Birmingham	17.6%	Birmingham	13.8%	Birmingham	13.5%
Huntsville/Decatur	9.2%	Mobile	8.4%	Mobile	8.4%	New Orleans	8.4%
Mobile	6.3%	Huntsville/Decatur	5.4%	Huntsville/Decatur	8.1%	Huntsville/Decatur	7.9%
Nashville	5.7%	New Orleans	5.0%	New Orleans	5.6%	Mobile	6.1%
New Orleans	4.6%	Montgomery/Selma	4.3%	Nashville	5.5%	Atlanta	4.4%
Montgomery/Selma	4.2%	Atlanta	3.8%	Montgomery/Selma	4.5%	Nashville	4.3%
Memphis	4.1%	Baton Rouge	3.6%	Atlanta	4.2%	Baton Rouge	4.2%
Atlana	4.0%	Jackson, MS	3.4%	Tuscaloosa	3.9%	Memphis	4.0%
Jackson, MS	3.3%	Nashville	2.8%	Baton Rouge	3.5%	Montgomery/Selma	3.6%
Baton Rouge	3.1%	Tuscaloosa	2.2%	Jackson, MS	3.2%	Tuscaloosa	3.2%
Louisville	3.1%	Memphis	2.2%	Memphis	3.2%	Columbus, GA	3.2%

Source: Alabama Gulf Coast Convention & Visitors Bureau

The south Alabama gulf coast market is primarily a drive in market with a majority of the area's visitors coming from within a day's drive of the coast. As illustrated above, Alabama residents are the largest single source of visitors to the area, accounting for between 34 and 39 percent of the visitors over the period from Fall 2012 to Summer 2013.

During the 2012 to 2013 period, over 1.5 million visitors to the area spent over $725 million. The following table summarizes the visitor expenditures for the period Fall 2012 through Summer 2013:

2012-2103 VISITOR PROFILE
VISITORS/EXPENDITURES

	# Visitors	Expenditures
Fall 2012	287,300	$116,566,200
Winter 2012	266,700	$122,562,000
Spring 2013	302,900	$143,235,400
Summer 2013	655,200	$343,056,200
Annual 2012-2013	1,512,100	$725,419,800

Source: Alabama Gulf Coast Convention & Visitors Bureau

In addition to tourism, sporting events generate a lot of activity in the local market area. This crucial niche market hosted 93 events in 2013 and generated almost 72,000 room nights during 2013. The following table summarizes the number of sporting events, room nights generated and visitor spending for the period 2007 through 2013:

GULF SHORES & ORANGE BEACH, ALABAMA SPORTING EVENTS							
	2007	2008	2009	2010	2011	2012	2013
# Events	27	28	51	68	69	88	93
Room Nights	11,961	10,081	23,193	38,142	48,655	64,076	71,931
Visitor Spending (million)	$3.4	$3.0	$7.6	$12.8	$16.3	$22.4	$27.9
Source: GulfShores OrangeBeachSports.com							

Although the area currently lacks a substantial amount of meeting space, group activity represents a portion of the local market that has an impact on the local lodging market. A total of 223 events in 2013 reflects a five percent increase over 2012 and generated 54,509 room nights in the local market area according to the Gulf Shores & Orange Beach Sports Commission.

The market benefits from a variety of tourist and leisure attractions in the area which are centered around the Gulf beaches. The peak season for tourism in the area is from June through August. During other times of the year, demand is comprised of travelers seeking a weekend getaway, winter long visitors (snowbirds) and other similar weekend demand generators. Primary attractions in the area include:

- ❑ Gulf Beaches — Coast
- ❑ Gulf fishing — Coast
- ❑ Gulf State Park — Gulf Shores
- ❑ Bon Secour National Wildlife Refuge — Gulf Shores
- ❑ Alabama Gulf Coast Zoo — Gulf Shores
- ❑ Fort Morgan Historic Site — Gulf Shores
- ❑ Peninsula Golf and Racquet Club — Gulf Shores
- ❑ Kiva Dunes Golf Club — Gulf Shores
- ❑ Gulf State Park Golf Course — Gulf Shores
- ❑ Waterville USA — Gulf Shores
- ❑ Meaher State Park — Spanish Fort
- ❑ Gulf Islands National Seashore — Coast

Conclusions

The Baldwin County and Gulf Shores market area benefits from its proximity on the Gulf of Mexico. The growth in the local economy resulting from job growth, economic diversity, business expansion, the increase in the residential base and the strength of the local, regional and national economies will continue to have a positive impact on the local lodging market. While there is a certain level of unsatisfied lodging demand along the coast in the local market area during the peak demand periods, the development of a lodge and meeting facility within the Gulf State Park will stimulate lodging demand previously unable to take advantage of the unique characteristics of the area due to the

lack of quality hotel accommodations offering a substantial amount of meeting space in the immediate market area. The growth of the area resulting from the additional new commercial, residential and retail developments over the past several years will be a positive factor in supporting the hospitality industry in the area.

LODGING SUPPLY AND DEMAND

National Performance

According to Smith Travel Research (STR), the U.S. lodging market has experienced a 1.6 percent increase in occupancy, a 3.9 percent increase in average rate and an 5.4 percent increase in RevPAR in 2013 compared to the same period in 2012. During this period, room supply has increased 0.7 percent while room demand is up 2.2 percent. Room occupancy for the U.S. lodging market for the full year was up to 62.3 percent compared to 61.3 percent in 2012, while average daily rates were $110.35 compared to $106.25 in 2012. Based on initial projections, 2014 should be a good year, barring any unforeseen circumstances.

Year to date through the end of August 2014, average daily rates increased 4.4 percent to $115.25 while occupancies were up 3.4 percent to 66.0 percent. Room supply increased 0.8 percent while room demand was up 4.3 percent during the first eight months of 2014.

The national RevPAR data showed a significant drop in 2001 followed by a continued drop in 2002 as a result of the economic slowdown and the terrorist attacks of September 11, 2001. The lodging industry began a turnaround in late 2003 although the annual increase that year was only 0.3 percent. Strong RevPAR growth was experienced in 2004 and 2005. While the growth for 2006 was strong, it was below the growth rate of 2005. This same case was true for 2007 when RevPAR growth was 5.7 percent compared to 2006 RevPAR growth of 7.6 percent. Beginning in late 2007, the combination of the home mortgage financial problems and the rapidly rising cost of fuel impacted the lodging market in 2008 with RevPAR dropping 1.7 percent. The national lodging market experienced a tremendous drop in RevPAR (-16.7 percent) as a result of large declines in occupancy and average rate.

It should be noted that these data reflect the national lodging market taken as a whole, and there are considerable differences from market to market. The following table shows data for the U.S. lodging industry on an annualized basis from 1993 through July 2014:

U. S. LODGING INDUSTRY
ANNUALIZED DATA
1993-2014

	Occupancy	Average Daily Rate	RevPAR	RevPAR % Change
YTD 8/2014	66.0%	$115.25	$76.03	8.0%
YTD 8/2013	63.8%	$110.36	$70.40	
2013	62.3%	$110.35	$68.69	5.4%
2012	61.3%	$106.25	$65.15	6.8%
2011	59.9%	$101.85	$61.02	8.0%
2010	57.6%	$98.08	$56.50	5.2%
2009	55.1%	$97.51	$53.71	-16.7%
2008	60.3%	$106.96	$64.49	-1.7%
2007	63.1%	$104.04	$65.61	6.3%
2006	63.4%	$97.31	$61.69	7.6%
2005	63.1%	$90.95	$57.39	8.4%
2004	61.3%	$86.26	$52.88	7.8%
2003	59.1%	$83.19	$49.20	0.3%
2002	59.0%	$83.19	$49.04	-2.6%
2001	59.8%	$84.45	$50.52	-7.1%
2000	63.5%	$85.24	$54.13	5.5%
1999	63.1%	$81.29	$51.29	2.7%
1998	63.9%	$78.15	$49.94	5.3%
1997	64.5%	$73.52	$47.42	3.8%
1996	65.7%	$69.56	$45.70	4.2%
1995	65.1%	$67.34	$43.84	5.5%
1994	64.7%	$64.24	$41.56	7.0%
1993	63.7%	$60.99	$38.85	-

Source: Pinkowski & Company; STR

A review of the performance by segment within the lodging industry provided by STR reveals that the upscale segment experienced similar increases in occupancy, average rate and RevPAR during the year when compared to the total U.S. market. This segment also experienced larger increases in supply while demand was slightly lower when compared to the total U.S. market. The following table illustrates the percentage change for the upper upscale chain segment and the upper upscale price category compared to the total U.S. for year end the year to date period August 2014 vs. August 2013:

PERFORMANCE BY INDUSTRY SEGMENT
% CHANGE AUGUST 2014 VS AUGUST 2013

	ADR	Occupancy	RevPAR	% Change Revenue	% Change Room Available	% Change Room Sold
Total United States	$115.25	66.0%	$76.03	8.9%	0.8%	4.3%
Segment						
Chain Scale						
Upper Upscale	$167.44	75.2%	$125.93	8.9%	1.5%	3.8%
Price						
Upper Upscale	$166.00	73.6%	$122.11	8.1%	0.9%	3.5%

Source: STR; Pinkowski & Company

As illustrated in the previous table, the upper upscale chain and price category segments have experienced significant increases in revenue accompanied by limited increases in the available room supply.

A breakdown of the current active hotel development pipeline for the U.S. by chain scale is presented in the following table. The increases in all phases of the development pipeline illustrated in the following table show a reversal in the recent trend in the level of development activity. While existing supply increased 0.7 percent between July 2013 and July 2014, the number of rooms "in construction" are up 43.5 percent and the "total active pipeline" is up 12.3 percent over the prior period. While the percentage increase in the number of rooms under construction is high, the actual increase in supply represents a 2.2 percent of the existing supply. At the present time, the actual number of rooms being added is considerably less than during the last major supply expansion that occurred between 2007 and 2010.

U.S. PIPELINE BY CHAIN SCALE
NUMBER OF ROOMS & PERCENTAGE CHANGE
JULY 2014 VERSUS JULY 2013

Chain Scale	Existing Supply	% Change	In Construction	% Change	Total Active Pipeline	% Change
Luxury	107,603	0.8%	3,572	-23.8%	7,260	-5.1%
Upper Upscale	565,420	1.5%	10,596	47.6%	28,094	26.9%
Upscale	621,416	3.3%	42,014	53.1%	104,047	10.8%
Middle Upscale	870,567	-0.2%	31,034	42.0%	114,277	17.8%
Midscale	483,881	1.0%	5,007	46.5%	24,849	7.6%
Economy	770,448	0.0%	1,053	7.7%	4,525	4.5%
Unaffiliated	1,542,323	0.4%	15,259	51.9%	105,307	7.7%
Total	4,961,658	0.7%	108,535	43.5%	388,359	12.3%

Source: STR

The forecasted performance of the national lodging market for 2011 through 2018 is summarized in the following table. These projections are based on historical performance combined with projected supply increases and economic projections complied by STR and PKF Hospitality Research.

NATIONAL FORECAST SUMMARY
U.S. LODGING MARKET

Year	Occ.	ADR	RevPAR
2011(1)	59.9%	$101.92	$61.01
2012(1)	61.3%	$106.16	$65.06
2013(1)	62.2%	$110.33	$68.59
2014	64..4%	$115.27	$74.22
2015	65.0%	$121.84	$79.16
2016	64.9%	$129.03	$83.74
2017	64.3%	$135.99	$57.38
2018	63.0%	$141.57	$87.24

(1) Historical

Source: PKF Hospitality Research; STR; P&C

The national lodging market is projected to experience an increase of 8.5 percent in occupancy between 2011 and 2015 before declining slightly in 2016, 2017 and 2018. Average rates are forecasted to increase 38.9 percent increase between 2011 and 2018.

As illustrated in the following table, the upper upscale hotel market average rate is forecasted to increase 39.5 percent between 2011 and 2018 while the occupancy is expected to increase 6.9 percent by 2015 before dropping in 2016, 2017 and 2018.

NATIONAL FORECAST SUMMARY UPPER UPSCALE HOTELS			
Year	Occ.	ADR	RevPAR
2011	69.3%	$148.05	$102.61
2012	70.9%	$154.41	$109.42
2013	71.9%	$160.98	$115.81
2014	73.5%	$168.89	$124.17
2015	73.8%	$179.17	$132.19
2016	73.4%	$190.33	$139.67
2017	72.7%	$200.10	$145.41
2018	71.4%	$206.47	$147.36
Source: PKF Hospitality Research; STR; P&C			

Resort hotels are forecasted to show increases in occupancy through 2015 before dropping in 2016, 2017 and 2018. Average rates are forecasted to increase 40.1 percent.

NATIONAL FORECAST SUMMARY RESORT HOTELS			
Year	Occ.	ADR	RevPAR
2011	61.9%	$135.86	$84.07
2012	63.2%	$142.10	$89.79
2013	64.1%	$150.09	$96.14
2014	66.5%	$158.15	$105.11
2015	66.7%	$168.23	$112.23
2016	65.9%	$177.45	$116.98
2017	64.6%	$185.34	$119.80
2018	62.9%	$190.40	$119.68
Source: PKF Hospitality Research; STR; P&C			

The demand for lodging accommodations in the U.S. continues to increase at a rapid pace. According to STR, lodging demand increased 4.1 percent during the first half of 2014. By year end 2014, PKF is forecasting an annual demand growth rate of 4.5 percent. Concurrent with the increase in occupancy will be a projected 4.5 percent increase in average rate, which results in a RevPAR increase of 8.2 percent for 2014, the strongest annual RevPAR increase since 2005.

Gulf Shores and Orange Beach Lodging Market

According to STR, the south Alabama Gulf Coast market contains 165 hotels with 12,455 rooms as of July 2014. The Orange Beach/Gulf Shores market area contains a total of 18

hotels with 2,307 rooms as of July 2014. These properties include typical limited service and full service hotels as well as a variety of condominium and time share developments that contribute to the STR data base.

According to the Gulf Shores and Orange Beach tourism officials, there are a variety of facilities that cater to visitors seeking overnight lodging accommodations in the market area. The following table summarizes the accommodations inventory in the market as of June 2014:

GULF SHORES & ORANGE BEACH, ALABAMA ACCOMMODATIONS INVENTORY

	Units		
	Existing	Proposed	Total
Gulf Shores			
Condos	4,519	0	4,519
Hotels	941	89	1,030
Total	5,460	89	5,549
Orange Beach			
Condos	8,466	97	8,563
Hotels	1,162	63	1,225
Total	9,628	160	9,788
Ft Morgan			
Condos	1,582	0	1,582
Hotels	0	0	0
Total	1,582	0	1,582
Alabama Gulf Coast			
Condos	14,567	97	14,664
Hotels	2,103	152	2,255
Total	16,670	249	16,919

Source: Gulf Shores & Orange Beach Tourism

The variation in the number of hotel rooms is due to differences in the sources of the data in the previous table.

As illustrated in the previous table, there are considerably more condominiums providing lodging accommodations in the market when compared to hotels, with 12,985 condominium units compared to 2,103 hotel rooms in Orange Beach and Gulf Shores.

The following table summarize the monthly performance of hotels for the period 2011 through July 2014:

GULF SHORES & ORANGE BEACH, ALABAMA
HOTEL PERFORMANCE SUMMARY

	Occupancy				ADR				RevPAR			
	2011	2012	2013	2014	2011	2012	2013	2014	2011	2012	2013	2014
Dec	17.4%	16.8%	18.5%	22.0%	$84.16	$86.14	$93.98	$89.27	$14.62	$14.44	$17.40	$19.68
Jan	23.3%	20.2%	23.5%	24.3%	$73.65	$70.15	$82.82	$80.82	$17.18	$14.17	$19.50	$19.63
Feb	41.6%	39.9%	42.6%	41.6%	$84.11	$83.40	$95.86	$93.80	$35.01	$33.29	$40.85	$39.06
Winter	26.4%	25.3%	27.7%	29.3%	$80.83	$80.42	$91.61	$88.83	$21.37	$20.35	$25.42	$25.99
Mar	59.9%	66.7%	64.0%	67.8%	$118.87	$131.93	$148.30	$143.16	$71.22	$88.01	$94.91	$97.09
Apr	67.7%	67.1%	58.2%	59.4%	$130.69	$146.93	$149.38	$153.50	$88.46	$98.58	$86.98	$91.22
May	65.3%	71.9%	74.1%	76.4%	$149.47	$151.62	$178.69	$181.45	$97.56	$109.06	$132.45	$138.68
Spring	64.3%	68.7%	65.5%	67.7%	$133.41	$144.35	$160.19	$159.85	$85.72	$99.19	$104.97	$108.23
Jun	83.3%	87.7%	89.7%	91.2%	$175.02	$194.42	$206.46	$212.09	$145.85	$170.46	$185.11	$193.40
Jul	92.1%	91.1%	91.1%	67.1%	$191.40	$212.65	$216.04	$234.43	$176.34	$193.69	$196.83	$227.75
Aug	59.8%	60.7%	701.0%	0.0%	$140.17	$165.57	$168.61	$0.00	$83.76	$100.54	$118.28	$0.00
Summer	78.4%	79.8%	83.6%	93.8%	$172.56	$194.04	$199.26	$222.29	$135.21	$154.76	$166.54	$208.55
Sep	50.0%	51.5%	59.4%	0.0%	$121.38	$127.04	$139.01	$0.00	$60.67	$65.39	$82.60	$0.00
Oct	49.9%	52.6%	55.0%	0.0%	$117.33	$124.91	$126.62	$0.00	$58.55	$65.69	$69.69	$0.00
Nov	23.9%	33.3%	33.5%	0.0%	$94.74	$100.56	$99.72	$0.00	$22.67	$33.52	$33.41	$0.00
Fall	41.7%	45.2%	49.4%	0.0%	$114.97	$118.93	$125.52	$0.00	$47.97	$53.80	$61.98	$0.00
Total	53.3%	57.1%	56.7%	59.4%	$138.53	$153.04	$158.90	$169.87	$73.87	$87.33	$90.15	$100.90

Source: Gulf Shores & Orange Beach Tourism

The performance of the local lodging market in Gulf Shores and Orange Beach reflects the seasonality of the market, the type of facilities available and the type of demand captured. Between 2011 and 2013, occupancy and average rates have increased reflecting the improving national economy and the continuing increase in popularity of the local market as a destination. The level of occupancy achieved reflects the seasonal nature of the tourist demand in the area and the lack of available meeting space to help boost occupancy during the traditionally slow off season. Average rates have continued to increase at a strong pace reflecting the strength of the demand during peak demand periods.

The performance of the area's condominium market is reflected in the following table:

GULF SHORES & ORANGE BEACH, ALABAMA
COMDOMINIUM PERFORMANCE SUMMARY

	Occupancy				ADR				RevPAR			
	2011	2012	2013	2014	2011	2012	2013	2014	2011	2012	2013	2014
Dec	14.9%	10.4%	12.3%	16.1%	$63.66	$74.98	$84.46	$59.65	$9.51	$7.78	$10.35	$9.61
Jan	43.8%	34.7%	37.2%	45.6%	$43.64	$48.40	$48.49	$45.21	$19.12	$16.78	$18.06	$20.61
Feb	58.2%	63.2%	54.8%	66.6%	$53.11	$54.46	$56.06	$55.23	$30.91	$34.43	$30.74	$36.81
Winter	38.7%	34.4%	34.7%	42.0%	$50.94	$54.86	$56.65	$52.15	$19.73	$18.90	$19.69	$21.92
Mar	45.8%	52.5%	59.4%	53.9%	$111.16	$117.84	$140.74	$126.92	$50.86	$61.88	$83.63	$68.46
Apr	36.5%	31.4%	28.1%	34.2%	$145.65	$175.77	$167.57	$166.42	$53.12	$55.23	$47.12	$56.97
May	45.8%	43.2%	43.7%	47.4%	$182.12	$226.96	$224.99	$222.04	$83.40	$97.95	$98.34	$105.26
Spring	42.7%	42.3%	43.3%	45.3%	$147.27	$168.90	$174.50	$171.07	$62.88	$71.47	$75.56	$77.46
Jun	73.1%	76.3%	77.0%	74.2%	$239.88	$259.51	$280.27	$299.57	$175.30	$198.04	$215.69	$222.36
Jul	87.8%	82.6%	81.4%	89.8%	$253.52	$284.95	$319.36	$303.56	$222.64	$235.37	$259.96	$272.45
Aug	48.4%	46.8%	55.9%	0.0%	$175.43	$193.83	$204.46	$0.00	$84.85	$90.65	$114.32	$0.00
Summer	70.5%	68.5%	71.4%	82.1%	$231.92	$254.78	$275.47	$301.79	$163.42	$174.56	$196.75	$247.79
Sep	32.5%	30.8%	35.1%	0.0%	$132.84	$134.38	$139.92	$0.00	$43.22	$41.45	$49.10	$0.00
Oct	31.5%	26.4%	31.3%	0.0%	$116.61	$122.67	$128.63	$0.00	$36.69	$32.50	$40.26	$0.00
Nov	15.9%	14.6%	19.2%	0.0%	$79.17	$102.82	$102.22	$0.00	$12.59	$14.96	$19.59	$0.00
Fall	26.3%	23.9%	28.4%	0.0%	$115.05	$123.64	$127.10	$0.00	$30.21	$29.61	$36.14	$0.00
Total	44.7%	42.7%	44.7%	53.6%	$158.47	$174.21	$184.31	$188.37	$70.85	$74.43	$82.35	$100.97

Source: Gulf Shores & Orange Beach Tourism

As illustrated in the previous tables, hotels achieve a higher annual occupancy rate while the condominiums achieve a higher average rate. The higher average rate is due to the larger average size of the units when compared to the typical hotel. The condominiums typically will have two or more bedrooms, full kitchens and extra living space.

Local Lodging Market

We have identified eleven hotels within the local lodging market that would give a representative sample of the market performance. All of these properties contribute to STR and that data provides the basis for our performance indicators included in this report.

The properties we have identified within the local market represent the major franchised properties within the entire local market area. Although these properties are representative of the quality and facilities offered in the local market, they do not represent the true level of competition for the proposed lodge. These properties include:

- Staybridge Suites Gulf Shores 88 rooms
- Holiday Inn Express & Suites Gulf Shores 89 rooms
- Days Inn Gulf Shores 54 rooms
- Microtel Inn & Suites Gulf Shores 125 rooms
- Courtyard Gulf Shores 90 rooms

- Travelodge Gulf Shores 49 rooms
- Hampton Inn & Suites Orange Beach 160 rooms
- Fairfield Inn & Suites Orange Beach 116 rooms
- Holiday Inn Express Orange Beach 119 rooms
- Hilton Garden Inn Orange Beach 137 rooms
- Sleep Inn Orange Beach 118 rooms

The properties identified above represent all of the nationally branded lodging facilities located in the area. The two largest hotels in the market area, the 348 room Perdido Beach Resort and the 311 room Beach Club do not contribute to STR and have not been included in the local market performance data.

The following map identifies the location of each of the comparable properties identified above:

The performance of the properties included in the select local lodging market varies depending of facilities offered, brand and sources of demand captured.

While these properties do not represent direct competition for the proposed lodge, they may compete with the subject property for a portion of demand captured by the proposed facility. The extent of the competition from these hotels will vary depending on season, type of demand and rates offered.

Only one hotel, the Perdido Beach Resort, has significant meeting space and would represent competition within the local market for group and meetings demand. This property opened in 1987 but its quality and appearance would not be comparable to the proposed facilities at Gulf State Park. The other hotels identified may compete to a lesser extent for leisure demand depending on rates offered and timing of the demand. None

of these hotels offer a similar type of facility or service that will be offered by the proposed hotel.

The following table contains the historical performance of the select local lodging market from 2008 through June 2014 per data provided by STR:

GULF SHORES, ALABAMA
PROPOSED 350 ROOM LODGE
LOCAL LODGING MARKET HISTORICAL PERFORMANCE

Year	Occupancy %	Average Rate	REVPAR	Daily Room Supply	Daily Room Demand	Daily Room Revenue
2013	60.0%	$137.15	$95.84	1,144	686	$94,132
2012	58.8%	$130.56	$93.04	1,144	673	$87,892
2011	59.1%	$118.81	$88.48	1,105	653	$77,587
2010	52.4%	$104.01	$92.39	984	516	$53,643
2009	47.1%	$115.20	$101.99	947	447	$51,447
2008	54.6%	$117.85	$106.16	701	383	$45,112
CAG	1.9%	3.1%	-2.0%	10.3%	12.4%	15.8%
YTD 6/30/2014	61.5%	$143.72	$88.39	1,145	704	$101,179
YTD 6/30/2013	60.9%	$139.55	$84.99	1,144	698	$97,406
Growth	1.0%	3.0%	4.0%	0.1%	0.9%	3.9%

CAG = Compound Annual Growth

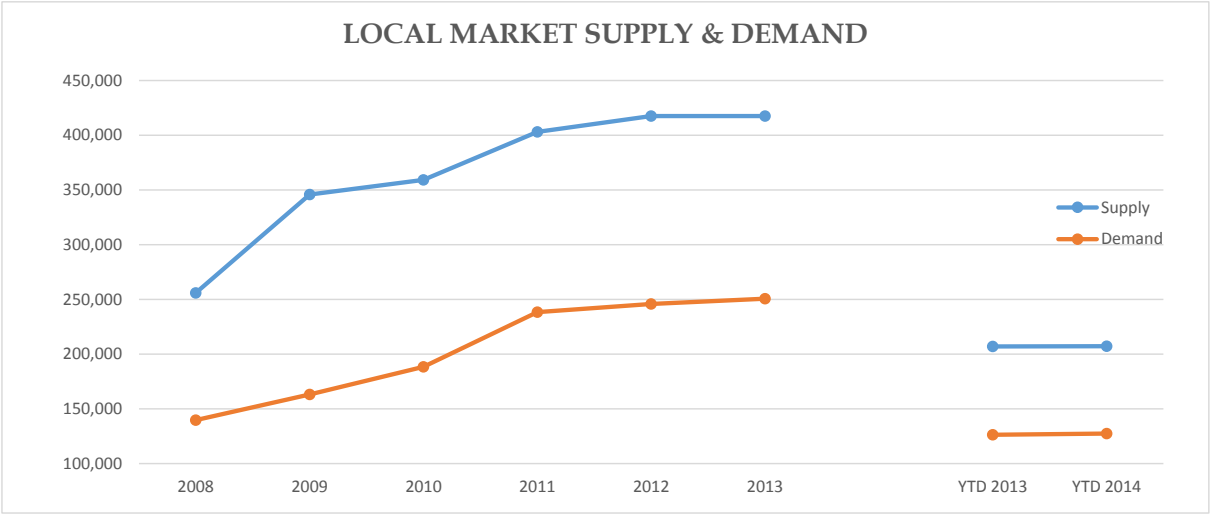
Source: STR, Pinkowski & Company

The performance of the select local lodging market was impacted by the economic slowdown in 2008 and the resulting drop in travel activity during the second half of the year. This slowdown continued into early 2009 as leisure and group travel activity moderated from prior year levels. The local market was impacted by the Gulf oil spill in 2010, with overall market occupancies continuing to decline despite a strong recovery nationally. Average rates declined dramatically between 2008 and 2010.

The performance of the local lodging market showed a dramatic turnaround in 2011, 2012 and 2013. Occupancy increased 14.5 percent between 2010 and 2013 while average rate increased 31.9 percent during that same period.

Year to date through the end of June 2014, occupancy increased 1.0 percent while average rates increased 3.0 percent. Supply was up 0.1 percent while demand increased 0.9 percent.

The trend in rooms supply and demand for the period 2008 through June 2014 is illustrated in the following graph:



The performance of the local lodging market by day of the week is presented in the following table:

PROPOSED 350 ROOM HOTEL
LOCAL LODGING MARKET HISTORICAL PERFORMANCE
DAY OF WEEK COMPARISON

	Sun	Mon	Tue	Wed	Thu	Fri	Sat
Occ	49.9%	54.3%	56.9%	56.1%	59.4%	71.8%	73.5%
ADR	$132.65	$128.63	$127.58	$128.39	$133.33	$155.56	$158.03
RevPAR	$66.21	$69.90	$72.56	$72.00	$79.16	$111.68	$116.22

12 month average July 2013 to June 2014

Source: STR; Pinkowski & Company

As illustrated in the previous table, the highest occupancy levels occur on Friday and Saturday while the lowest occupancy occurs on Sunday. This trend in occupancy reflects the strong influence of tourist and leisure demand in the market. The trend in average rates also reflects the influence of the tourist and leisure demand with the highest average rates occurring during the weekend period.

The following table summarizes the weekday/weekend performance of the comparable market for the period 2008 through June 2014:

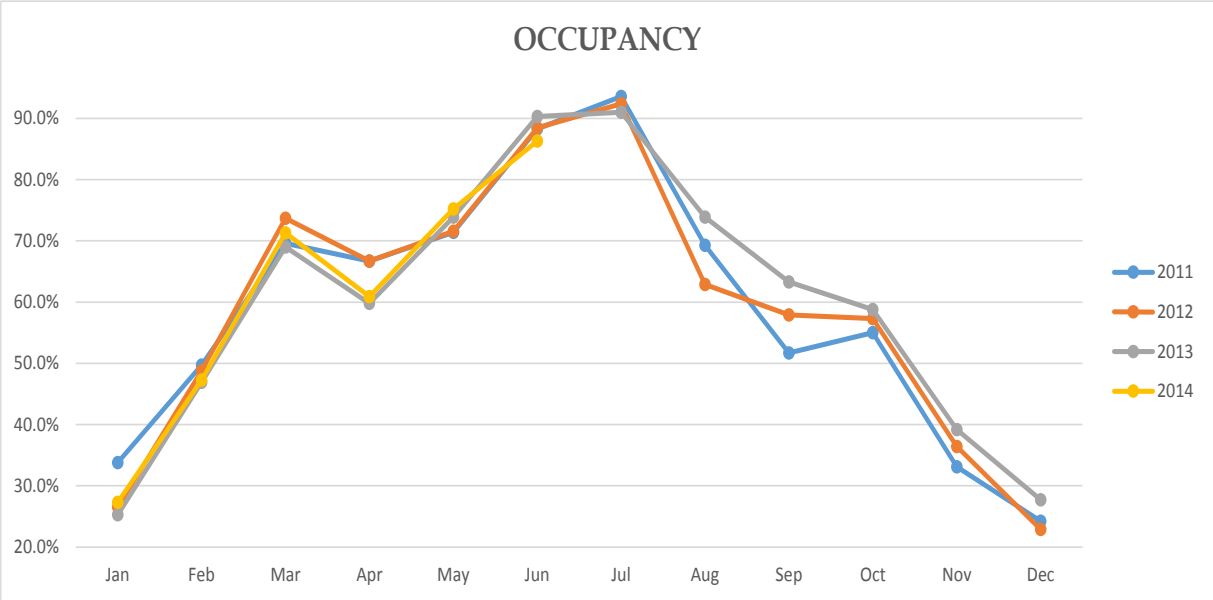
PROPOSED 350 ROOM HOTEL
LOCAL LODGING MARKET HISTORICAL PERFORMANCE
WEEKDAY / WEEKEND COMPARISON

	Weekday			Weekend		
Year	Occupancy	Average Rate	Revpar	Occupancy	Average Rate	Revpar
2013	55.0%	$128.37	$70.61	72.5%	$153.89	$111.59
2012	52.8%	$122.26	$64.60	74.0%	$145.49	$107.62
2011	53.8%	$111.74	$60.17	72.2%	$131.85	$95.16
2010	46.7%	$98.85	$46.18	66.5%	$112.99	$75.15
2009	41.4%	$107.21	$44.34	61.7%	$128.65	$79.37
2008	50.8%	$110.96	$56.34	64.3%	$131.58	$84.63
% Change	1.6%	3.0%	4.6%	2.4%	3.2%	5.7%
YTD 6/30/14	56.2%	$133.44	$74.99	74.6%	$162.95	$121.51
YTD 6/30/13	55.6%	$130.02	$72.26	74.3%	$157.26	$116.80
% Change	1.1%	2.6%	3.8%	0.4%	3.6%	4.0%

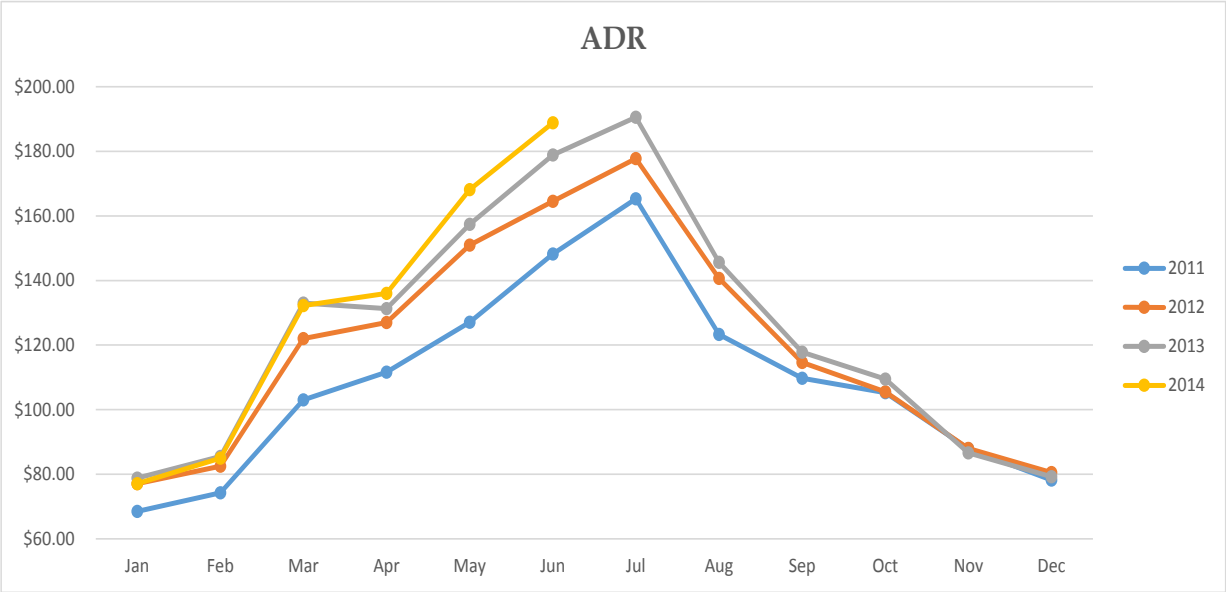
Source: STR; Pinkowski & Company

The change in the weekday/weekend performance of the local lodging market reflects the impact of tourist and leisure demand. The gap between weekend and weekday occupancy has widened over the past several years as the growth in weekend demand has outpaced the increase in weekday demand in the local market. Weekend average rates traditionally have been much higher than weekday rates and the gap has increased in recent years as have weekend occupancies have outpaced weekday performance.

The following graphs illustrate the trends and seasonality of the occupancy and average rate for the select local lodging market:

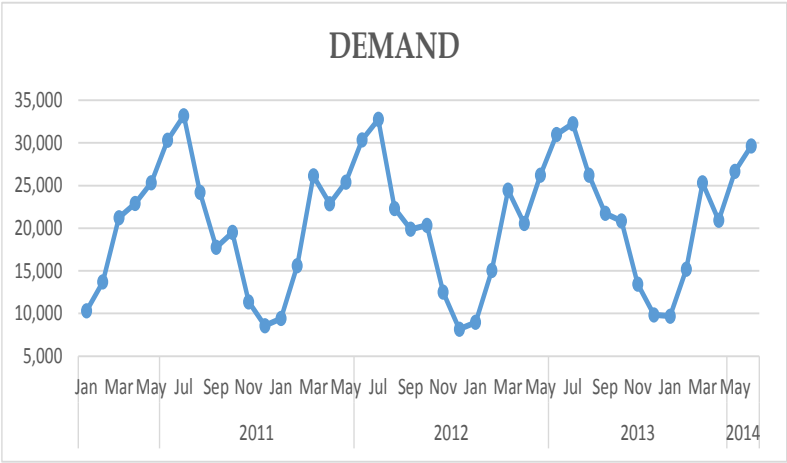


The previous graph illustrates the trend in occuancy within the select local lodging market for the period 2011 through June 2014. The market is highly seasonal with occupanies peaking in June and July. The weakest perfoming months are October through February. March, April, May and August also are relatively strong months in terms of occupancy levels achieved. Variations in monthly performance levels may be influenced by the timing of the school year and related vacations as well as major events such as hurricanes or tropical storms. As illustrated above, there is little variation in the trend from year to year.



As illustrated above, the market is highly seasonal with average rate peaking in June and July. Average rates tend to increase as occupancy levels improve and the rate trend mirrors the trend in occpancy within the market. Average rates are lowest between October and March, trending down from the peak summer travel period through the winter. As illustrated in the graph, average rates have continued to increase year over year with the largest increases occurirng during the peak summer months.

The trend in total demand by month is illustrated in the following table. Demand peaks during the summer months and is lowest during the November through February period. The seasonality of the demand in the local market has shown very little change over the last four years.



The monthly trend demonstrates an improvement and the current level of demand is nearly as high as any previous similar period. Each year follows a similar pattern, with the only exceptions occurring when the market is impacted by tropical storms and hurricanes that hit the Gulf during the year.

COMPARABLE SUPPLY AND DEMAND

We have identified a number of properties that would be considered comparable with the proposed lodge based on the facilities offered, achieved average rates, brand affiliation and the type of demand captured. These hotels represent the type of property and facilities that the proposed facility may compete with for a portion of the group and

leisure demand captured by the subject property. The following paragraphs and tables contain information relating to the performance of these properties.

The comparable supply for the proposed facility consists of a variety of properties located along the Gulf Coast and in the state of Alabama. Each of these properties could be competitive for a portion of the demand that could be captured by the proposed facility, but may not be directly competitive for, or comparable with each other or for all segments of the demand identified. These properties represent a sampling of the hotels that would be expected to compete for some of the same type and similar sources of demand that the proposed lodge is anticipated to capture. This demand may include group demand (which includes corporate group, association, local social), SMERF related demand utilizing meeting and banquet space, primarily local and regional in scope and leisure demand.

Comparable Supply

The hotels identified represent a small sampling of the hotels and locations that represent the total available national market for the proposed development. The hotels listed below provide a good indication of the type of properties, size, facilities and overall performance levels that are achievable.

The eleven properties identified as comparable for the proposed facility include:

GULF STATE PARK
COMPARABLE HOTELS

Hotel	# Rooms	Location	Year Open
Holiday Inn	340	Panama City, Fl	1990
Wyndham Bay Point	319	Panama City, Fl	1986
Crowne Plaza Grand	210	Pensacola, FL	1984
Hilton Sandestin	602	Sandestin, FL	1984
Holiday Inn Resort	206	Pensacola, FL	2011
Hilton Beachfront	275	Pensacola, FL	2003
Margaritaville Beach Resort	162	Pensacola, FL	2010
Renaissance Ross Bridge	259	Birmingham, AL	2005
Marriott Shoals	199	Florence, AL	2005
Renaissance	342	Montgomery, AL	2008
Marriott Grand	405	Point Clear, AL	1940
Total	3,319		

Source: STR

The properties identified above represent some of the hotels located along the Florida Gulf Coast and in Alabama most likely to be competitive for certain portions of demand that could be captured by the subject property. These properties also represent facilities

of similar size, amenities and type of destination when compared to the proposed Gulf State Park project.

The following map identifies the location of each of the comparable properties identified above:

The performance of the local properties (listed on pages 28-29) identified varies from the performance of these properties as a result of their locations, seasonality of demand at the individual property, facilities and services offered, brand affiliations, quality levels, pricing strategies and the type of demand captured.

The following table contains the historical performance of the local lodging market from 2008 through August 2014 per data provided STR:

GULF SHORES, ALABAMA
PROPOSED 350 ROOM LODGE
COMPARABLE LODGING MARKET HISTORICAL PERFORMANCE

Year	Occupancy %	Average Rate	REVPAR	Daily Room Supply	Daily Room Demand	Daily Room Revenue
2013	62.8%	$168.88	$95.84	3,315	2,082	$351,690
2012	62.2%	$164.68	$93.04	3,315	2,063	$339,701
2011	61.8%	$156.97	$88.48	3,295	2,037	$319,787
2010	59.5%	$149.42	$92.39	3,039	1,808	$270,142
2009	60.3%	$149.26	$101.99	2,944	1,777	$265,187
2008	61.4%	$157.98	$106.16	2,915	1,789	$282,553
CAG	0.5%	1.3%	-2.0%	2.6%	3.1%	4.5%
YTD 8/31/2014	68.9%	$188.78	$130.07	3,319	2,286	$431,551
YTD 8/31/2013	69.7%	$179.29	$124.97	3,315	2,312	$414,518
Growth	-1.1%	5.3%	4.1%	0.1%	-1.1%	4.1%

CAG = Compound Annual Growth

Source: STR, Pinkowski & Company

The performance of the comparable lodging market for the proposed lodge has fluctuated over the past several years and has experienced a drop in performance in 2009 into 2010 before improving in 2011 and 2012.

The performance of these properties is consistent with the trends for the lodging industry during this same time period. As a result of the economic slowdown, this segment of the lodging market has been impacted dramatically as travelers' perceptions have changed and the resort segment became somewhat "taboo" during 2008 and 2009. In addition, the negative publicity, the demonizing of luxury travel and meetings activity, and the negative connotations associated with corporate excess in terms of travel and meeting business severely impacted this segment of travel. During this period, several of the hotels also included in the comparable lodging market suffered from the impact of the Gulf oil spill in 2010.

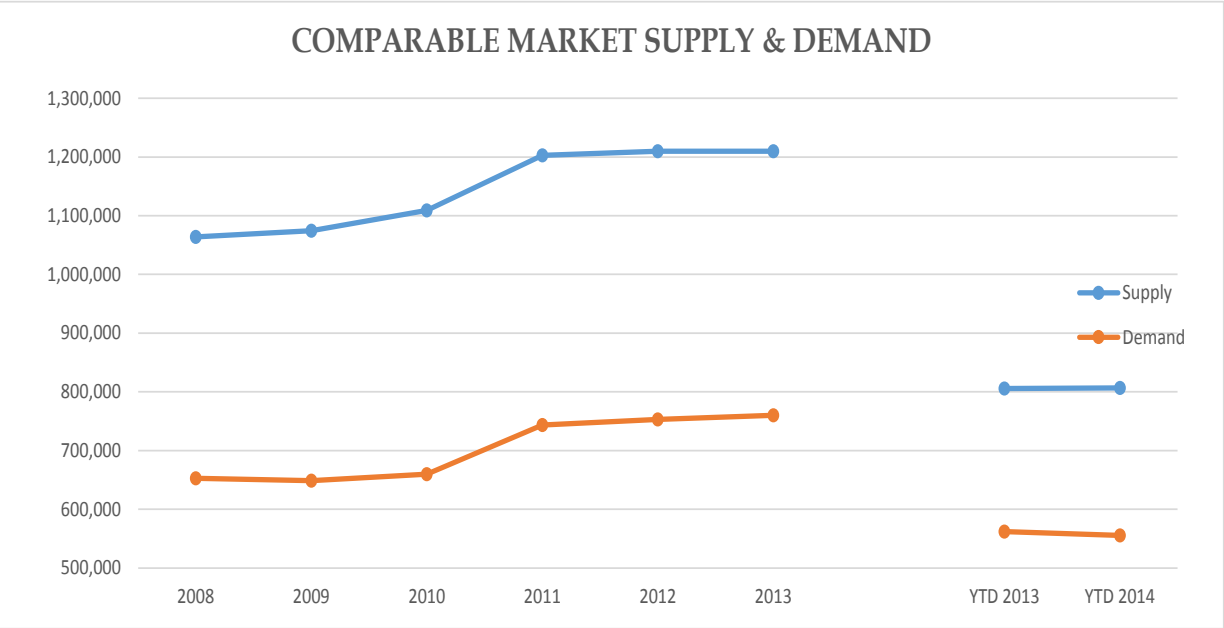
As evidenced by the improvement in the performance of this group of hotels, the recovery has continued in spite of the weaker performance that occurred in 2010 for several of these hotels. This drop in performance has proven temporary and travel patterns are returning to more normal levels as the economy continues to recover and the negative perception of the oil spill passes.

The market has experienced a 2.6 percent annual increase in supply between 2008 and 2013 with demand increasing 3.1 percent over the same period resulting in occupancy increasing from 61.4 percent in 2008 to 62.8 percent in 2013. Average rates have increased at a compound annual rate of 1.3 percent over the same period. The performance of this

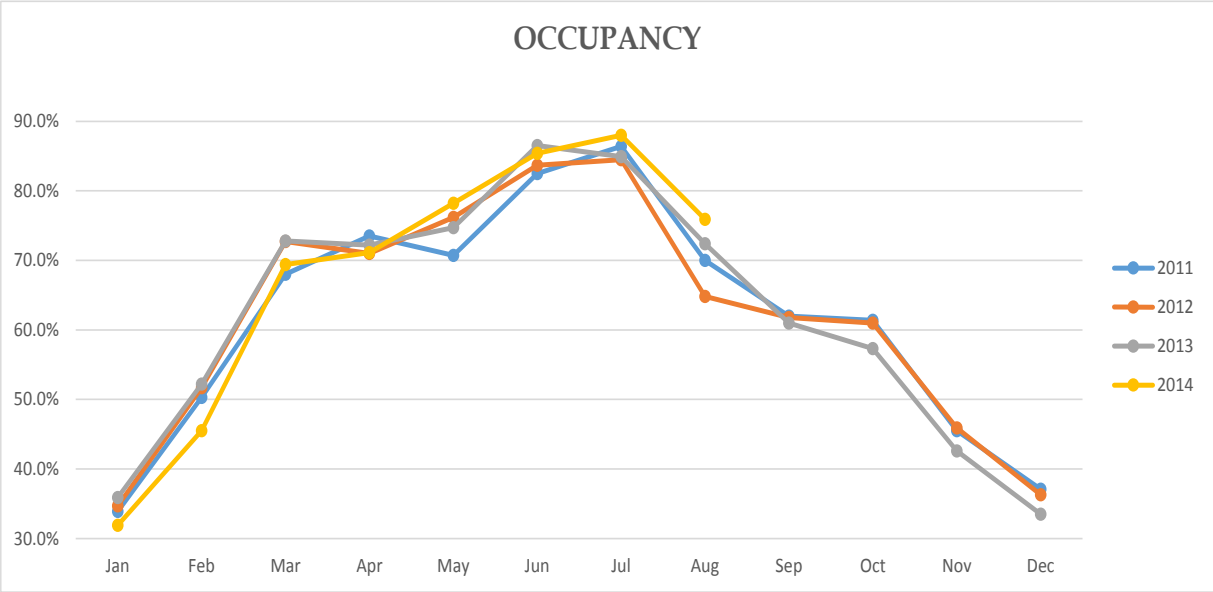
group of hotels has been impacted by the economic slowdown in late 2008 and the Gulf oil spill in 2010. Demand timing, changes in available room inventories and changes in travel patterns have impacted demand for these properties.

Year to date through August 2014, the performance of the comparable lodging market has seen occupancy drop slightly (down 1.1 percent) while average rates are up 5.3 percent and RevPAR is up 4.1 percent. Supply during the first eight months of 2014 was up 0.1 percent while demand is down 1.1 percent.

The following graph shows the trend in total room demand and supply for the comparable market for the period 2008 through August 2014:

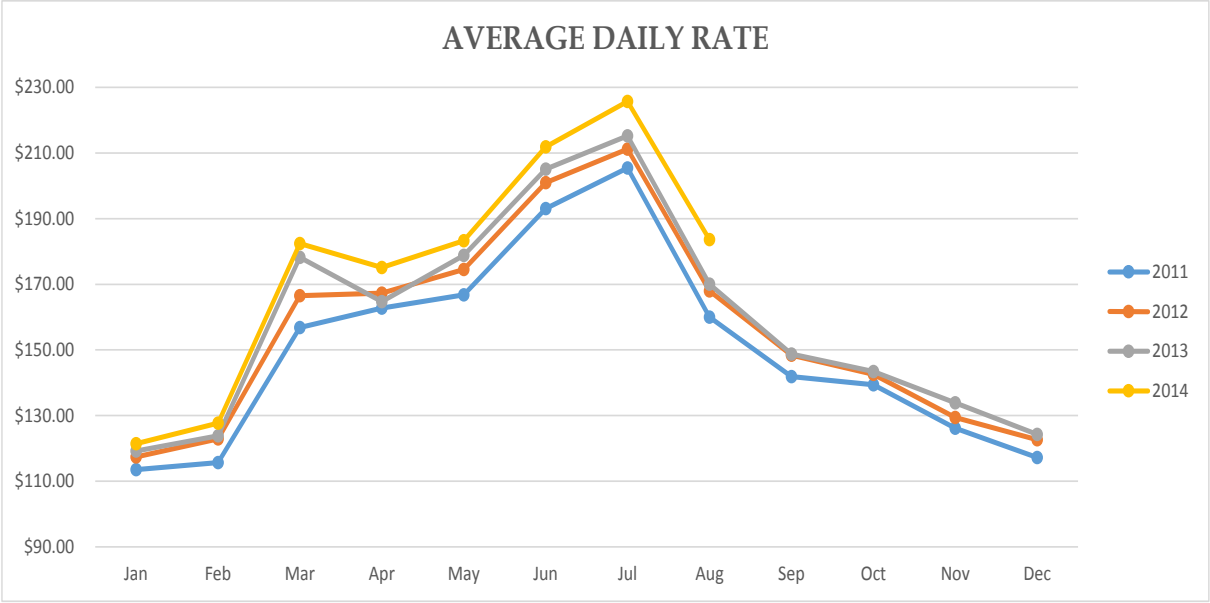


The data in the following graph illustrates the monthly occupancy trend for the comparable properties identified above for the period 2011 through August 2014. Monthly occupancy levels vary by season, with peak occupancies typically occurring between May and August. Occupancies are lowest in between November and February. This data reflects historical performance of the comparable properties and may not be indicative of the projected performance or trends for the proposed Gulf State Park Lodge property.



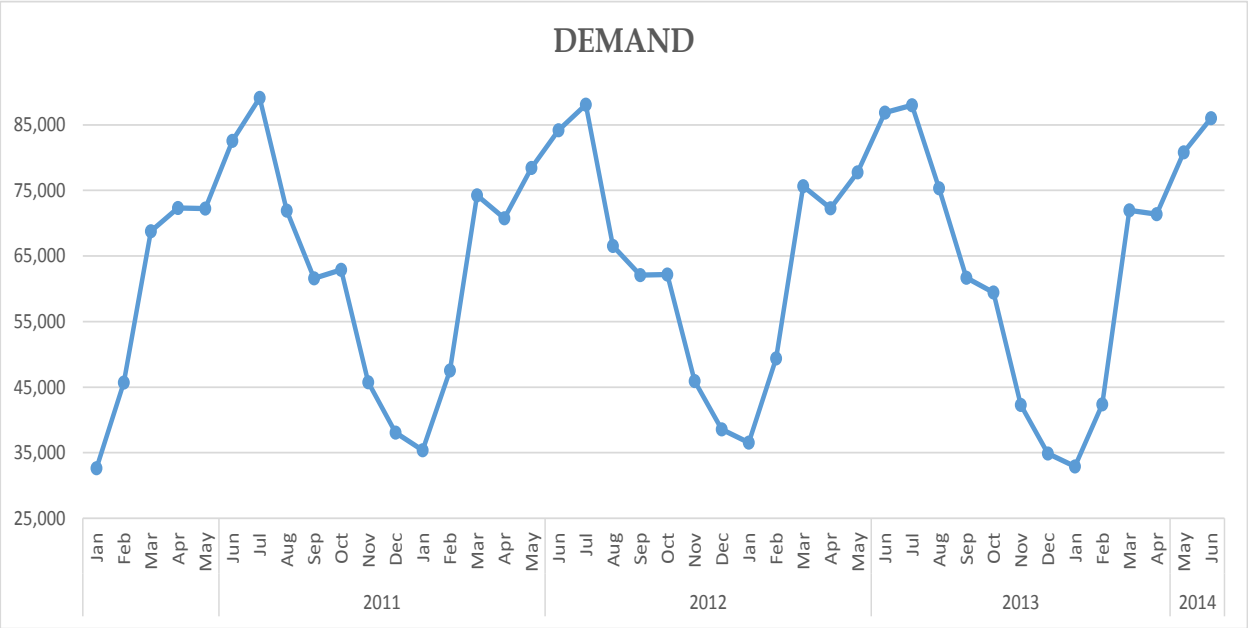
The occupancy trend illustrated above differs from the trend for the select local lodging market in Gulf Shores and Orange Beach. The two markets have different seasonal patterns due to the influence of the facilities in the comparable market that contain meeting and function space. The properties in the comparable lodging market achieve a higher occupancy and average rate as a result of the differences in facilities offered.

The data in the following table illustrates the monthly trend in average rates for the comparable properties for the period 2011 through August 2014. Average rates vary depending on season and trends in occupancy for the properties identified. Average rates have increased dramatically during this period while still following the same trend in performance. Rates also vary dramatically depending on the timing of demand.



This average rate trend differs from the trend for the select local market in Gulf Shores and Orange Beach. The highest and lowest average rate periods differ between the two markets reflecting the differences in demand timing, seasonality and type of demand captured. The average rates achieved by the comparable market are higher than the average rate achieved by the select local market in Gulf Shores and Orange Beach.

The following graph illustrates the monthly trend in actual room night demand for the comparable market. The peak travel period occurs between March and August with November through February typically being the slowest months for travelers. Room night demand peaked in 2007 with a total of 680,236 rooms occupied during the year.



The following table summarizes the breakdown of the performance of the comparable lodging market by day of the week:

PROPOSED 350 ROOM LODGE
COMPARABLE LODGING MARKET HISTORICAL PERFORMANCE
DAY OF WEEK COMPARISON

	Sun	Mon	Tue	Wed	Thu	Fri	Sat
Occ	49.7%	55.6%	61.2%	61.1%	62.6%	72.3%	73.5%
ADR	$176.77	$167.30	$165.85	$167.15	$175.25	$185.87	$187.54
RevPAR	$87.81	$93.07	$101.58	$102.09	$109.65	$134.44	$137.82

12 month average September 2013 to August 2014

Source: STR; Pinkowski & Company

Weekend occupancies and average rates are higher than weekday performance for the comparable properties identified in this report. The gap in the weekend versus weekday performance illustrates the strength of the weekend leisure demand.

The following table summarizes the weekday/weekend performance of the comparable market for the period 2006 through August 2014:

PROPOSED 350 ROOM LODGE
COMPARABLE LODGING MARKET HISTORICAL PERFORMANCE
WEEKDAY / WEEKEND COMPARISON

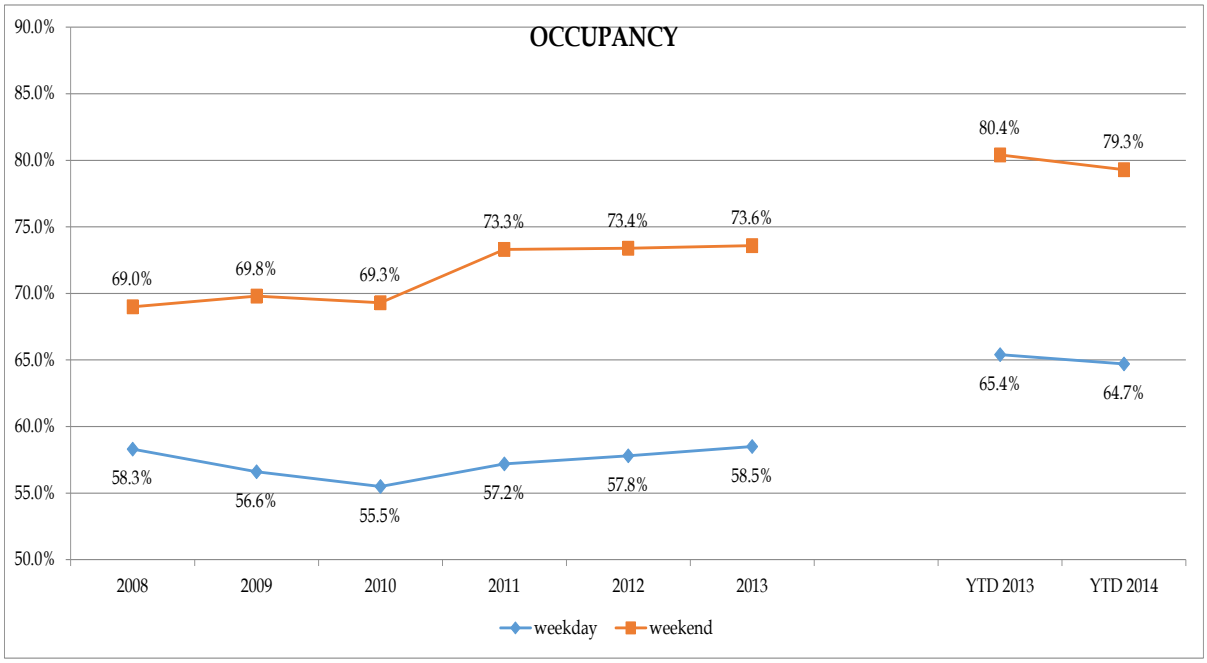
	Weekday			Weekend		
Year	Occupancy	Average Rate	Revpar	Occupancy	Average Rate	Revpar
2013	58.5%	$163.83	$95.86	73.6%	$178.95	$131.78
2012	57.8%	$159.73	$92.30	73.4%	$174.51	$128.12
2011	57.2%	$151.64	$86.70	73.3%	$167.26	$122.67
2010	55.5%	$144.68	$80.33	69.3%	$158.83	$110.12
2009	56.6%	$145.35	$82.27	69.8%	$157.23	$109.68
2008	58.3%	$153.32	$89.40	69.0%	$167.87	$115.88
% Change	0.1%	1.3%	1.4%	1.3%	1.3%	2.6%
YTD 8/31/14	64.7%	$182.40	$117.96	79.3%	$201.64	$159.88
YTD 8/31/13	65.4%	$173.53	$113.55	80.4%	$190.90	$153.43
% Change	-1.1%	5.1%	3.9%	-1.4%	5.6%	4.2%

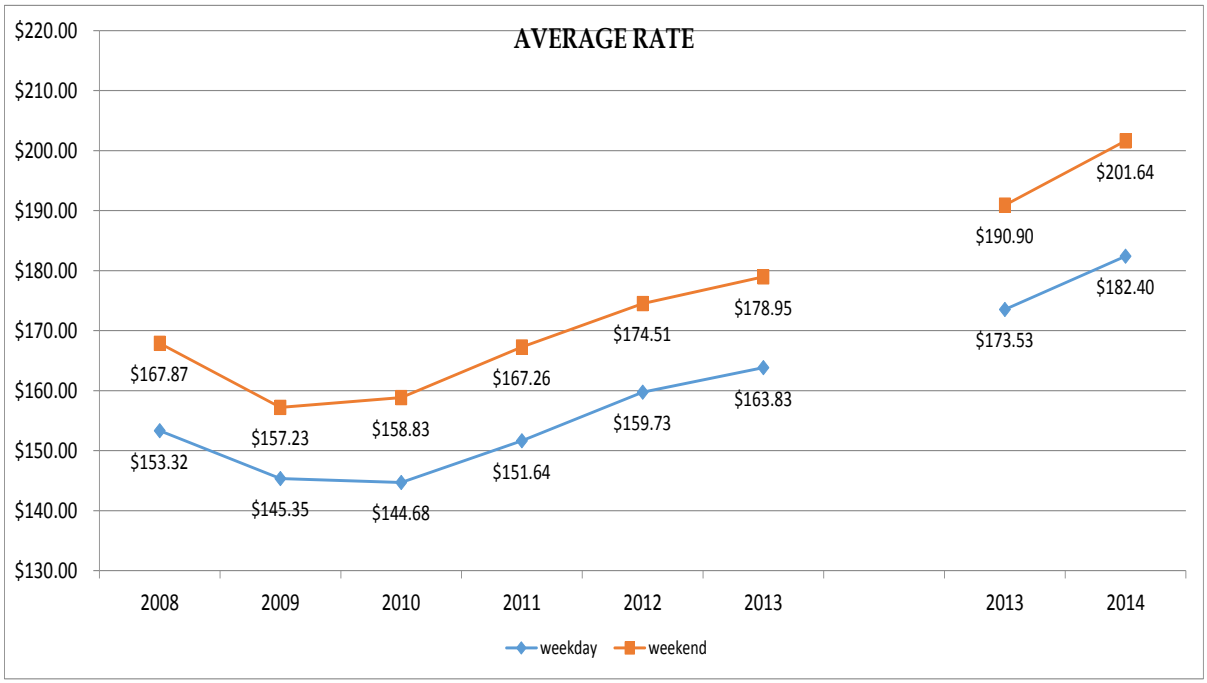
Source: STR; Pinkowski & Company

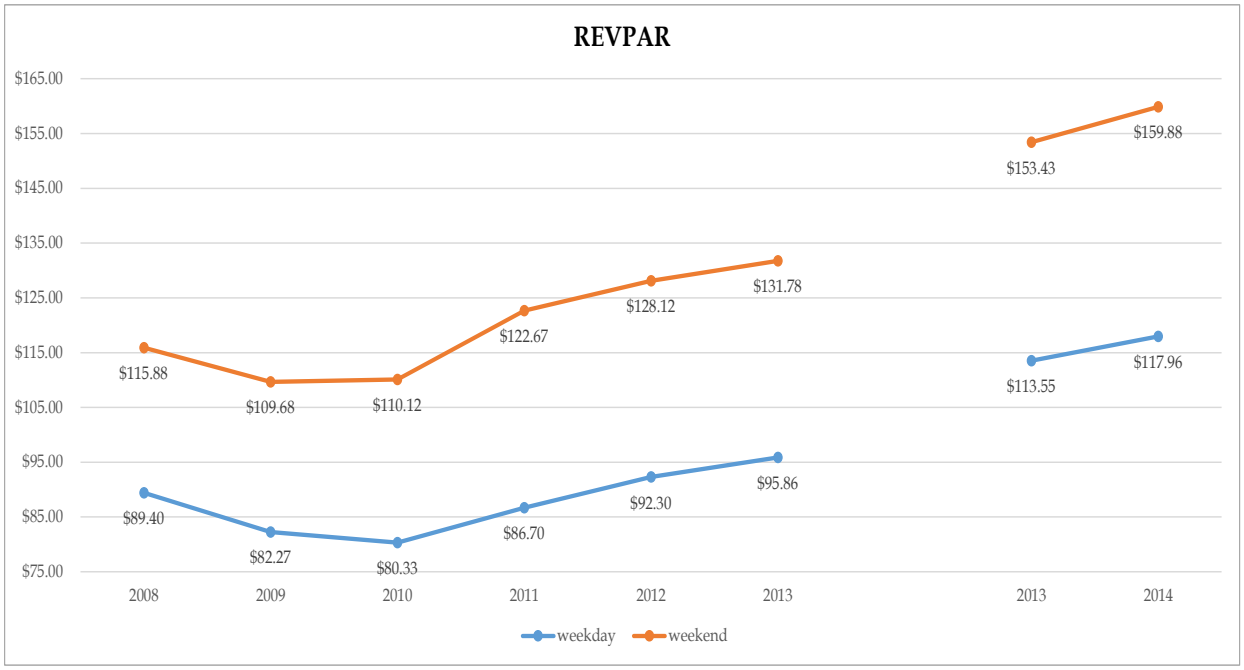
Weekend occupancies have increased considerably more (1.3 percent) compared to a 0.1 percent increase in weekday occupancies between 2008 and 2013. Average rates for both weekday and weekend have increased at the same 1.3 percent annual rate during this period. Average rates have exceeded the pre-recession levels achieved in 2009 and 2010, increasing dramatically over the last three years.

Year to date through the end of August, occupancy is down 1.1 percent during the weekday and 1.4 percent during the weekend. Average rates are continuing to increase, up 5.1 percent during the week and 5.6 percent during the weekend. Weekday is defined at Sunday through Thursday and weekend is defined as Friday and Saturday.

The following graphs illustrate the trend in weekday/weekend occupancy, average rate and RevPAR for the comparable market for the period 2008 through August 2014:


OCCUPANCY
90.0%
85.0%
80.0%
75.0%
70.0%
65.0%
60.0%
55.0%
50.0%
69.0%
69.8%
69.3%
73.3%
73.4%
73.6%
80.4%
79.3%
65.4%
64.7%
58.3%
56.6%
55.5%
57.2%
57.8%
58.5%
2008
2009
2010
2011
2012
2013
YTD 2013
YTD 2014
weekday
weekend


AVERAGE RATE
$220.00
$210.00
$200.00
$190.00
$180.00
$170.00
$160.00
$150.00
$140.00
$130.00
$167.87
$157.23
$158.83
$167.26
$174.51
$178.95
$190.90
$201.64
$153.32
$145.35
$144.68
$151.64
$159.73
$163.83
$173.53
$182.40
2008
2009
2010
2011
2012
2013
2013
2014
weekday
weekend



According to data provided by STR, the comparable market captures a mix of transient, group and contract demand. There were five properties with 1,524 rooms that contributed segmentation data to STR. With the exception of the Hilton Sandestin and the Hilton Beach Front, these hotels represent all of the hotels in the comparable supply that contain a significant amount of meeting and function space. These hotels included:

- ❑ Wyndham Bay Point Resort 319 rooms
- ❑ Renaissance Ross Bridge 259 rooms
- ❑ Marriott Shoals 199 rooms
- ❑ Renaissance Montgomery 342 rooms
- ❑ Marriott Grand 405 rooms

The following table summarizes the segmentation of the comparable market for the period 2010 through August 2014:

COMPARABLE PROPERTIES
SEGMENTATION ANALYSIS

	Demand			ADR		
	Transient	Group	Contract	Transient	Group	Contract
2013	54.8%	40.2%	5.0%	$167.27	$168.46	$154.06
2012	55.1%	39.3%	5.5%	$164.92	$166.02	$132.80
2011	51.5%	41.9%	6.8%	$158.55	$160.67	$126.36
2010	52.4%	43.5%	4.0%	$147.04	$155.27	$117.85
YTD 8/2014	55.7%	41.2%	3.1%	$188.39	$183.10	$169.01
YTD 8/2013	54.5%	40.6%	4.9%	$176.58	$179.27	$158.56

Source: STR; Pinkowski & Company

Based on the data provided by STR, the comparable properties that contribute segmentation data capture primarily a mix of transient and group demand, with contract demand representing a small portion of the total room nights captured. The mix of demand changes throughout the year, with group demand ranging from just over 30 percent of the demand captured during the peak summer months to slightly more than 50 percent during the off season.

The mix of demand for individual properties included in the comparable property supply varies depending on the facilities available. Those properties with extensive meeting space tend to have a higher mix of group demand while those properties located on the coast will tend to cater more towards transient leisure demand. Properties with meeting space will also tend to perform better when compared to those properties without meeting space.

The properties located in the immediate market area have not been included in the comparable supply due to their primary sources of demand, dependence on non-group related demand, average daily rates achieved, facilities and the relatively limited amount of available function space at these hotels.

In addition to these properties, there are a number of time share and condominium developments that provide overnight lodging accommodations in the local market area. These properties vary in size, quality and location and most do not offer any potential competition for the proposed hotel.

The following table contains information on the comparable hotels we have identified for the proposed lodge and meeting facilities:

GULF STATE PARK
PROPOSED 350 ROOM LODGE
COMPARABLE PROPERTY PROFILE

	Holiday Inn & Suites Resort	Holiday Inn Resort	Wyndham Bay Point Resort	Crowne Plaza Grand	Hilton Sandestin Beach	Margaritaville Beach Hotel	Hilton Beach Front	Renaissance Ross Bridge	Marriott Shoals Hotel	Renaissance Hotel & Spa (1)	Marriott Grand Resort
Location	**Pensacola, FL**	**Panama City, FI**	**Panama City, FI**	**Pensacola, FL**	**Destin, FL**	**Pensacola, FL**	**Pensacola, FL**	**Hoover, AL**	**Florence, AI**	**Montgomery, AI**	**Point Clear, AL**
# on Map	1	2	3	4	5	6	7	8	9	10	11
# Of Rooms	206	340	319	210	602	162	275	259	199	342	405
Year Opened	2011	1990	1986	1984	1984	2010	2003	2005	2005	2008	1940
FACILITIES AVAILABLE											
Pool - Indoor/Outdoor	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Restaurant	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Lounge	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Spa	No	Yes	Yes	No	Yes	No	No	Yes	Yes	Yes	Yes
Meeting Space											
Total Meeting Space	10,000	0	40,000	7,584	50,000	1,700	30,000	21,000	30,000	103,000	37,000
Square Foot per Guest Roon	48.5	0.0	125.4	36.1	83.1	10.5	109.1	81.1	150.8	301.2	91.4
Largest Meeting Room	2,058	0	11,594	4,424	9,504	1,200	6,758	9,794	11,840	13,920	9,750

(1) adjacent to Montgomery Convention Center
Source: Property Management, Pinkowski & Company

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APPENDIX H

MIGRATORY AND NATIVE BIRDS IN THE REGION

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Common Name	*Scientific Name*
Acadian Flycatcher	*Empidonax virescens*
American Kestrel	*Falco sparverius*
American Redstart	*Setophaga ruticilla*
American Robin	*Turdus migratorius*
American Woodcock	*Scolopax minor*
Ash-throated Flycatcher	*Myiarchus cinerascens*
Baltimore Oriole	*Icterus galbula*
Barn Swallow	*Hirundo rustica*
Bay-breasted Warbler	*Setophaga castanea*
Bell's Vireo	*Vireo bellii*
Bicknell's Thrush	*Catharus bicknelli*
Black-and-white Warbler	*Mniotilta varia*
Black-billed Cuckoo	*Coccyzus erythropthalmus*
Blackburnian Warbler	*Setophaga fusca*
Blackpoll Warbler	*Setophaga striata*
Black-tailed Gnatcatcher	*Polioptila melanura*
Black-thrd. Blue Warbler	*Setophaga caerulescens*
Black-thrd. Green Warbler	*Setophaga virens*
Blue Grosbeak	*Passerina caerulea*
Blue Jay	*Cyanocitta cristata*
Blue-gray Gnatcatcher	*Polioptila caerulea*
Blue-headed Vireo	*Vireo solitarius*
Blue-winged Warbler	*Vermivora cyanoptera*
Broad-winged Hawk	*Buteo platypterus*
Brown Creeper	*Certhia americana*
Brown Thrasher	*Toxostoma rufum*
Brown-headed Nuthatch	*Sitta pusilla*
Canada Warbler	*Cardellina canadensis*
Cape May Warbler	*Setophaga tigrina*
Carolina Chickadee	*Poecile carolinensis*
Carolina Wren	*Thryothorus ludovicianus*
Cerulean Warbler	*Setophaga cerulea*
Chestnut-sided Warbler	*Setophaga pensylvanica*
Chipping Sparrow	*Spizella passerina*
Chuck-will's-widow	*Antrostomus carolinensis*
Clapper Rail	*Rallus crepitans*
Clay-colored Sparrow	*Spizella pallida*
Common Ground-Dove	*Columbina passerina*
Common Yellowthroat	*Geothlypis trichas*
Cooper's Hawk	*Accipiter cooperii*
Dickcissel	*Spiza americana*
Downy Woodpecker	*Picoides pubescens*
Dusky Flycatcher	*Empidonax oberholseri*
Eastern Kingbird	*Tyrannus tyrannus*
Eastern Meadowlark	*Sturnella magna*
Eastern Phoebe	*Sayornis phoebe*

Common Name	*Scientific Name*
Eastern Towhee	*Pipilo erythrophthalmus*
Eastern Wood-Pewee	*Contopus virens*
Eastern X Spotted Towhee	*Pipilo maculatus*
Field Sparrow	*Spizella pusilla*
Golden-crowned Kinglet	*Regulus satrapa*
Golden-winged Warbler	*Vermivora chrysoptera*
Grasshopper Sparrow	*Ammodramus savannarum*
Gray Catbird	*Dumetella carolinensis*
Gray-cheeked Thrush	*Catharus minimus*
Great Crested Flycatcher	*Myiarchus crinitus*
Gry-ch./Bicknell's Thrush	*Catharus bicknelli*
Green-tailed Towhee	*Pipilo chlorurus*
Hammond's Flycatcher	*Empidonax hammondii*
Hermit Thrush	*Catharus guttatus*
Hooded Warbler	*Setophaga citrina*
House Finch	*Haemorhous mexicanus*
House Wren	*Troglodytes aedon*
Indigo Bunting	*Passerina cyanea*
Kentucky Warbler	*Geothlypis formosa*
Le Conte's Sparrow	*Ammodramus leconteii*
Least Flycatcher	*Empidonax minimus*
Lincoln's Sparrow	*Melospiza lincolnii*
Loggerhead Shrike	*Lanius ludovicianus*
Louisiana Waterthrush	*Parkesia motacilla*
MacGillivary's Warbler	*Geothlypis tolmiei*
Magnolia Warbler	*Setophaga magnolia*
Marsh Wren	*Cistothorus palustris*
Merlin	*Falco columbarius*
Mourning Dove	*Zenaida macroura*
Mourning Warbler	*Geothlypis philadelphia*
Myrtle Warbler	*Dendroica coronata coronata*
Nashville Warbler	*Leiothlypis ruficapilla*
Nelson's Sharp-tail. Spar.	*Ammodramus nelsoni*
Northern Cardinal	*Cardinalis cardinalis*
Northern Mockingbird	*Mimus polyglottos*
Northern Parula	*Setophaga americana*
Northern Waterthrush	*Parkesia noveboracensis*
Olive-sided Flycatcher	*Contopus cooperi*
Orange-crowned Warbler	*Vermivora celata*
Orchard Oriole	*Icterus spurius*
Ovenbird	*Seiurus*
Painted Bunting	*Passerina ciris*
Peregrine Falcon	*Falco peregrinus*
Philadelphia Vireo	*Vireo philadelphicus*
Pine Warbler	*Setophaga pinus*

Common Name	*Scientific Name*
Prairie Warbler	*Setophaga discolor*
Prothonotary Warbler	*Protonotaria citrea*
Red-bellied Woodpecker	*Melanerpes carolinus*
Red-breasted Nuthatch	*Sitta canadensis*
Red-eyed Vireo	*Vireo olivaceus*
Red-headed Woodpecker	*Melanerpes erythrocephalus*
Red-shoulder Hawk	*Buteo lineatus*
Red-tailed Hawk	*Buteo jamaicensis*
Red-winged Blackbird	*Agelaius phoeniceus*
Rose-breasted Grosbeak	*Pheucticus ludovicianus*
Ruby-crowned Kinglet	*Regulus calendula*
Ruby-thrt. Hummingbird	*Archilochus colubris*
Savannah Sparrow	*Passerculus sandwichensis*
Scarlet Tanager	*Piranga olivacea*
Seaside Sparrow	*Ammodramus maritimus*
Sedge Wren	*Cistothorus platensis*
Sharp-shinned Hawk	*Accipiter striatus*
Slate-colored Junco	*Junco hyemalis*
Song Sparrow	*Melospiza melodia*
Summer Tanager	*Piranga rubra*
Swainson's Thrush	*Catharus ustulatus*
Swainson's Warbler	*Limnothlypis swainsonii*
Swamp Sparrow	*Melospiza georgiana*
Tennessee Warbler	*Leiothlypis peregrina*
"Traill's" Flycatcher	*Empidonax alnorum*
Tufted Titmouse	*Baeolophus bicolor*
Unidentified Contopus	
Unidentified Empidonax	

Common Name	Scientific Name
Veery	*Catharus fuscescens*
Virginia Rail	*Rallus limicola*
Warbling Vireo	*Vireo gilvus*
Western Palm Warbler	*Setophaga palmarum*
Western Wood-pewee	*Contopus sordidulus*
Whip-poor-will	*Caprimulgus vociferus*
White-crowned Sparrow	*Zonotrichia leucophrys*
White-eyed Vireo	*Vireo griseus*
White-throated Sparrow	*Zonotrichia albicollis*
Willow Flycatcher	*Empidonax traillii*
Wilson's Warbler	*Cardellina pusilla*
Winter Wren	*Troglodytes hiemalis*
Wood Thrush	*Hylocichla mustelina*
Worm-eating Warbler	*Helmitheros vermivorum*
Yellow Palm Warbler	*Setophaga palmarum*
Yellow Warbler	*Setophaga petechia*
Yellow-bell. Flycatcher	*Empidonax flaviventris*
Yellow-bellied Sapsucker	*Sphyrapicus varius*
Yellow-billed Cuckoo	*Coccyzus americanus*
Yellow-breasted Chat	*Icteria virens*
Yellow-shafted Flicker	*Colaptes auratus*
Yellow-throated Vireo	*Vireo flavifrons*
Yellow-throated Warbler	*Setophaga dominica*

Source: http://sites.usm.edu/migratory-bird-research/materials/FtMorganBirdCapTotals.pdf

APPENDIX I

OTHER LAWS AND EXECUTIVE ORDERS

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Appendix D. Other Laws and Executive Orders (from the Final PDARP/PEIS)

D.1 Federal Laws

Americans with Disabilities Act
Antiquities Act of 1906
Archeological Resource Protection Act of 1979
Bald and Golden Eagle Protection Act
Clean Air Act
Clean Water Act (Federal Water Pollution Control Act)
Coastal Barrier Resources Act
Coastal Wetlands Planning, Protection and Restoration Act of 1990
Coastal Zone Management Act
Comprehensive Environmental Response, Compensation, and Liability Act of 1980
Endangered Species Act of 1973
Estuary Protection Act
Farmland Protection Policy Act
Fish and Wildlife Conservation Act
Fish and Wildlife Coordination Act
Magnuson-Stevens Fishery Conservation and Management Act
Marine Mammal Protection Act
Marine Protection, Research and Sanctuaries Act
Migratory Bird Treaty Act of 1918
National Environmental Policy Act of 1969
National Historic Preservation Act of 1966
National Marine Sanctuaries Act
National Wildlife Refuge System Improvement Act of 1997
Native American Graves Protection and Repatriation Act
Oil Pollution Act of 1990
Outer Continental Shelf Lands Act
Park System Resource Protection Act
Rivers and Harbors Act
Water Resources Development Acts

D.2 Federal Executive Orders and Regulations

Council on Environmental Quality's Regulations for Implementing the Procedural Provisions of NEPA
DOI NEPA Procedures
DOI Regulations for Implementing NEPA
NOAA NEPA Procedures
NOAA Regulations for NRDA
Executive Order 11514—Protection and Enhancement of Environmental Quality as amended by Executive Order 11991
Executive Order 11593—Protection and Enhancement of the Cultural Environment
Executive Order 11988—Floodplain Management
Executive Order 11990—Protection of Wetlands
Executive Order 12580—Implementation of Section 311 of the Federal Water Pollution Control Act and OPA as amended by Executive Order 12777
Executive Order 12898—Environmental Justice
Executive Order 12962—Recreational Fisheries
Executive Order 13007—Indian Sacred Sites
Executive Order 13089—Coral Reef Protection
Executive Order 13112—Invasive Species
Executive Order 13158—Marine Protected Areas
Executive Order 13175—Consultation and Coordination with Indian Tribal Governments
Executive Order 13186—Responsibilities of Federal Agencies to Protect Migratory Birds
Executive Order 13352—Facilitation of Cooperative Conservation
Executive Order 13547—Stewardship of the Ocean, Our Coasts, and the Great Lakes
Executive Order 13554—Gulf Coast Ecosystem Restoration Task Force
Executive Order 13653—Preparing the United States for the Impacts of Climate Change
Executive Order 13693—Planning for Federal Sustainability in the Next Decade

APPENDIX J

BEST PRACTICES

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Appendix A. Best Practices (from the Final PDARP/PEIS)

The federal regulatory agencies will provide guidance to implementing trustees and federal action agencies as part of the environmental compliance process. Best practices generally include design criteria, best management practices (BMPs), lessons learned, expert advice, tips from the field, and more. Trustees use appropriate best practices to avoid or minimize impacts to natural resources, including protected and listed species and their habitats.

Federal environmental compliance includes developing a project proposal, requesting technical assistance if needed, and then entering into consultation or coordination under the relevant regulatory act (e.g., Endangered Species Act [ESA], Magnuson-Stevens Fishery Conservation and Management Act [MSFCMA], Migratory Bird Treaty Act, Marine Mammal Protection Act, Bald and Golden Eagle Protection Act, Clean Water Act). During any consultation process, additional project-specific measures may be recommended or required as applicable to a project type in different locations (e.g., dune walkovers in Florida and Texas) due to differences in relevant conditions, such as species presence or absence or other factors.

Below is a list of best practices that the Trustees have determined could be applicable to the stated restoration approaches. The potential programmatic environmental consequences described in Chapter 6, Environmental Consequences and Compliance with Other Laws, are presented largely without factoring in best practices that could avoid or minimize the potential adverse effects at a project-specific level. Such practices can be established during project planning and implementation. An exception is the analysis of impacts to protected biological resources and their habitats. For these resources, Restoration Types were specifically analyzed assuming the incorporation of best practices that would typically be required by regulating agencies because these projects generally would not be able to move forward through agency review without incorporation of best practices (see Section 6.9). Such best practices include, but are not limited to, steps taken through site selection, engineering and design, use of proven restoration techniques, and other conditions or activities required for project-specific regulatory compliance. Future projects tiered from this programmatic document will include the best practices below or best practices identified during project consultation, as appropriate. If changes to the best practices below are warranted for specific future projects, those changes will be analyzed in the future NRDA analysis and associated tiered Environmental Assessments (EAs) and Environmental Impact Statements (EISs) as well as other required reviews. Once best practices have been accepted, the project will be implemented using those best practices.

Points of contact:

- *U.S. Fish and Wildlife Service (USFWS) Ecological Services Field Offices*
  http://www.fws.gov/ecological-services/map/index.html
- *National Marine Fisheries Service (NMFS) Southeast Region*
  http://sero.nmfs.noaa.gov/

A.1 Practices Included in Environmental Consequences Analysis in Chapter 6, Section 6.4

The PDARP/PEIS assumed incorporation of the practices described in this Section A.1, Practices Included in Environmental Consequences Analysis in Chapter 6, Section 6.4, in the analysis of environmental consequences. This section presents best practices organized by species and also includes a section on general construction measures. Several of the best practices are described in larger documents and only the titles are included here. Appropriate websites should be checked during project planning to see if updated guidance is available. The organization by species is as follows:

- Birds
    - Bald eagle
    - Migratory birds
    - Piping plover and red knot
    - Red-cockaded woodpecker
- Mammals
    - Beach mouse
    - Manatee
    - Bottlenose dolphin
    - Other marine mammals
- Reptiles and amphibians
    - Reticulated flatwoods salamander
    - Eastern indigo snake
- Tortoises/turtles
    - Gopher tortoise
    - Sea turtles—in water
    - Sea turtles—nesting beaches
- Fish
    - Gulf sturgeon
- Plants
    - Protected plants
- Invasive species
- General construction measures

A.1.1 Birds

A.1.1.1 Bald Eagles

If bald eagle breeding or nesting behaviors are observed or a nest is discovered or known, have all activities avoid the nest by a minimum of 660 feet. If the nest is protected by a vegetated buffer where there is *no* line of sight to the nest, then the minimum avoidance distance is 330 feet. Maintain this avoidance distance from the onset of breeding/courtship behaviors until any eggs have hatched and eaglets have fledged (approximately 6 months).

If a similar activity (such as driving on a roadway) is closer than 660 feet to a nest, maintain a distance buffer as close to the nest as the existing tolerated activity. If a vegetated buffer is present and there is no line of sight to the nest and a similar activity is closer than 330 feet to a nest, then maintain a distance buffer as close to the nest as the existing tolerated activity.

In some instances activities conducted within 660 feet of a nest may result in disturbance, particularly for the eagles occupying the Mississippi barrier islands. If an activity appears to cause initial disturbance, stop the activity and move all individuals and equipment away until the eagles are no longer displaying disturbance behaviors. Contact the USFWS's Migratory Bird Permit Office to determine how to avoid impacts or if a permit may be needed.

A.1.1.2 Migratory Birds

Use care to avoid birds when operating machinery or vehicles near birds.

During the project design phase, coordinate with the USFWS and the state trust resource agency to site and design projects to avoid or minimize impacts to migratory bird nesting habitats or important feeding/loafing areas.

Avoid working in migratory bird nesting habitats during breeding, nesting, and fledging (approximately mid-February through late August). If project activities must occur during this timeframe and breeding, nesting, or fledging birds are present, contact the state trust resource agency to obtain the most recent guidance to protect nesting birds or rookeries, and their recommendations will be implemented.

Conservation areas may already be marked to protect bird nesting areas. Stay out of existing marked areas.

If vegetation clearing is necessary, clear vegetation outside the migratory bird nesting season (approximately mid-February through late August) or have a qualified biologist inspect for active nests. If no active nests are found, vegetation may be removed. If active nests are found, vegetation may be removed after the nest successfully fledges.

Avoid driving over the natural organic material ("wrack") line or areas of dense seaweed, as these habitats may contain hatchlings and chicks that are difficult to see.

Install pointy, white piling caps on exposed pilings to prevent bird roosting on piers, docks, and marinas.

A.1.1.3 Piping Plover and Red Knot

Provide all individuals working on a project with information in support of general awareness of piping plover or red knot presence and means to avoid birds and their critical or otherwise important habitats.

Avoid working in designated critical habitat when piping plovers are present (approximately late July through mid-May) or important wintering sites for red knots when they are present (contact USFWS for red knot timeframes and habitats) to the maximum extent practicable. If work must be conducted when people are present, avoid working near concentrations of individuals or post avoidance areas to minimize disturbance.

For projects that result in large-scale habitat changes, coordinate early with USFWS to enhance or protect habitat features preferred by the species (inlet shoals, lagoons, washover fans, ephemeral pools, baysides, and mud flats). Do not remove sand from intertidal, sand, or mud flats.

Use dredged material to enhance adjacent emerged and submerged shoals and bayside habitats within and adjacent to project areas.

Minimize vegetation planting in preferred habitats and avoid removal of wrack year-around along the shoreline.

During recreational use, enforce leash or “no pet” policies in critical or important habitats.

A.1.1.4 Red-Cockaded Woodpecker

Avoid working within active red-cockaded woodpecker clusters (the minimum convex polygon containing the aggregation of cavity trees used by a group of red-cockaded woodpeckers and a 200-foot-wide buffer surrounding the polygon).

If avoidance is not possible or management activities in red-cockaded woodpecker suitable habitat are desired, conduct standard surveys to determine if the habitat is supporting any individuals or presence can be assumed. If red-cockaded woodpeckers are present (or assumed to be), avoid cavity trees and use mechanized equipment during the non-nesting season (approximately April 1 through July 31).

If tree removal is necessary, survey pine trees approximately 60 or more years old for active cavities within one year of the proposed removal. Extend surveys from the project site out to no less than one-half mile. Replace any cavities affected by the project via drilled cavity construction.

If impacts to suitable foraging habitat (pines approximately 30 or more years old and within one-half mile of an active cavity tree) are proposed, conduct a foraging habitat analysis. Foraging habitat may need to be replanted post-project.

Design projects within red-cockaded woodpecker suitable habitat such that prescribed fire needs are not impeded.

A.1.2 Mammals

A.1.2.1 Beach Mouse

Avoid using vehicles and mechanical equipment within the dune system, including primary, secondary, and tertiary dunes.

Avoid storing or staging equipment, vehicles, and project debris in a manner or location where it could be colonized by mice.

If work must occur within the dune system, have a qualified, permitted, biologist survey the project site before work commences and flag potential burrows and tracks so that they can be avoided.

Where possible, replace footpaths or low-lying dune walkovers with improved walkovers that do not fragment the dune system. For dune walkover construction in Florida and Alabama, follow the Conservation Measures for Dune Walkover Construction (USFWS 2013).

Avoid vegetation removal, including scrub vegetation. If vegetation is damaged or removed during project implementation, plant appropriate native plants in the same location to minimize erosion and provide a food source for beach mice. If forage plants are reduced or limited in the project area, supplemental beach mouse food sources may be necessary.

A.1.2.2 Manatee

In Florida, follow the most current versions of USFWS's *Standard Manatee Conditions for In-Water Work* and *Additional Conditions for In-Water Activities in Manatee Habitat* for in-water work in Alabama, Mississippi, and Texas where manatees could be present, follow conditions a, b, c, and d of the *Standard Manatee Conditions.* Report any collisions to the USFWS or state trust resource agency. Temporary signs, if necessary, can be modified from the Florida Fish and Wildlife Conservation Commission's template to reflect local conditions. In Louisiana, follow the most recent version of the *Standard Manatee Conditions*.

A.1.2.3 Bottlenose Dolphin

For projects with any in-water construction activities, dredging, or wetland/barrier island creation and nourishment, follow the most current version of the NMFS Southeast Region's *Measures for Reducing Entrapment Risk to Protected Species* for projects that enhance recreational fishing opportunities (e.g., fishing pier enhancement/development), visibly post the NMFS Southeast Region's *Dolphin-Friendly Fishing Tips* sign and other applicable protected species educational signs.

For projects that enhance recreational and commercial vessel based activities, follow NMFS's *Southeast U.S. Marine Mammal and Sea Turtle Viewing Guidelines*.

A.1.2.4 Other Marine Mammals

To reduce the risk associated with vessel strikes of protected species or related disturbance, follow the most current version of NMFS Southeast Region's *Vessel Strike Avoidance Measures and Reporting for Mariners*, revised February 2008.

A.1.3 Reptiles and Amphibians

A.1.3.1 Reticulated Flatwoods Salamander

Avoid suitable habitat during all construction activities and do not permanently alter hydrology of the area. Avoid eliminating connectivity between suitable ponds.

Use silt fencing to prevent sedimentation or erosion of the project site into ponds.

If suitable habitat (including the approximately 1,500-foot buffer zone around breeding ponds) may be affected, perform pre-project surveys within 2 miles of known breeding sites or assume the presence of reticulated flatwoods salamanders. Schedule work during the nonbreeding season (summer) and maintain the natural contour of the ponds.

A.1.3.2 Eastern Indigo Snake

If suitable habitat or other evidence of Eastern indigo snakes is discovered within the project area during site surveys, implement the most recent version of USFWS's *Standard Protection Measures for the Eastern Indigo Snake*.

A.1.4 Tortoises/Turtles

A.1.4.1 Gopher Tortoise

If suitable habitat is present, have a qualified biologist conduct surveys to identify any gopher tortoise burrows. If burrows are within the project area and cannot be avoided through establishing a protective buffer (size determined by USFWS and the state trust resource agency), implement standard procedures to relocate the tortoise within the project site but away from the areas of construction or restoration or consider conservation banks. A Candidate Conservation Agreement with Assurances may be appropriate for project sites within the nonlisted range of the species.

A.1.4.2 Sea Turtles—In Water

Implement the following guidelines: NMFS's *Sea Turtle and Smalltooth Sawfish Construction Conditions* (revised March 23, 2006), NMFS's *Measures for Reducing Entrapment Risk to Protected Species* (revised May 22, 2012) and NMFS's *Vessel Strike Avoidance Measures and Reporting for Mariners* (revised February 2008).

A.1.4.3 Sea Turtles—Nesting Beaches

If a sea turtle (either adult or hatchling) is observed, maintain at least 200 feet between the turtle and personnel, equipment, or machinery and notify the sea turtle monitoring program. Allow the turtle to leave the area of its own volition.

During nourishment activities, use beach quality sand that is suitable for successful sea turtle nesting and hatchling emergence. Emulate the natural shoreline slope and dune system (including configuration and shape) to the maximum extent practicable.

In Florida and Alabama, avoid the use of vehicles and heavy machinery on nesting beaches during sea turtle nesting and hatching season (approximately May through October).

If work must occur on nesting beaches during sea turtle nesting season (May through August), begin work with vehicles or machinery after 9:00 am local time to allow the sea turtle monitoring program to detect and mark new nests and assess the need to relocate sea turtle nests that could be affected by the project construction. Avoid marked nests by at least 10 feet.

If beach topography is altered, restore all areas to the natural beach profile by 8:00 pm local time each day during nesting and hatching season. Restore beach topography by raking tire ruts and filling pits or holes.

Avoid driving over the wrack line or areas of dense seaweed, as these habitats may contain sea turtle hatchlings that are difficult to see.

All observed sea turtle nests located in Texas should be excavated and the eggs relocated for incubation.

Construction in Texas should be scheduled to avoid Kemp's ridley nesting season, which extends from April 1 until October 1.

A.1.5 Fish

A.1.5.1 Gulf Sturgeon

Avoid work in riverine critical habitats when Gulf sturgeon are likely to be present (April to October). Do not dredge in spawning areas when Gulf sturgeon are likely to be present.

During project implementation, maintain riparian buffers of at least 100 feet around critical habitat. Install silt fencing to prevent sedimentation or erosion into streams and rivers.

Operate dredge equipment in a manner to avoid risks to Gulf sturgeon (e.g., disengage pumps when the cutter head is not in the substrate; avoid pumping water from the bottom of the water column). Implement NMFS's *Sea Turtle and Smalltooth Construction Conditions* (revised March 23, 2006) and NMFS's *Measures for Reducing Entrapment Risk to Protected Species* (revised May 22, 2012), as they are protective of Gulf sturgeon as well.

A.1.5.2 Sawfish

Implement NMFS's *Sea Turtle and Smalltooth Construction Conditions* (revised March 23, 2006) and NMFS's *Measures for Reducing Entrapment Risk to Protected Species* (revised May 22, 2012).

A.1.6 Plants

A.1.6.1 Protected Plants

Perform surveys to determine if protected plants (or suitable habitat) are on or adjacent to the project site. Have a qualified individual perform the surveys and follow suitable survey protocols. Conduct plant surveys during appropriate survey periods (usually flowering season).

Design projects to avoid known locations and associated habitat to the extent possible. Use "temporary" removal of plants and soil profile plugs (which include the A and B horizons) with the intent to replace to original location post-construction as a last resort. Consider transplanting and seed banking only after all other options are exhausted.

Enhance and protect plants on site and in adjacent habitats to the maximum extent possible.

Use only native plants for post project restoration efforts.

A.1.7 Invasive Species

Develop and implement a Hazard Analysis and Critical Control Points (HACCP) plan to prevent and control invasive species. Use (ASTM E2590–08) or other version of HACCP or other similar planning tool.

Implement an Integrated Pest Management (IPM) approach to facility design, sanitation, and maintenance to prevent and control invasive and pest species.

Inspect sites, staging, and buffer areas for common invasive species prior to the onset of work. Map any invasive species detected and note qualitative or quantitative measures regarding abundance. Implement a control plan, if necessary, to ensure these species do not increase in distribution or abundance at a site due to project implementation. Inspect sites periodically to identify and control new colonies/individuals of an invasive species not previously observed prior to construction.

Prior to bringing any equipment (including personal gear, machinery, vehicles, or vessels) to the work site, inspect each item for mud or soil, seeds, and vegetation. If present, clean the equipment, vehicles, or personal gear until they are free from mud, soil, seeds, and vegetation. Inspect the equipment, vehicles, and personal gear each time they are being prepared to go to a site or prior to transferring between sites to avoid spreading exotic, nuisance species.

Place and maintain predator-proof waste receptacles in strategic locations during project implementation to prevent an increase in predator abundance. For projects designed to enhance or increase visitor use, maintain predator-proof waste receptacles for the life of the project.

Have the appropriate state agency inspect any equipment or construction materials for invasive species prior to use.

Inspect and certify propagated or transplanted vegetation as pest and disease free prior to planting in restoration project areas.

A.1.8 General Construction Measures

A.1.8.1 Guidelines

Bubble Curtain Specifications for Pile Driving, as contained in the Florida Statewide Programmatic Opinion on page 270.

Construction Guidelines in Florida for Minor Piling-Supported Structures Constructed in or over Submerged Aquatic Vegetation (SAV), Marsh or Mangrove Habitat, U.S. Army Corps of Engineers/NMFS, August 2001.

Key for Construction Conditions for Docks or Other Minor Structures Constructed in or Over Johnson's Seagrass (Halophila johnsonii), NMFS/U.S. Army Corps of Engineers, October 2002.

National Artificial Reef Plan (as Amended): Guidelines for Siting, Construction, Development, and Assessment of Artificial Reefs, NOAA, February 2007.

Guidelines for Marine Artificial Reef Materials, GSMFC, January 2004.

Assessment and Mitigation of Marine Explosives: Guidance for Protected Species in the Southeast U.S., NMFS, February 2008.

A.1.8.2 Piling Installation

Push pilings into soft, bottom substrate to reduce noise from installation; do not drive and hammer pilings into bottom substrate unless necessary for proper construction.

A.1.8.3 Protected Species

Provide all individuals working on a project with information in support of general awareness of and means to avoid impacts to protected species and their habitats present at the specific project site.

Survey for other at-risk or imperilled species. If found on site, contact the USFWS and state trust resource agency to determine if avoidance or minimization measures or a Candidate Conservation Agreement with Assurances may be appropriate.

A.1.8.4 Site Maintenance and Conduct

Use the nearest, existing staging, access and egress areas, travel corridors, pathways, and roadways (including those provided by the state, local governments, land managers, trustee, or private property owner, with proper permissions) and do not create new staging areas, access (except dune walkovers) or egress, or travel corridors through dune habitats.

Limit driving on the beach for construction to the minimum necessary within the designated travel corridor–established just above or just below the primary “wrack” line. Avoid driving on the upper beach whenever possible, and never drive over any dunes or beach vegetation. Check with the USFWS and state trust resource agency for additional specific beach driving recommendations in Florida and Alabama.

Minimize construction noise to the maximum extent practicable when working near protected species and their habitats.

Maintain or improve all lighting regimes. Methods include working during daylight hours only, prohibiting lighting on dune walkovers, and using wildlife-friendly lighting where lighting is necessary for human safety.

Post signs at kiosks, ramps, and piers to provide visitors with information to avoid and minimize impacts to protected species and their habitats while recreating. Develop signs in coordination with NMFS, USFWS, and the local state trust resource agency.

Supply and maintain containers for waste fishing gear to avoid fish and wildlife entanglement.

A.1.8.5 Land and Vegetation Protection

Develop and implement an erosion control plan to minimize erosion during and after construction and where possible use vegetative buffers (100 feet or greater), revegetate with native species or annual grasses, and conduct work during dry seasons.

Develop and implement a spill prevention and response plan, including conducting daily inspections of all construction and related equipment to ensure there are no leaks of antifreeze, hydraulic fluid, or other substances and cleaning and sealing all equipment that would be used in the water to rid it of chemical residue. Develop a contract stipulation to disallow use of any leaking equipment or vehicles.

Prohibit use of hazardous materials, such as lead paint, creosote, pentachlorophenol, and other wood preservatives during construction in, over or adjacent to, sensitive sites during construction and routine maintenance.

Where landscaping is necessary or desired, use native plants from local sources. If non-native species must be used, ensure they are noninvasive and use them in container plantings.

A.1.8.6 Wetland and Aquatic Resource Protection

Complete an engineering design and post-construction inspection for projects where geomorphic elevations are restored in wetlands, marshes, and shallow water habitats to ensure the success of the restoration project. Manage elevation of fill material to ensure projected consolidation rates are accomplished and that habitat suitable for wetland and marsh vegetation is developed.

Avoid and minimize, to the maximum extent practicable, placement of dredged or fill material in wetlands and other aquatic resources.

Design construction equipment corridors to avoid and minimize impacts to wetlands and other aquatic resources to the maximum extent practicable.

To the maximum extent possible, implement the placement of sediment to minimize impacts to existing vegetation or burrowing organisms.

Place protective warning signs and buoys around at-risk habitats for infrastructure projects that could increase recreational uses in SAV or oyster areas.

Apply herbicide in accordance with the direction and guidance provided on the appropriate U.S. Environmental Protection Agency (EPA) labels and state statutes during land-based activities.

Only use suitable borrow sites (i.e., those that do not contain *Sargassum,* SAV, or oysters) as dredging sites for sediment. Obtain sediments by beneficially using dredged material from navigation channels or by accessing material from approved offshore borrow areas. Sediments must closely match the chemical and physical characteristics of sediment at the restoration site. Additionally, use target borrow areas within reasonable proximity to suitable sites for sediment placement.

When local conditions indicate the likely presence of contaminated soils and sediments, test soil samples for contaminant levels and take precautions to avoid disturbance of, or provide for proper

disposal of, contaminated soils and sediments. Evaluate methods prior to dredging to reduce the potential for impacts from turbidity or tarballs.

Perform maintenance of generators, cranes, and any other stationary equipment operated within 150 feet of any natural or wetland area, as necessary, to prevent leaks and spills from entering the water.

Designate a vehicle staging area removed from any natural surface water resource or wetland to perform fueling, maintenance, and storage of construction vehicles and equipment. Inspect vehicles and equipment daily prior to leaving the storage area to ensure that no petroleum or oil products are leaking.

Upon completion of construction activities, restore all disturbed areas as necessary to allow habitat functions to return. Create and manage public access developments to enhance recreational experience and educational awareness to minimize effects to habitat within wetland and shallow water areas and to the long-term health of related biological communities.

Incorporate containment levees for fill cells for projects using marsh creation or other barrier island restoration. Remove these containment levees after construction to allow for the restoration of natural tidal exchange.

Use silt fencing where appropriate to reduce increased turbidity and siltation in the project vicinity. This would apply to both on land and in water work.

Continue oyster and clam shell recycling programs to provide natural material for creating additional oyster reefs.

Ensure shells to be introduced for reef creation are subjected to depuration in a secure open air area for a period of not less than 6 months.

Make all efforts to reduce the peak sound level and exposure levels of fish to reduce the potential impact of sound on fish present in the project areas.

Use a vibratory hammer whenever possible to reduce peak sound pressure levels in the aquatic environment.

Use sound attenuation devices where practicable for pulse noise (impact hammers) to reduce peak sound pressure levels in the aquatic environment.

Stipulate the timing of activities to avoid impacts to spawning fish and eggs/larvae.

Use best practices to reduce turbidity, such as turbidity blankets, to reduce the potential impact of turbidity on finfish.

Screen water withdrawal pipes to minimize potential entrainment of fish from the withdrawal area. Have project proponents coordinate with NMFS to create an intake screen that would minimize potential impingement of fish.

A.1.8.7 Aquaculture Facilities

Treat effluent from aquaculture facilities to avoid dispersal of potential pathogens into receiving waters.

Make sure that all aquaculture facilities and fish raised in those facilities meet fish health standards and are screened for pathogens prior to release into receiving waters.

Implement a genetics management plan that ensures maintenance of genetic diversity of native stocks of finfish in the Gulf of Mexico.

Develop and implement a stocking management plan prior to the release of hatchery-reared finfish.

A.2 Future Best Practices

The PDARP/PEIS did not incorporate the practices described in this section (Section A.2) in the analysis of environmental consequences in Chapter 6. Although these were not available at the time of analysis in the PDARP/PEIS, practices developed in the future are intended to provide essential technical assistance to avoid and minimize effects to ESA-listed species and their designated critical and Essential Fish Habitat (EFH). Incorporating this guidance into future restoration plans can lead to effective and efficient consultation under the ESA and MSFCMA. As projects in the Gulf of Mexico are implemented, additional practices may be developed. Check the websites below for the most recent guidance available.

A.2.1 Project Design Criteria for ESA-Listed Species

Project Design Criteria (PDC) are being developed by NMFS[1] to provide technical assistance and avoid or reduce adverse impacts to ESA-listed and protected species. PDCs may be developed for the following and/or additional restoration actions:

- Marine debris removal.
- Living shorelines.
- Marsh creation and enhancement.
- Non-fishing piers.
- Oyster reef creation or enhancement.

Once complete, detailed descriptions of PDCs can be found under the “NMFS’ Southeast Regional Office Guidance” on the following webpage: *NOAA Fisheries, Southeast Regional Office Webpage: ESA*.

A.2.2 Best Practices for EFH Under MSFCMA

At time of publication, practices to avoid and minimize effects to EFH were under development. Please check the following webpage for EFH best practices that may be developed: *NOAA Fisheries, Southeast Regional Office Webpage: Essential Fish Habitat Consultation Guidance Documents*.

[1] NMFS Protected Resources Division Southeast Region 2015. Personal communication with Rachel Sweeney and Mike Tucker, August.

APPENDIX K

CONSULTATION CORRESPONDENCE

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Phillip Hinesley
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Alabama Department of Conservation and Natural Resources
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Dear Mr. Brown and Mr. Hinesley:

The Natural Resource Trustees for the Deepwater Horizon Oil Spill Alabama Trustee Implementation Group (AL TIG) have prepared a draft restoration plan, entitled "Alabama Trustee Implementation Group Draft Restoration Plan I and Environmental Impact Statement: Provide and Enhance Recreational Opportunities (RP/EIS)". This restoration plan, if approved by the Alabama TIG after consideration of public review and comment, would select for implementation six restoration projects within Alabama's coastal zone. The U.S. Department of the Interior (DOI), the National Oceanic and Atmospheric Administration (NOAA), the United States Department of Agriculture, and the United States Environmental Protection Agency (the "Federal Trustees"), have reviewed the restoration plan and proposed projects for consistency with the Alabama Coastal Area Management Program (ACAMP) and have found that, as proposed, these restoration actions are consistent to the maximum extent practicable with the applicable, enforceable policies of the State's federally-approved ACAMP. This letter submits that determination for State review on behalf of all Federal Trustees.

Background

On April 20, 2010, the Deepwater Horizon (DWH) mobile drilling unit exploded, caught fire, and eventually sank in the Gulf of Mexico, resulting in a massive release of oil and other substances from British Petroleum's (BP) Macondo well and causing loss of life and extensive natural resource injuries. Initial efforts to cap the well following the explosion were unsuccessful, and for 87 days after the explosion, the well continuously and uncontrollably discharged oil and natural gas into the northern Gulf of Mexico. Approximately 3.19 million barrels (134 million gallons) of oil were released into the ocean. Oil spread from the deep ocean to the surface and nearshore environment, from Texas to Florida. The oil came into contact with and injured natural resources as diverse as deep-sea coral, fish and shellfish, productive wetland habitats, sandy beaches, birds, endangered sea turtles, and protected marine life. The oil spill prevented people from fishing, going to the beach, and enjoying their typical recreational activities along the Gulf of Mexico. Extensive response actions, including cleanup activities and actions to try to prevent the oil from reaching sensitive resources, were undertaken to try to reduce harm to people and the environment. However, many of these response actions had collateral impacts on the environment and on natural resource services. The oil and other substances released from the well in combination with the extensive response actions together make up the DWH oil spill.

In accordance with the Final Programmatic Damage Assessment and Restoration Plan and Final Programmatic Environmental Impact Statement (Final PDARP/PEIS) and Record of Decision

(ROD), the AL TIG has prepared this draft RP/EIS, which simultaneously fulfills requirements under the Oil Pollution Act (OPA) and the National Environmental Policy Act (NEPA) and proposes a range of restoration alternatives to compensate the public for lost recreational use opportunities in Alabama caused by the DWH oil spill. OPA requires the Trustees to develop a restoration plan. NEPA requires federal agencies to develop an EIS for any "major federal action significantly affecting the quality of the human environment." The draft RP/EIS describes the restoration planning process and provides analysis focusing on project-specific issues in an integrated EIS tiered from the Final PDARP/PEIS.

Proposed Alabama Restoration Projects:

In this draft RP/EIS, the AL TIG evaluates nine restoration alternatives. Six of the restoration alternatives are identified as preferred alternatives, either for conducting engineering and design (E&D) only or for selection and full implementation. The restoration alternatives are independent of each other and may be selected independently by the AL TIG following completion of the Final RP/EIS. Following are the restoration alternatives considered for implementation in Alabama in this RP/EIS:

1. Gulf State Park Lodge and Public Access Amenities

The Gulf State Park Lodge and Associated Public Access Amenities project (GSP Project) would provide partial funding to complete the rebuilding of the Gulf State Park Lodge, which was destroyed in 2004 by Hurricane Ivan, and to develop a host of associated public access amenities at the park. The lodge would be open to all Gulf State Park visitors and would offer public access and amenities similar to those at existing lodges in the National Park System. The GSP Project would provide partial compensation for recreational services lost as a result of DWH injuries to the natural resources of coastal Alabama by creating and enhancing public access to natural resources for recreational use and facilitating recreational experiences.

The rebuilding of the Gulf State Park Lodge was previously part of the Gulf State Park Enhancement Project, which was funded with early restoration funds from BP during Phase III of Early Restoration. Following a lawsuit brought by the Gulf Restoration Network, the use of the $58.5 million for the lodge was stayed pending the completion of additional analysis under OPA and NEPA. The GSP Project, as proposed in the current draft RP/EIS, would include elements that were considered in the Final Phase III ERP/EIS, as well as the following additional free public access elements:

a. Interpretive Lobby

b. Public Education Programs to be held in the lodge lobby, which could include bird watching, astronomy, and information on the coastal environment (additional element)

c. Public Restrooms and Post-Beach Showers

d. Public Beach Access from the Lodge Area

e. Tram System for Access to the Remainder of the Park. Tram stations would be located within existing parking lots. Should shade shelters be added to these stops, they would be added on top of existing asphalt. No new ground disturbance would occur as a result of this activity. The trams would be stored and maintained at an existing state park maintenance facility that has capacity to store and maintain the additional equipment (additional element)

f. Pedestrian Path from the pier parking to the lodge to connect the parking with the enhanced beach access and amenities. This path would be approximately 620 feet long and constructed to ADA accessibility standards (additional element)

g. Bike Share Stations/Program including installing bicycle sharing stations. Bicycle sharing stations would be installed within the development footprint considered under the Final Phase III ERP/EIS (additional element)

h. Meeting Space Viewing Area

2. Fort Morgan Pier Rehabilitation

The Fort Morgan Pier Rehabilitation project would fund the rehabilitation of an existing 500-foot-long fishing pier, located at the Fort Morgan State Historic Site in Baldwin County. The pier, which is over 40 years old, fell into disrepair, and in 2014 the Alabama Historical Commission closed it for safety reasons. The proposed project would rehabilitate the pier on its existing foundations, increasing publicly available opportunities for pier-based fishing in Baldwin County. The proposed project would replace the current pier decking with new decking, install an anchored vinyl sheet pile as support and protection, and construct a concrete sidewalk connecting the pier and the shore. No new infrastructure would be required or added at the site.

3. Fort Morgan Peninsula Public Access Improvements

The Fort Morgan Peninsula Public Access Improvements project would establish “pocket parks” at 11 existing Baldwin County- and state-owned sites on Fort Morgan Peninsula. These publicly accessible sites mainly consist of narrow (50 to 100-foot wide) parcels at the end of county-owned rights-of-way. The proposed project would construct a mix of parking, restroom and shower facilities, and dune walkovers to improve and enhance public access to the beach. At some sites, electrical service and water and sewer lines would be installed, and utilities would be placed underground. Educational signage concerning coastal resources would be placed at the sites.

4. Gulf Highlands Land Acquisition and Improvements

The Gulf Highlands Land Acquisition and Improvements project would consist of the acquisition of the 113 acre Gulf Highlands parcel, located on the Fort Morgan Peninsula in Baldwin County. The Gulf Highlands parcel is the largest remaining privately owned Gulf-fronting parcel on Alabama's coast with approximately 2,700 linear feet of undeveloped beachfront, and is currently at risk of development. In addition to acquisition of the parcel, ADCNR would design, permit, and construct a parking area, controlled access point(s) with a raised dune walkover, perimeter fencing, boundary signs, and educational/interpretive signage.

5. Laguna Cove Little Lagoon Natural Resource Protection

The Laguna Cove Little Lagoon Natural Resource Protection project would include acquisition of and development of recreational amenities on two undeveloped tracts of land, totaling approximately 53 acres near Little Lagoon in Gulf Shores, Southwest Baldwin County. The project site is near the boundaries of the Bon Secour National Wildlife Refuge and include approximately 6,100 linear feet of shoreline on Little Lagoon. This site was previously approved for a subdivision and a large-scale marina and is at risk of future development. Proposed amenities would include a parking area, fishing pier, bathhouse, boardwalk, restrooms, and kayak launch. Educational signage focused on coastal resources would be placed around the site to promote environmental awareness and stewardship.

6. Bayfront Park Restoration and Improvements

The Bayfront Park Restoration and Improvements project would consist of engineering and design (E&D) for restoration and improvements at Mobile County's Bayfront Park located on Dauphin Island Parkway near the Alabama Port community. The park encompasses approximately 20 acres, about 50 percent of which is classified as estuarine marine wetland, and provides playground, picnic, and restroom facilities along with limited public access to Mobile Bay. The County Commission provides full-time staffing and maintenance of the grounds.

Currently, the park receives more than 300 visitors on the weekends and more than 1,200 per week during the peak summer months. The proposed E&D work would evaluate the construction of a living shoreline and/or sandy beach along the Bayfront Park's currently armored Mobile Bay shoreline and development of additional recreational amenities at the park. These new amenities could include improved restroom and playground facilities, a renovated wetland boardwalk and nature trail, expanded birdwatching opportunities, and a geocaching trail. This would include development of a plan for the addition of signage and interpretive materials promoting environmental education and stewardship.

7. Dauphin Island Eco-Tourism and Environmental Education Area

The Dauphin Island Eco-Tourism and Environmental Education Area project would include the acquisition approximately 100 acres of privately held land and water bottom by the Town of Dauphin Island. The water bottom in this area is not currently owned by the State. The property is currently for sale, and if sold to another private landowner, the property could be permitted and developed. This project would protect the land from development and enhance recreational use of the coastal habitat by providing amenities that offer recreational opportunities to the public. These proposed visitor amenities include a fishing pier, bicycle path, parking area, boardwalks, gazebos, and public restrooms. The fishing pier and boardwalks would allow visitors access to the marsh and water. Boardwalks would be placed above wetland habitat to allow visitors access to these habitats while minimizing environmental impacts. Educational signage would be placed at strategic locations to improve public awareness of environmental resources associated with the site.

8. Mid-Island Parks and Public Beach Improvements (Parcels A, B, and C)

The Mid-Island Parks and Public Beach Improvements project (Parcels A, B, and C) would involve the acquisition and management of three separate parcels of property on Dauphin Island, in southwest Mobile County. Dauphin Island's Gulf-fronting beaches were repeatedly oiled during the DWH oil spill and were the site of response activity. Acquisition of these parcels would protect them from future development and would collectively offer public parking, restrooms, and dune walkover access to the Gulf of Mexico, thereby increasing public access to the resource and enhancing the quality of visitor experience.

Parcel A is one of the largest parcels (approximately 8 acres) of undeveloped land on Dauphin Island and includes approximately 1,200 linear feet of beachfront. Parcel A is currently zoned resort-commercial, which allows for construction of buildings up to and including condominiums. This project builds on previous conservation work by the Town of Dauphin Island, The Nature Conservancy, and other partners to protect critically important coastal bird, shorebird, and migratory stopover habitat along the Gulf of Mexico, specifically including Dauphin Island. A dune walkover would be constructed on Parcel A to provide controlled access to this shoreline and protect habitat.

Parcels B and C are approximately 0.94 and 1.15 acres, respectively. These two parcels are located to the north of Parcel A. Parcels B and C are zoned as resort-commercial, multi-family, and commercial general and could be developed as such. Parking is proposed for Parcels B and C. Restrooms are proposed for Parcel B. This project is designed to enhance access to the Gulf. Added parking and restroom facilities would increase public access and enhance the quality of visitor experiences.

9. Mid-Island Parks and Public Beach Improvements (Parcels B and C)

The Mid-Island Parks and Public Beach Improvements project (Parcels B, and C) would be the same as the project described above, but would not include the acquisition of, or improvements to Parcel A.

<u>Summary of Coastal Zone Management Consistency Review for Proposed Projects</u>:

The AL TIG's view of the principal enforceable policies of the ACAMP that are potentially

applicable to the projects proposed in the RP/EIS and the basis of our determination of consistency with these policies is reflected in the following summaries:

1. Gulf State Park Lodge and Public Access Amenities

The rebuilding of the Gulf State Park Lodge was previously part of the Gulf State Park Enhancement Project, which was funded with early restoration funds from BP during Phase III of Early Restoration and evaluated in the Final Phase III ERP/EIS. ACZMA consistency determination was made at that time. Most additional elements proposed in the draft RP/EIS would be located within the footprint of the original Gulf State Park Enhancement Project, which has been reviewed and authorized under ADEM Permit CCB&D-03-017-A and/or Department of Army General Permit ALGP-05 (SAM-2013-00917-JEB). Additional proposed elements that would occur outside or partially outside the original footprint include a tram system and a pedestrian path from the pier parking to the lodge. These elements would be placed in previously disturbed areas and are not expected to impact wetlands. Therefore, there would be no additional CZMA consistency determination requirements for these proposed elements. In the unlikely event that impacts to coastal resources are unavoidable, all appropriate permits and CZMA consistency determination requirements would be obtained or met prior to construction.

2. Fort Morgan Pier Rehabilitation

<u>335-8-2-.01 General Rules Applicable to all Uses Subject to the ACAMP</u>

Pursuant to Ala. Admin. Code r. 335-8-2-.01(1), all uses subject to the ACAMP that are in violation with applicable state air and water quality standards shall not be permitted or certified to be in compliance with the ACAMP. The proposed project shall not violate any state air quality standards and best management practices (BMPs) will be observed to ensure that state water quality standards are not violated. Although the project may cause short term impacts to water quality resulting from increased turbidity, any effects to water quality will be temporary and should not violate state water quality standards.

Pursuant to Ala. Admin. Code r. 335-8-2-.01(2), uses subject to the ACAMP shall not have an adverse impact on historical, cultural or archeological resources, on wildlife and fisheries habitats (especially the critical habitat of endangered species listed pursuant to 16 U.S.C. §§ 1531-1543), or on public access to tidal and submerged lands, navigable waters, beaches and other public recreational resources. While there could be some minor adverse impacts to these resources, the implementation of BMPs would ensure that these impacts are avoided or minimized to the maximum extent possible.

<u>335-8-2-.02 Dredging and/or Filling</u>

Ala. Admin Code r. 335-8-2-.02 contains a number of requirements for projects which include the dredging and filling of State water bottoms. This proposed Fort Morgan Pier Rehabilitation project would require the placement of approximately 8,890 square feet of fill material. Fill material would be placed between the newly installed vinyl sheet pile and the existing support structure for added stabilization. The proposed project would not include dredging. Although the project may cause short term impacts to water quality resulting from increased turbidity, any effects to water quality will be temporary and should not violate state water quality standards. The proposed project is not expected to adversely impact existing natural oyster reefs, submersed grassbeds, or wetlands. Further, once final engineering and design is completed, the appropriate U.S. Army Corps of Engineers permits will be applied for and obtained prior to commencement of construction.

<u>335-8-2-.05 Piers, Docks, Boathouses, and Other Pile Supported Structures</u>

Ala. Admin Code R. 335-8-2-.05 contains a number of requirements for projects which include piers, docks, boathouses, and other pile supported structures. This proposed project would include rehabilitation of an existing pier. However, no new piles would be installed. The proposed project would include the replacement of the current pier decking with new decking and installation of an

anchored vinyl sheet pile as support and protection. The project would also include construction of a concrete sidewalk connecting the pier and the shore. The proposed project would not present a navigation hazard. No construction would be completed over wetlands or submersed grassbeds and any potential impacts to these resources would be minimized through the implementation of BMPs. Further, once final engineering and design is completed, the appropriate U.S. Army Corps of Engineers permits will be applied for and obtained prior to commencement of construction.

Provisions of ACAMP Considered Inapplicable to the Fort Morgan Pier Rehabilitation Project

The following additional elements of the ACAMP were considered but, based on our review, did not appear to be applicable to the Fort Morgan Pier Rehabilitation project:

335-8-2-.03 Mitigation
335-8-2-.04 Marinas
335-8-2-.06 Shoreline Stabilization and Erosion Mitigation
335-8-2-.07 Canals, Ditches and Boatslips
335-8-2-.08 Construction and Other Activities on Gulf Front Beaches and Dunes
335-8-2-.09 Groundwater Extraction
335-8-2-.10 Siting, Construction and Operation of Energy Facilities
335-8-2-.11 Commercial and Residential Development
335-8-2-.12 Discharges to Coastal Waters (greater than 1 million gallons per day)

3. Fort Morgan Peninsula Public Access Improvements

335-8-2-.01 General Rules Applicable to all Uses Subject to the ACAMP

Pursuant to Ala. Admin. Code r. 335-8-2-.01(1), all uses subject to the ACAMP that are in violation with applicable state air and water quality standards shall not be permitted or certified to be in compliance with the ACAMP. The proposed project shall not violate any state air quality standards and best management practices (BMPs) will be observed to ensure that state water quality standards are not violated. Although the project may cause short term impacts to water quality resulting from increased turbidity, any effects to water quality will be temporary and should not violate state water quality standards.

Pursuant to Ala. Admin. Code r. 335-8-2-.01(2), uses subject to the ACAMP shall not have an adverse impact on historical, cultural or archeological resources, on wildlife and fisheries habitats (especially the critical habitat of endangered species listed pursuant to 16 U.S.C. §§ 1531-1543), or on public access to tidal and submerged lands, navigable waters, beaches and other public recreational resources. While there could be some minor adverse impacts to these resources, the implementation of BMPs would ensure that these impacts are avoided or minimized to the maximum extent possible.

335-8-2-.08 Construction and Other Activities on Gulf Front Beaches and Dunes and 335-8-2-.11 Commercial and Residential Development

Ala. Admin. Code r. 335-8-2-.08 and Ala. Admin. Code r. 335-8-2-.11 contain requirements for Gulf front and coastal construction and development projects. This proposed project will be in compliance with the requirements of these regulations. The only elements of this project which would be constructed seaward of the Construction Control Line would be the installation of pile supported dune walkovers. These dune walkovers will be constructed in compliance with 335-8-1-.02(z) which defines a dune walkover as a raised walkway which is no more than six feet in width, constructed without roof or walls, elevated at least one foot above the dune, and extends seaward of the seaward vegetation line. While construction of these dune walkovers may result in temporary impacts to beach and dune habitats, the dune walkovers are expected to result in beneficial impacts by creating controlled access points and discouraging pedestrian traffic across dunes. This proposed project will be in compliance with the requirements of these regulations. Further, the construction of dune walkovers is considered a permissible use under 335-8-1-.05(1)(j).

Provisions of ACAMP Considered Inapplicable to the Fort Morgan Peninsula Public Access Improvements Project

The following additional elements of the ACAMP were considered but, based on our review, did not appear to be applicable to the Fort Morgan Peninsula Public Access Improvements project:

335-8-2-.02 Dredging and/or Filling
335-8-2-.03 Mitigation
335-8-2-.04 Marinas
335-8-2-.05 Piers, Docks, Boathouses, and Other Pile Supported Structures
335-8-2-.06 Shoreline Stabilization and Erosion Mitigation
335-8-2-.07 Canals, Ditches and Boatslips
335-8-2-.09 Groundwater Extraction
335-8-2-.10 Siting, Construction and Operation of Energy Facilities
335-8-2-.11 Commercial and Residential Development
335-8-2-.12 Discharges to Coastal Waters (greater than 1 million gallons per day)

4. Gulf Highlands Land Acquisition and Improvements

335-8-2-.01 General Rules Applicable to all Uses Subject to the ACAMP

Pursuant to Ala. Admin. Code r. 335-8-2-.01(1), all uses subject to the ACAMP that are in violation with applicable state air and water quality standards shall not be permitted or certified to be in compliance with the ACAMP. The proposed project shall not violate any state air quality standards and best management practices (BMPs) will be observed to ensure that state water quality standards are not violated. Although the project may cause short term impacts to water quality resulting from increased turbidity, any effects to water quality will be temporary and should not violate state water quality standards.

Pursuant to Ala. Admin. Code r. 335-8-2-.01(2), uses subject to the ACAMP shall not have an adverse impact on historical, cultural or archeological resources, on wildlife and fisheries habitats (especially the critical habitat of endangered species listed pursuant to 16 U.S.C. §§ 1531-1543), or on public access to tidal and submerged lands, navigable waters, beaches and other public recreational resources. While there could be some minor adverse impacts to these resources, the implementation of BMPs would ensure that these impacts are avoided or minimized to the maximum extent possible.

335-8-2-.08 Construction and Other Activities on Gulf Front Beaches and Dunes and 335-8-2-.11 Commercial and Residential Development

Ala. Admin. Code r. 335-8-2-.08 and Ala. Admin. Code r. 335-8-2-.11 contain requirements for Gulf front and coastal construction and development projects. This proposed project will be in compliance with the requirements of these regulations. The only portion of the proposed project which would be constructed seaward of the Construction Control Line would be the installation of the pile supported dune walkover described above. This dune walkover will be constructed in compliance with 335-8-1-.02(z) which defines a dune walkover as a raised walkway which is no more than six feet in width, constructed without roof or walls, elevated at least one foot above the dune, and extends seaward of the seaward vegetation line. While this may result in temporary impacts to beach and dune habitats, the dune walkover is expected to result in beneficial impacts by creating controlled access points and discouraging pedestrian traffic across dunes. This proposed project will be in compliance with the requirements of these regulations.

Provisions of ACAMP Considered Inapplicable to the Gulf Highlands Land Acquisition and Improvements Project

The following additional elements of the ACAMP were considered but, based on our review, did not appear to be applicable to the Gulf Highlands Land Acquisition and Improvements project:

335-8-2-.02 Dredging and/or Filling

335-8-2-.03 Mitigation
335-8-2-.04 Marinas
335-8-2-.05 Piers, Docks, Boathouses, and Other Pile Supported Structures
335-8-2-.06 Shoreline Stabilization and Erosion Mitigation
335-8-2-.07 Canals, Ditches and Boatslips
335-8-2-.09 Groundwater Extraction
335-8-2-.10 Siting, Construction and Operation of Energy Facilities
335-8-2-.11 Commercial and Residential Development
335-8-2-.12 Discharges to Coastal Waters (greater than 1 million gallons per day)

5. Laguna Cove Little Lagoon Natural Resource Protection

335-8-2-.01 General Rules Applicable to all Uses Subject to the ACAMP

Pursuant to Ala. Admin. Code r. 335-8-2-.01(1), all uses subject to the ACAMP that are in violation with applicable state air and water quality standards shall not be permitted or certified to be in compliance with the ACAMP. The proposed project shall not violate any state air quality standards and best management practices (BMPs) will be observed to ensure that state water quality standards are not violated. Although the project may cause short term impacts to water quality resulting from increased turbidity, any effects to water quality will be temporary and should not violate state water quality standards.

Pursuant to Ala. Admin. Code r. 335-8-2-.01(2), uses subject to the ACAMP shall not have an adverse impact on historical, cultural or archeological resources, on wildlife and fisheries habitats (especially the critical habitat of endangered species listed pursuant to 16 U.S.C. §§ 1531-1543), or on public access to tidal and submerged lands, navigable waters, beaches and other public recreational resources. While there could be some minor adverse impacts to these resources, the implementation of BMPs would ensure that these impacts are avoided or minimized to the maximum extent possible.

335-8-2-.05 Piers, Docks, Boathouses, and Other Pile Supported Structures

Ala. Admin Code r. 335-8-2-.05 contains a number of requirements for projects which include piers, docks, boathouses, and other pile supported structures. The proposed project would include the construction of a pile supported fishing pier on the eastern side of the property and would be approximately 8 feet by 600 feet and include a 15-foot by 250-foot ‘T ‘at the end of the pier. The pier would include a ramp for ADA-compliant accessibility. This ramp would be 10 feet wide with a hand rail on each side. There would be a 20-foot by 30-foot deck base at the end of the ramp. A pile supported boardwalk would be established on the west side of the property, approximately 8 feet by 600 feet that would provide area for viewing or fishing. A 10-foot by 20-foot kayak launch is proposed at the waterward edge of the boardwalk. These pile-supported structures would be elevated in compliance with required permits and would not be constructed on Gulf fronting beaches. The proposed project would not obstruct ebb and flow of the tide or present a navigation hazard. Any potential impacts to wetlands or submersed grassbeds would be minimized through the implementation of BMPs.

Provisions of ACAMP Considered Inapplicable to the Laguna Cove Little Lagoon Natural Resource Protection Project

The following additional elements of the ACAMP were considered but, based on our review, did not appear to be applicable to the Laguna Cove Little Lagoon Natural Resource Protection project:

335-8-2-.02 Dredging and/or Filling
335-8-2-.03 Mitigation
335-8-2-.04 Marinas
335-8-2-.06 Shoreline Stabilization and Erosion Mitigation
335-8-2-.07 Canals, Ditches and Boatslips
335-8-2-.08 Construction and Other Activities on Gulf Front Beaches and Dunes

335-8-2-.09 Groundwater Extraction
335-8-2-.10 Siting, Construction and Operation of Energy Facilities
335-8-2-.11 Commercial and Residential Development
335-8-2-.12 Discharges to Coastal Waters (greater than 1 million gallons per day)

6. Bayfront Park Restoration and Improvements

At the time, the AL TIG proposed only proposed to complete the E&D phase of the Bayfront Park Restoration and Improvements project. This phase of the proposed project would be in full compliance with CZMA. Additional CZMA compliance evaluation would be completed at a later time, if the project enters the construction phase.

7. Dauphin Island Eco-Tourism and Environmental Education Area

<u>335-8-2-.01 General Rules Applicable to all Uses Subject to the ACAMP</u>

Pursuant to Ala. Admin. Code r. 335-8-2-.01(1), all uses subject to the ACAMP that are in violation with applicable state air and water quality standards shall not be permitted or certified to be in compliance with the ACAMP. The proposed project shall not violate any state air quality standards and best management practices (BMPs) will be observed to ensure that state water quality standards are not violated. Although the project may cause short term impacts to water quality resulting from increased turbidity, any effects to water quality will be temporary and should not violate state water quality standards.

Pursuant to Ala. Admin. Code r. 335-8-2-.01(2), uses subject to the ACAMP shall not have an adverse impact on historical, cultural or archeological resources, on wildlife and fisheries habitats (especially the critical habitat of endangered species listed pursuant to 16 U.S.C. §§ 1531-1543), or on public access to tidal and submerged lands, navigable waters, beaches and other public recreational resources. While there could be some minor adverse impacts to these resources, the implementation of BMPs would ensure that these impacts are avoided or minimized to the maximum extent possible.

<u>335-8-2-.05 Piers, Docks, Boathouses, and Other Pile Supported Structures</u>

Ala. Admin Code r. 335-8-2-.05 contains a number of requirements for projects which include piers, docks, boathouses, and other pile supported structures. The proposed project would include the construction of a pile supported fishing pier. The fishing pier would be 10 feet by 530 feet and include four finger piers off of the main pier. Each finger pier would be 10 feet by 100 feet and would include handrails. The pier would include a ramp for accessibility. This ramp would be 10 feet wide with a hand rail on each side. There would be a 20 foot by 30-foot deck base at the end of the ramp. A pile supported boardwalk above the wetlands would connect with the parking area and fishing pier. The walk would be approximately 1,520 linear feet and 8 feet wide. This pile-supported structure would be elevated in compliance with required permits. The proposed project would not obstruct ebb and flow of the tide or present a navigation hazard. Any potential impacts to wetlands or submersed grassbeds would be minimized through the implementation of BMPs.

<u>Provisions of ACAMP Considered Inapplicable to the Dauphin Island Eco-Tourism and Environmental Education Area Project</u>

The following additional elements of the ACAMP were considered but, based on our review, did not appear to be applicable to the Dauphin Island Eco-Tourism and Environmental Education Area project:

335-8-2-.02 Dredging and/or Filling
335-8-2-.03 Mitigation
335-8-2-.04 Marinas
335-8-2-.06 Shoreline Stabilization and Erosion Mitigation
335-8-2-.07 Canals, Ditches and Boatslips
335-8-2-.08 Construction and Other Activities on Gulf Front Beaches and Dunes

335-8-2-.09 Groundwater Extraction
335-8-2-.10 Siting, Construction and Operation of Energy Facilities
335-8-2-.11 Commercial and Residential Development
335-8-2-.12 Discharges to Coastal Waters (greater than 1 million gallons per day)

8. Mid-Island Parks and Public Beach Improvements (Parcels A, B, and C)

335-8-2-.01 General Rules Applicable to all Uses Subject to the ACAMP

Pursuant to Ala. Admin. Code r. 335-8-2-.01(1), all uses subject to the ACAMP that are in violation with applicable state air and water quality standards shall not be permitted or certified to be in compliance with the ACAMP. The proposed project shall not violate any state air quality standards and best management practices (BMPs) will be observed to ensure that state water quality standards are not violated. Although the project may cause short term impacts to water quality resulting from increased turbidity, any effects to water quality will be temporary and should not violate state water quality standards.

Pursuant to Ala. Admin. Code r. 335-8-2-.01(2), uses subject to the ACAMP shall not have an adverse impact on historical, cultural or archeological resources, on wildlife and fisheries habitats (especially the critical habitat of endangered species listed pursuant to 16 U.S.C. §§ 1531-1543), or on public access to tidal and submerged lands, navigable waters, beaches and other public recreational resources. While there could be some minor adverse impacts to these resources, the implementation of BMPs would ensure that these impacts are avoided or minimized to the maximum extent possible.

335-8-2-.08 Construction and Other Activities on Gulf Front Beaches and Dunes
Ala. Admin Code R. 335-8-2-.08 contains a number of requirements for projects on Gulf-front beaches and dunes. The proposed project would include the construction of a pile supported dune walkover on Parcel A. This walkover would be approximately 975 linear feet and approximately 6 feet wide. These dune walkovers will be constructed in compliance with 335-8-1-.02(z) which defines a dune walkover as a raised walkway which is no more than six feet in width, constructed without roof or walls, elevated at least one foot above the dune, and extends seaward of the seaward vegetation line. The walkover would extend along the western edge of the parcel along an old street ROW from the northern edge of the parcel and extend seaward to the approximate seaward vegetation line. Pilings would be jetted to an appropriate depth, the supporting framing would be installed followed by the installation of decking and railings. No construction would be completed over wetlands. No structures other than the dune walkover would be located seaward of the Construction Control Line.

Provisions of ACAMP Considered Inapplicable to the Mid-Island Parks and Public Beach Improvements (Parcels A, B, and C) Project

The following additional elements of the ACAMP were considered but, based on our review, did not appear to be applicable to the Mid-Island Parks and Public Beach Improvements (Parcels A, B, and C) project:

335-8-2-.02 Dredging and/or Filling
335-8-2-.03 Mitigation
335-8-2-.04 Marinas
335-8-2-.05 Piers, Docks, Boathouses, and Other Pile Supported Structures
335-8-2-.06 Shoreline Stabilization and Erosion Mitigation
335-8-2-.07 Canals, Ditches and Boatslips
335-8-2-.09 Groundwater Extraction
335-8-2-.10 Siting, Construction and Operation of Energy Facilities
335-8-2-.11 Commercial and Residential Development
335-8-2-.12 Discharges to Coastal Waters (greater than 1 million gallons per day)

9. Mid-Island Parks and Public Beach Improvements (Parcels B and C)

335-8-2-.01 General Rules Applicable to all Uses Subject to the ACAMP

Pursuant to Ala. Admin. Code r. 335-8-2-.01(1), all uses subject to the ACAMP that are in violation with applicable state air and water quality standards shall not be permitted or certified to be in compliance with the ACAMP. The proposed project shall not violate any state air quality standards and best management practices (BMPs) will be observed to ensure that state water quality standards are not violated. Although the project may cause short term impacts to water quality resulting from increased turbidity, any effects to water quality will be temporary and should not violate state water quality standards.

Pursuant to Ala. Admin. Code r. 335-8-2-.01(2), uses subject to the ACAMP shall not have an adverse impact on historical, cultural or archeological resources, on wildlife and fisheries habitats (especially the critical habitat of endangered species listed pursuant to 16 U.S.C. §§ 1531-1543), or on public access to tidal and submerged lands, navigable waters, beaches and other public recreational resources. While there could be some minor adverse impacts to these resources, the implementation of BMPs would ensure that these impacts are avoided or minimized to the maximum extent possible.

Provisions of ACAMP Considered Inapplicable to the Mid-Island Parks and Public Beach Improvements (Parcels B and C) Project

The following additional elements of the ACAMP were considered but, based on our review, did not appear to be applicable to the Mid-Island Parks and Public Beach Improvements (Parcels B and C) project:

335-8-2-.02 Dredging and/or Filling
335-8-2-.03 Mitigation
335-8-2-.04 Marinas
335-8-2-.05 Piers, Docks, Boathouses, and Other Pile Supported Structures
335-8-2-.06 Shoreline Stabilization and Erosion Mitigation
335-8-2-.07 Canals, Ditches and Boatslips
335-8-2-.08 Construction and Other Activities on Gulf Front Beaches and Dunes
335-8-2-.09 Groundwater Extraction
335-8-2-.10 Siting, Construction and Operation of Energy Facilities
335-8-2-.11 Commercial and Residential Development
335-8-2-.12 Discharges to Coastal Waters (greater than 1 million gallons per day)

Conclusion:
Based on this review, the Federal Trustees find the Draft RP/EIS to be consistent with the federally-approved ACAMP. This letter submits that determination for review by the State coincident with public review of this document.

The Federal Trustees are requesting and would deeply appreciate a response to this determination of consistency as soon as is practicable. We thank you in advance for your efforts to accommodate this request.

Sincerely,

Christopher D. Doley
Designated Trustee Representative for Deepwater Horizon
National Oceanic and Atmospheric Administration

LANCE R. LEFLEUR
DIRECTOR

ROBERT J. BENTLEY
GOVERNOR

Alabama Department of Environmental Management
adem.alabama.gov

1400 Coliseum Blvd. 36110-2400 ▪ Post Office Box 301463
Montgomery, Alabama 36130-1463
(334) 271-7700 ▪ FAX (334) 271-7950

February 2, 2017

Christopher D. Doley
Designated Trustee Representative for Deepwater Horizon
National Oceanic and Atmospheric Administration
National Marine Fisheries Service
Silver Spring, Maryland 20910

RE: State of Alabama Coastal Consistency Concurrence
Draft Restoration Plan entitled "*Alabama Trustee Implementation Group Draft Restoration Plan Phase I and Environmental Impact Statement: Provide and Enhance Recreational Opportunities (RP/EIS)*"
Select for Implementation Six Restoration Projects within Alabama's Coastal Zone

- Gulf State Park Lodge and Public Access Amenities
- Fort Morgan Pier Rehabilitation
- Fort Morgan Peninsula Public Access Improvements
- Gulf Highlands Land Acquisition and Improvements
- Laguna Cove Little Lagoon Natural Resource Protection
- Bayfront Park Restoration and Improvements
- Dauphin Island Eco-Tourism and Environmental Education Area
- Mid-Island Parks and Public Beach Improvements (Parcels A, B, and C)
- Mid-Island Parks and Public Beach Improvements (Parcels B and C).

Alabama Department of Environmental Management (ADEM) Tracking Code: 2017-096-FC-FAA-NRDA

Dear Mr. Doley:

The ADEM received the Natural Resource Trustees' (Trustees) coastal consistency determination for the referenced activities - required by 15CFR§930.36 - on December 15, 2016. Public noticing requirements of 15CFR §930.42 have been completed. Pursuant to 15CFR §930.41, by this letter the ADEM hereby notifies the Trustees of its **concurrence** with the Trustee's determination that the proposed activities are consistent with the enforceable policies of the Alabama Coastal Area Management Program.

Contact the Mobile-Coastal office anytime with questions. Always include the ADEM tracking code above when corresponding on this matter.

Sincerely,

Anthony Scott Hughes, Chief
Field Operations Division

cc: Phillip Hinesley, ADCNR (Sent Via Email Only: Phillip.Hinesley@dcnr.alabama.gov)
Linda McCool, ADCNR (Sent Via Email Only: Linda.McCool@dcnr.alabama.gov)
William H. Brantley, ADCNR-SLD (Sent Via Email Only: Will.Brantley@dcnr.alabama.gov)

ASH/jsb

File: CZCERT

Birmingham Branch
110 Vulcan Road
Birmingham, AL 35209-4702
(205) 942-6168
(205) 941-1603 (FAX)

Decatur Branch
2715 Sandlin Road, S.W.
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(256) 353-1713
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Mobile Branch
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(251) 450-3400
(251) 479-2593 (FAX)

Mobile-Coastal
3664 Dauphin Street, Suite B
Mobile, AL 36608
(251) 304-1176
(251) 304-1189 (FAX)

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 4
ATLANTA FEDERAL CENTER
61 FORSYTH STREET
ATLANTA, GEORGIA 30303-8960

JAN 30 2017

Mr. Dan Van-Nostrand
NOAA Gulf of Mexico Disaster Response Center
Attn: Alabama Recreational Use Restoration Plan
7344 Zeigler Blvd
Mobile, Alabama 36608

Re: EPA Review Comments on Deepwater Horizon Oil Spill Alabama Trustee Implementation Group Draft Restoration Plan I and Environmental Impact Statement (DEIS): Provide and Enhance Recreational Opportunities; CEQ #20160301

Dear Mr. Van-Nostrand:

The U.S. Environmental Protection Agency has reviewed the subject Draft Environmental Impact Statement (DEIS) consistent with Section 102(2)(C) of the National Environmental Policy Act (NEPA) and Section 309 of the Clean Air Act. The Alabama Trustee Implementation Group (AL TIG) is undertaking a restoration planning effort to meet the purpose of restoring those natural resources and services injured as a result of the Deepwater Horizon (DWH) oil spill. The 2016 Final Programmatic Damage Assessment and Restoration Plan/Programmatic Environmental Impact Statement (Final PDARP/PEIS) identified extensive and complex injuries to natural resources and services across the Gulf of Mexico as well as a need and plan for comprehensive restoration consistent with the Oil Pollution Act (OPA). The AL TIG Restoration Plan/DEIS focuses on the restoration of injuries to Alabama's natural resources and services with particular emphasis on the restoration type: "Provide and Enhance Recreational Opportunities," using funds made available through the DWH Consent Decree. This RP/DEIS describes restoration projects which are consistent with the goals outlined in the PDAR/PEIS that would provide the public with recreational shoreline use services in Alabama.

The AL TIG has prepared this "EIS to inform the public about the Deepwater Horizon Natural Resources Damage Assessment (DWH NRDA) restoration planning efforts and to seek public comment on the six preferred alternatives (five preferred restoration alternatives proposed for implementation and one preferred restoration alternative proposed for engineering and design [E&D])."[1] The AL TIG includes a designated representative from the EPA Region 4 Office's Water Protection Division. The EPA is designated as one of the four Federal agencies and five Gulf state's trustees under OPA for NRDA activities. In addition, the EPA is also a cooperating agency for the preparation of this NEPA document under 40 CFR Section 1501.6, et al.

Over the last 6 months, the EPA Region 4 NEPA Program Office provided review and pre-draft technical comments during the drafting of the subject DEIS. Because the EPA previously reviewed and

[1] p. ES-2 of DEIS

provided technical comments on this DEIS and those comments have been largely incorporated into the final DEIS, we do not have any additional substantive review comments to offer on the DEIS.

The preferred restoration alternatives considered in the DEIS include:

- Gulf State Park Lodge and Associated Public Access Amenities Project – $56,300,000
- Fort Morgan Pier Rehabilitation – $3,075,000
- Laguna Cove Little Lagoon Natural Resource Protection – $4,400,000
- Bayfront Park Restoration and Improvement (E & D only) – $1,000,000
- Dauphin Island Eco-Tourism and Environment Education Area – $4,000,000
- Mid-Island Parks and Public Beach Improvements (Parcels B and C) – $1,900,000

The total funding proposed in this RP/DEIS is $70,675,000.

We have a 'Lack of Objections' (LO) on the proposed restoration activities as described in the RP/DEIS. Furthermore, the EPA does not anticipate any significant environmental impacts associated with any of the preferred restoration alternatives. Finally, we support the trustees' efforts to comprehensively address the natural resources and services injured as a result of the DWH oil spill.

The EPA appreciates the opportunity to review this RP/DEIS and we request and support continued coordination and collaborative efforts as this proposal moves through the NEPA process. Should the NOAA have questions regarding these general comments, please feel free to contact Mr. Christopher Militscher, Chief of the NEPA Program Office at (404)562-9512 or by email at Militscher.chris@epa.gov or Mr. Dan Holliman at (404) 562-9531 or by email at holliman.daniel@epa.gov.

Sincerely,

G. Alan Farmer
Director
Resource Conservation and Restoration Division

United States Department of the Interior

FISH AND WILDLIFE SERVICE
1208-B Main Street
Daphne, Alabama 36526

IN REPLY REFER TO:
2017-TA-0163

JAN 0 4 2017

Debora L. McClain
Deputy DOI DH NRDAR Case Manager
Region 4
134 Union Road
Lakewood, CO 80228

Dear Ms. McClain:

Thank you for your letter dated December 2, 2016, regarding a Coastal Barrier Resource Act (CBRA) determination for the DWH Early Restoration Project Alternatives in Coastal Alabama. Your letter is requesting that the Fish and Wildlife Service (Service) determine whether the proposed alternatives are located within the John H. Chafee Coastal Barrier Resource System (CBRS) and if so, whether the project is consistent with the Coastal Barrier Resource Act (CBRA) of 1982. The Service has reviewed the proposed alternatives and provides the following information on a technical assistance basis.

Project Alternatives:
1) Gulf State Park Lodge and Associated Public Access Amenities
2) Fort Morgan Pier Rehabilitation

The above referenced projects are:

_____ Not located within the CBRS
__X__ Located within an Otherwise Protected Area
_____ Located within the CBRS and is consistent with CBRA
_____ Located within the CBRS and is not consistent with CBRA

Project Alternatives:
3) Fort Morgan Peninsula Public Access Improvements
4) Laguna Cover Little Lagoon Natural Resources Protection
5) Bayfront Park Restoration and Improvement
6) Dauphin Island Eco-Tourism and Environmental Education
7) Mid Island Parks and Public Beach Improvements (Parcels A, B, and C)
8) Mid Island Parks and Public Beach Improvements (Parcels B and C)

PHONE: 251-441-5181 FAX: 251-441-6222

The above referenced projects are:

__X_ Not located within the CBRS
_____ Located within an Otherwise Protected Area
_____ Located within the CBRS and is consistent with CBRA
_____ Located within the CBRS and is not consistent with CBRA

We hope this letter is responsive to your inquiry. Additional information concerning the CBRA can be found on the Service's website at http://www.fws.gov/cbra. If you have any additional questions, please contact Ms. Shannon Holbrook of this office at 251-441-5871.

Sincerely,

William J. Pearson
Field Supervisor
Alabama Ecological Services Field Office

Bill, December 2, 2016

The DOI Deepwater Horizon Case Management Office is working through various environmental compliance consultations on post-settlement proposed restoration alternatives in Alabama. First, we would like to thank you for all your efforts in the ESA Section 7 consultations your office has conducted for the Early Restoration projects. We are now working on the Coastal Barrier Resources Act consistency determinations for proposed alternatives. There are eight proposed alternatives that could occur in Alabama that are being evaluated by the Alabama Trustee Implementation Group (TIG) as potential restoration projects. The alternatives will be proposed in a draft restoration plan that will be released for public review and comment later this month. If the Trustees select these project alternatives, or any combination of alternatives, after consideration of public comment, the restoration projects would be implemented by the Alabama Department of Conservation and Natural Resources (ADCNR).

We used the Coastal Barrier Resources System mapper – Beta (http://www.fws.gov/cbra/Maps/Mapper.html [accessed November 29, 2016]) to determine if proposed alternatives were located within an Otherwise Protected Area or within a System Unit. If the proposed alternatives would occur in an Otherwise Protected Area or outside of a System Unit, no additional analysis was developed.

The table below summarizes the eight proposed alternatives and our CBRA Consistency Determinations. These alternatives are briefly described below, and shown in Figures 1-9.

Proposed Alternatives	**CBRA Consistency Determination**
Gulf State Park Lodge and Associated Public Access Amenities (GSP Project)	Occurs entirely within AL-02P. CBRA does not apply.
Fort Morgan Pier Rehabilitation	Occurs entirely within Q01P. CBRA does not apply.
Fort Morgan Peninsula Public Access Improvements	Does not occur within any CBRS Unit.
Laguna Cove Little Lagoon Natural Resource Protection	Does not occur within any CBRS Unit.
Bayfront Park Restoration and Improvement	Does not occur within any CBRS Unit.
Dauphin Island Eco-Tourism and Environmental Education	Does not occur within any CBRS Unit.
Mid Island Parks and Public Beach Improvements (Parcels A, B, and C)	Does not occur within any CBRS Unit.
Mid Island Parks and Public Beach Improvements (Parcels B and C)	Does not occur within any CBRS Unit.

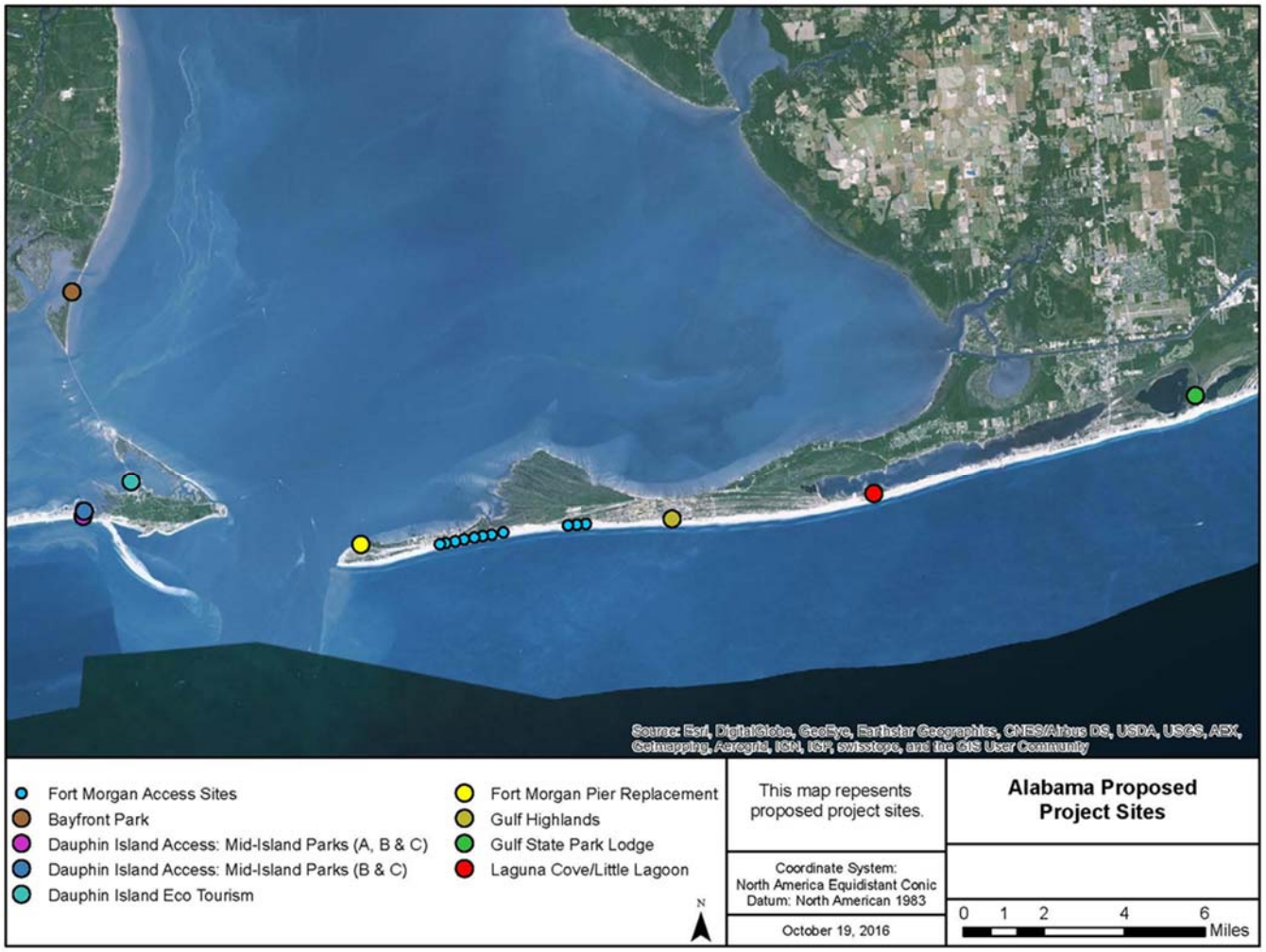

Figure 1. Location of proposed alternatives, Baldwin and Mobile counties, Alabama.

1. The Gulf State Park Lodge and Associated Public Access Amenities Project

The Gulf State Park Lodge and Associated Public Access Amenities Project would provide partial funding to rebuild the Gulf State Park (GSP) Lodge, which was destroyed in 2004 by Hurricane Ivan, and add associated visitor enhancements and amenities. The project would provide park visitors with an educational/interpretive lobby, public education programs, expansive viewing porches, public beach access, public restrooms and post-beach shower facilities, a restaurant, café, a bike share program, a public tram system, free public Wi-Fi, and overnight accommodations. The GSP Lodge would be rebuilt as a "green" overnight stay facility. The new lodge would provide overnight accommodations and ecologically based amenities in a natural environment. The lodge would be open to all GSP visitors and would offer amenities similar to those at existing lodges in the National Park System. The lobby and other public spaces in and around the lodge would serve as focal points for environmental education, with exhibits and programs addressing coastal Alabama ecosystems and sustainable development practices in the coastal zone.

Consistency Analysis

The proposed alternative occurs entirely within AL-02P. We have determined that CBRA does not apply because this is an Otherwise Protected Area and the only prohibition is Federal Flood Insurance. If there is anything else we need to capture for CBRA please let me know.

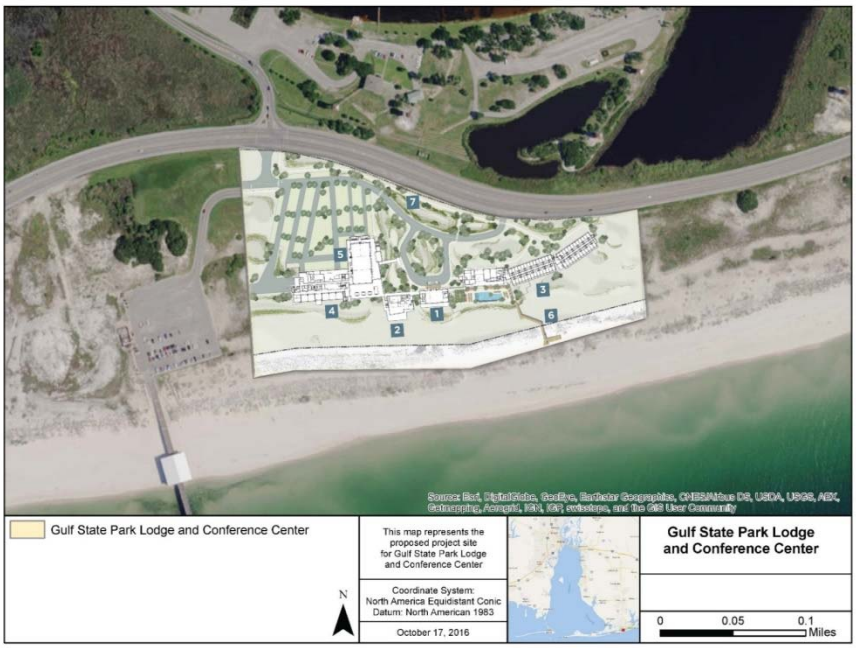

Figure 2. Location of GSP project alternative.

2. Fort Morgan Pier Rehabilitation Project

This alternative would fund the rehabilitation of a fishing pier located on the Fort Morgan Peninsula in extreme southwestern Baldwin County, Alabama. The existing pier is approximately 500 feet long and is located at the Fort Morgan State Historic Site. Until recently, the Fort Morgan fishing pier was heavily used by recreational fisherman. However, the pier, which is over 40 years old, fell into disrepair, and in 2014 the Alabama Historical Commission closed the pier for safety reasons. The proposed alternative would rehabilitate the pier on its existing foundations, increasing publicly available opportunities for pier-based fishing in Baldwin County

Consistency Analysis

The proposed alternative occurs entirely within Q01P. We have determined that CBRA does not apply because this is an Otherwise Protected Area and the only prohibition is Federal Flood Insurance. If there is anything else we need to capture for CBRA please let me know.

Figure 3. Location of Fort Morgan Pier Rehab project alternative.

3. Fort Morgan Peninsula Public Access Improvements

This alternative would fund Gulf beach access improvements on the Fort Morgan Peninsula in southwest Baldwin County, Alabama. The proposed alternative would construct parking and dune walkovers at 11 existing Baldwin County- and state-owned sites. These sites mainly consist of narrow (50 to 100 feet wide) county-owned sites at the end of county-owned rights-of-way. The sites are currently accessible by the public but lack parking, beach access amenities such as showers and bathrooms, and/or dune walkovers. Access would be improved for beach visits and other beach-based recreational activities by providing parking, beach access amenities, and dune walkovers to enhance recreational use and protect resources.

Consistency Analysis

The proposed alternative is not within any designated System Unit and is therefore not subject to CBRA.

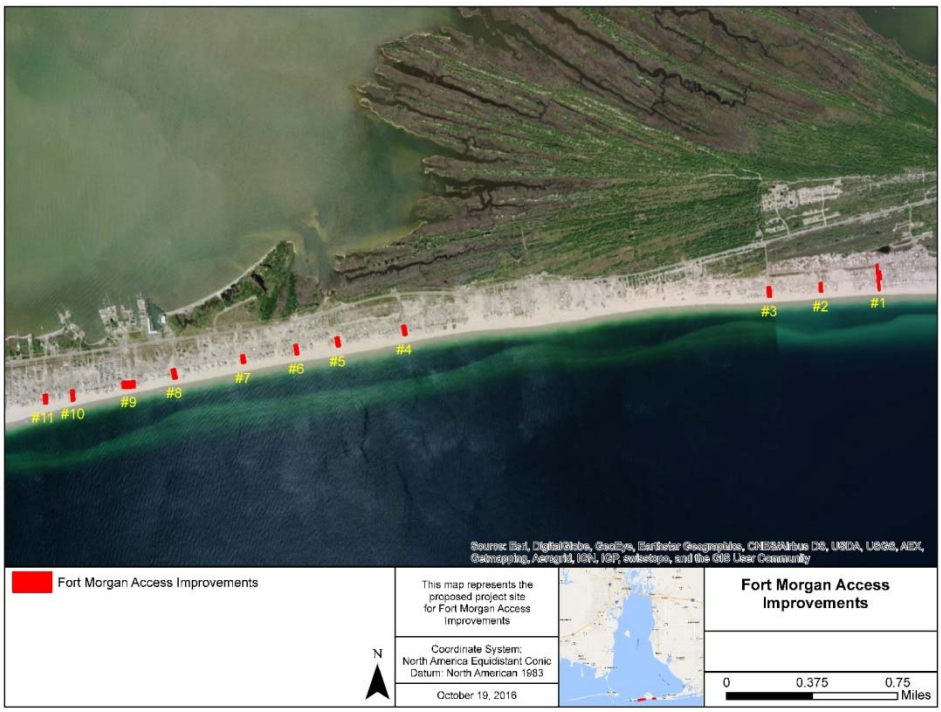

Figure 4. Location of Fort Morgan Access Improvements proposed alternative.

4. Laguna Cove Little Lagoon Natural Resource Protection

The State of Alabama would acquire two undeveloped tracts of land, totaling approximately 53 acres near Little Lagoon in Gulf Shores, Alabama. The tracts contain coastal wetlands and include portions of shoreline along Little Lagoon. This alternative would protect one of the largest undeveloped tracts of land on Little Lagoon, preserving habitat and ensuring that the land would remain in the public domain for enjoyment by future generations. In addition to land acquisition, several improvements are proposed to provide recreational access to the site, including a boardwalk, kayak launch, parking, and restrooms.

Consistency Analysis

The proposed alternative is not within any designated System Unit and is therefore not subject to CBRA.

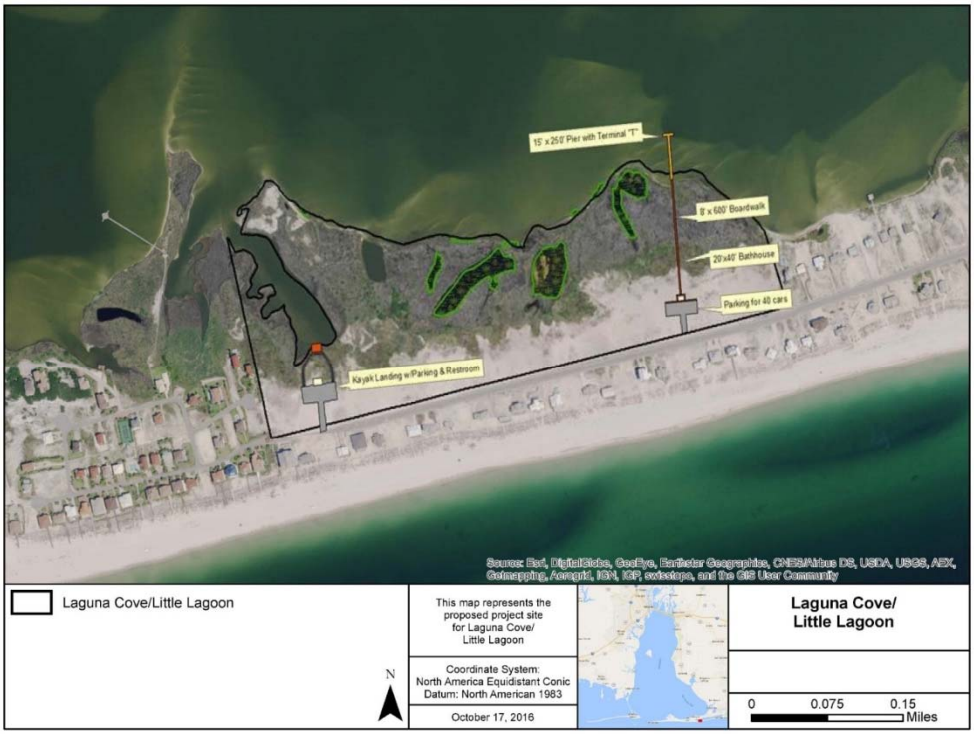

Figure 5. Location of Laguna Cove Little Lagoon proposed alternative.

5. Bayfront Park Restoration and Improvement

This alternative is proposed for a phased approach to restoration planning. The plan evaluates engineering and design activities to examine restoring Bayfront Park and providing additional improvements to the area on land owned by Mobile County. If this project were selected for implementation, additional NEPA analysis to address project implementation (construction and operation of the project) would occur at that time. Bayfront Park is located in Mobile County, on Dauphin Island Parkway near the Alabama Port community. This alternative would provide enhanced public access and infrastructure protection at Bayfront Park. As part of the project, a public access plan to promote support and stewardship would be developed.

Consistency Analysis

The proposed alternative is not within any designated System Unit and is therefore not subject to CBRA.

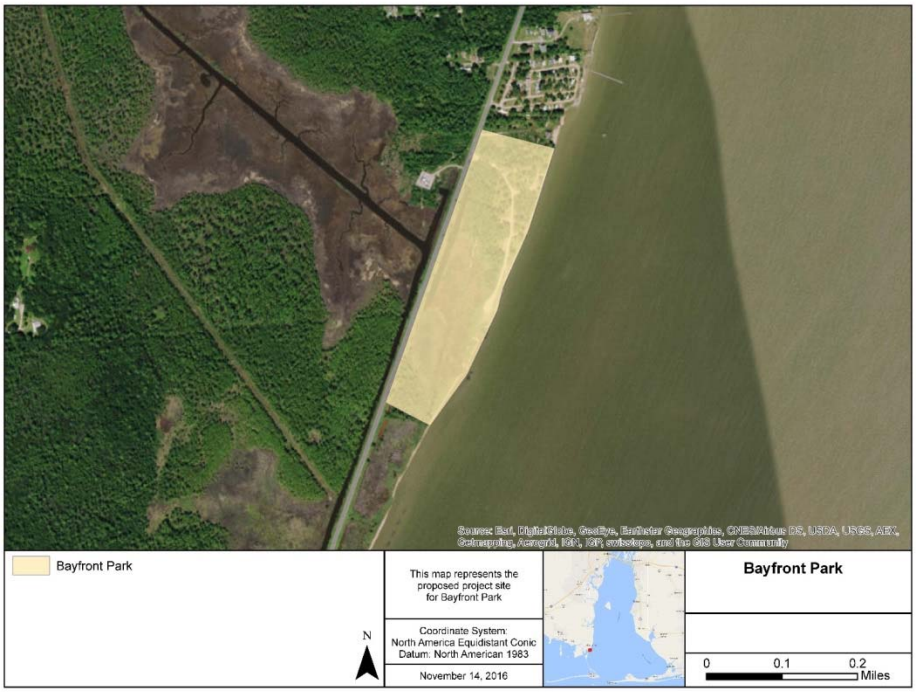

Figure 6. Location of Bayfront Park proposed alternative.

6. Dauphin Island Eco-Tourism and Environmental Education

Approximately 100 acres of land would be acquired, owned, and managed by the Town of Dauphin Island. The alternative would include developing a parking area and visitor amenities, including boardwalks, a gazebo, and public restrooms. Boardwalks would be placed above wetland habitat to allow visitors access to these habitats while minimizing environmental impacts. Educational signage would be placed at strategic locations to improve public awareness of environmental resources and enhance learning opportunities. This alternative would increase public access to wetland habitats adjacent to Aloe Bay, where very little public access currently exists.

Consistency Analysis

The proposed alternative is not within any designated System Unit and is therefore not subject to CBRA.

Figure 7. Location of Dauphin Island Eco Tourism proposed alternative.

7. Mid Island Parks and Public Beach Improvements (Parcels A, B, and C)

This alternative involves the acquisition of a total of approximately 10 acres and construction of access improvements on three separate parcels of land that would collectively offer visitors to Dauphin Island an expanded public beach area, improved access to the existing beach, additional public parking, and restroom/shower facilities. Once acquired, the Town of Dauphin Island would manage the land. These acquisitions and improvements would create new public access though visitor use amenities to the shoreline and enhance the quality of the experiences for visitors who currently use Dauphin Island's public beach.

Consistency Analysis

The proposed alternative is not within any designated System Unit and is therefore not subject to CBRA.

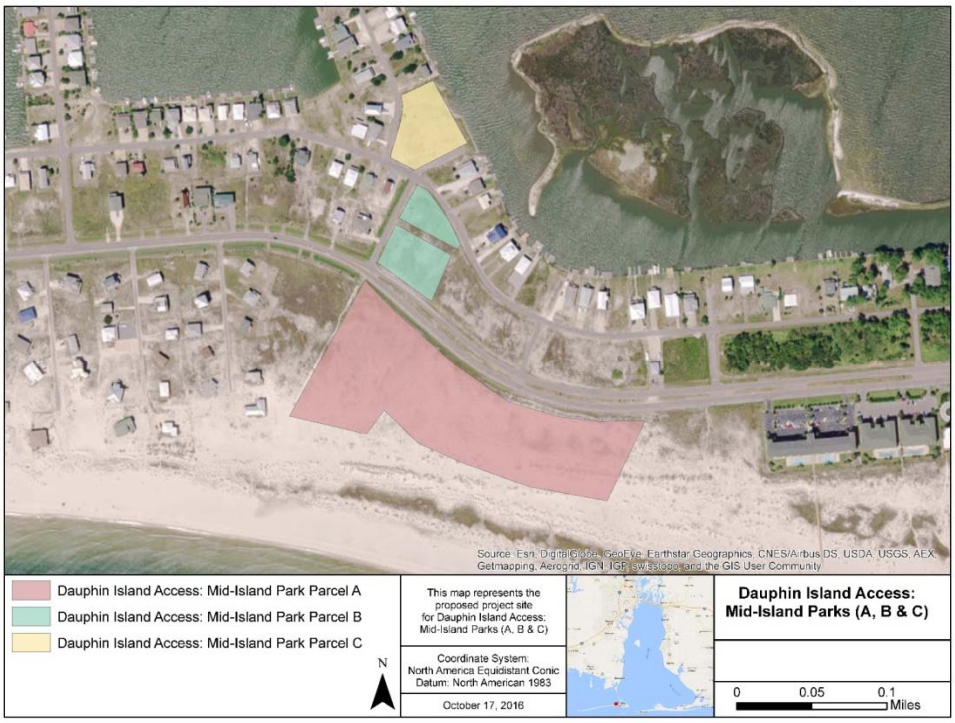

Figure 8. Location of Mid Island Parks and Public Beach Improvements (Parcels A, B, C) proposed alternative.

8. Mid Island Parks and Public Beach Improvements (Parcels B and C)

This alternative involves the acquisition and construction of access improvements on two separate parcels of property to collectively offer public parking and restroom/shower facilities at Dauphin Island. Once acquired, the Town of Dauphin Island would manage the land. This proposed alternative is designed to enhance access to the Gulf. Added parking and restroom/shower facilities would increase public access and enhance the quality of visitor experiences.

Consistency Analysis

The proposed alternative is not within any designated System Unit and is therefore not subject to CBRA.

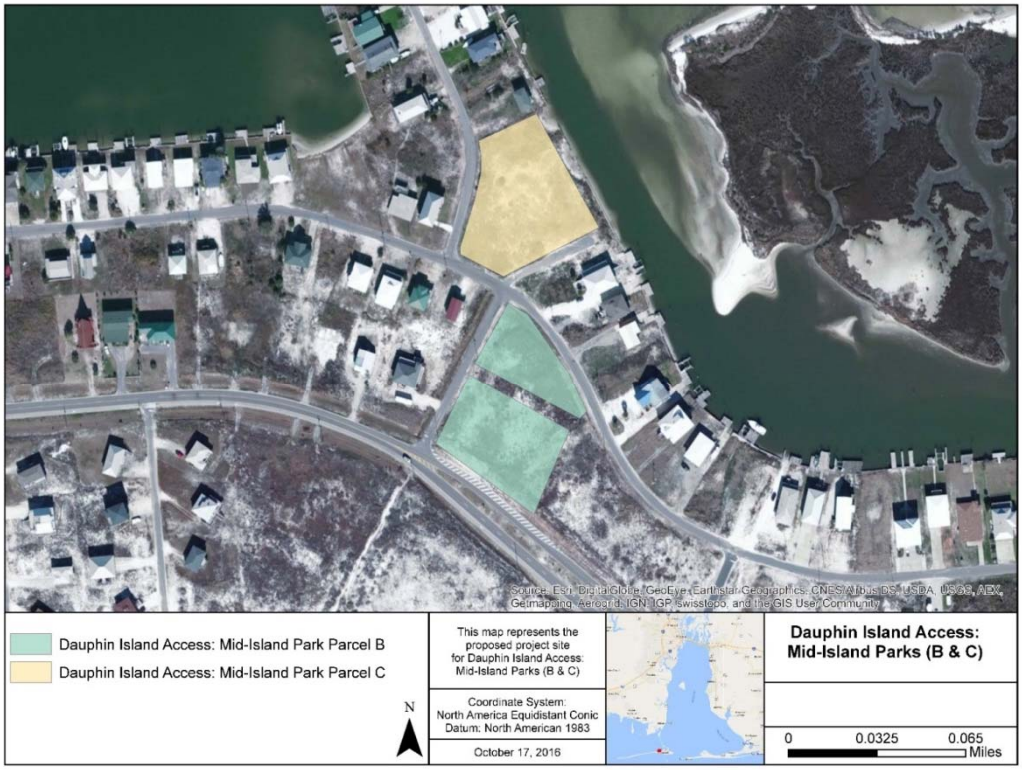

Figure 9. Location of Mid Island Parks and Public Beach Improvements (Parcels B, C) proposed alternative.

UNITED STATES DEPARTMENT OF COMMERCE
National Oceanic and Atmospheric Administration
NATIONAL MARINE FISHERIES SERVICE
Silver Spring, MD 20910

March 29, 2017

David Bernhart
Assistant Regional Administrator for Protected Resources
NOAA Fisheries Service, Southeast Regional Office
263 13th Avenue South
Saint Petersburg, Florida 33701

Re: Request for Section 7 Endangered Species Act Formal Consultation for Projects Proposed for Funding under the Deepwater Horizon (DWH) Oil Spill Natural Resource Damage Assessment (NRDA) in the Alabama Trustee Implementation Group Restoration Plan and Environmental Impact Statement

Dear David,

The National Oceanic and Atmospheric Administration (NOAA) Restoration Center requests formal consultation under section 7 of the Endangered Species Act (ESA) for the projects listed below that are likely to adversely affect ESA-listed species. None of the proposed projects will affect any designated critical habitat.

The NOAA Restoration Center, a Lead Federal Agency, is requesting consultation on behalf of the Natural Resource Trustees for the DWH NRDA Alabama Restoration Area. Enclosed please find a Biological Assessment for each project based on the following effect determinations:

Project Name	Location	Not Likely to Adversely Affect	Likely to Adversely Affect
Dauphin Island Eco-Tourism and Environment Education Area	South Mobile County, Alabama	Hawksbill Sea Turtle	Green Sea Turtle
		Leatherback Sea Turtle	Kemp's Ridley Sea Turtle
		Gulf Sturgeon	Loggerhead Sea Turtle
Fort Morgan Pier Rehabilitation	Fort Morgan Peninsula, Bon Secour Bay, Alabama	Hawksbill Sea Turtle	Green Sea Turtle
		Leatherback Sea Turtle	Kemp's Ridley Sea Turtle
		Gulf Sturgeon	Loggerhead Sea Turtle
		Hawksbill Sea Turtle	Green Sea Turtle

Laguna Cove Little Lagoon Natural Resource Protection	Southwest Baldwin County, Alabama	Leatherback Sea Turtle	Kemp's Ridley Sea Turtle
		Gulf Sturgeon	Loggerhead Sea Turtle

For further questions about the projects, please contact Christy Fellas in the NOAA Restoration Center, Southeast Region at 727-551-5714 or christina.fellas@noaa.gov. Thank you for your assistance.

Sincerely,

Aileen C. Smith
Interim Program Manager, Deepwater Horizon Restoration
Restoration Center, Office of Habitat Conservation

UNITED STATES DEPARTMENT OF COMMERCE
National Oceanic and Atmospheric Administration
NATIONAL MARINE FISHERIES SERVICE
Silver Spring, MD 20910

MEMORANDUM FOR: FILE

FROM: Christy Fellas, DWH Environmental Compliance Coordinator
NOAA Restoration Center, Southeast Region

DATE: March 29, 2017

SUBJECT: Projects Proposed in Alabama Trustee Implementation Group Restoration Plan #1 and Environmental Impact Statement: ESA No Effect Determination

Under the Endangered Species Act (ESA) Section 7(a)(2), each Federal agency shall ensure that any action authorized, funded, or carried out by such agency is not likely to jeopardize the continued existence of any endangered or threatened species, or destroy/adversely modify designated critical habitat. If a Federal agency determines that a Federal action will have no effect on ESA-listed species or designated critical habitat, then the Federal agency is not required to consult with NMFS for purposes of ESA. This memo is not intended to include a summary of DOI protected species for the determinations provided below.

Based on the my review of project materials (Spring 2017) in coordination with representatives from NOAA's Protected Resource Division (PRD) in the South East Regional Office (SERO), the NOAA Restoration Center determined that all three projects proposed for implementation in the Alabama TIG Restoration Plan/Environmental Impact Statement will have no effect to listed species under the jurisdiction of National Marine Fisheries Service because the projects are upland or restricted to planning. These projects will not require further ESA evaluation. Should any project be modified in a way that could adversely impact ESA, this determination will be reevaluated as appropriate.

Proposed Projects

- Dauphin Island Mid-Island Parks and Public Beach Improvements
- Gulf State Park Lodge and Public Access Amenities
- Bayfront Park Restoration and Improvement (Engineering & Design)

UNITED STATES DEPARTMENT OF COMMERCE
National Oceanic and Atmospheric Administration
NATIONAL MARINE FISHERIES SERVICE
Silver Spring, MD 20910

MEMORANDUM FOR: FILE

FROM: Christy Fellas, DWH Environmental Compliance Coordinator
NOAA Restoration Center, Southeast Region

DATE: March 29, 2017

SUBJECT: Projects Proposed in Alabama Trustee Implementation Group Restoration Plan #1 and Environmental Impact Statement: EFH No Effect Determination

The Magnuson-Stevens Fishery Conservation and Management Act (Magnuson-Stevens Act), as amended by the Sustainable Fisheries Act of 1996 (Public Law 104-267), established procedures designed to identify, conserve, and enhance Essential Fish Habitat (EFH) for those species regulated under a Federal fisheries management plan (FMP). A Federal agency must prepare an EFH Assessment for any Federal action that may adversely affect EFH (50 CPR 600.920(e)(l)). A Federal agency must first determine whether their action may adversely impact EFH. If a Federal agency determines that a Federal action may adversely impact EFH, then the Federal agency must prepare an EFH assessment. If a Federal agency determines that a Federal action will not adversely affect EFH, then the Federal agency is not required to prepare an EFH Assessment.

Based on my review of project materials (Spring 2017) in coordination with representatives from NOAA's Habitat Conservation Division (HCD) in the South East Regional Office (SERO), the NOAA Restoration Center determined that all projects proposed for implementation in the in the Alabama Trustee Implementation Group Restoration Plan #1 and Environmental Impact Statement will not affect EFH because the projects are upland, restricted to planning or have been designed to avoid affecting EFH. As a result, none of the projects below require further EFH evaluation. Should any project be modified in a way that could adversely impact EFH, this determination will be reevaluated as appropriate.

Proposed Projects

- Dauphin Island Mid-Island Parks and Public Beach Improvements
- Gulf State Park Lodge and Public Access Amenities
- Bayfront Park Restoration and Improvement (Engineering & Design)
- Dauphin Island Eco-Tourism and Environment Education Area
- Fort Morgan Pie Rehabilitation
- Laguna Cove Little Lagoon Natural Resource Protection

United States Department of the Interior

FISH AND WILDLIFE SERVICE
1875 Century Boulevard
Atlanta, Georgia 30345

In Reply Refer To:
FWS/R4/DH NRDAR

Memorandum

March 28, 2017

To: Field Supervisor, Alabama Ecological Services Field Office, Daphne, Alabama

From: Deputy *Deepwater Horizon* Natural Resource Damage Assessment and Restoration (NRDAR), Department of the Interior Case Manager

Subject: Informal Consultation Request for four proposed projects in Alabama: Dauphin Island Eco-Tourism and Environmental Education, Fort Morgan Pier Rehabilitation, Mid Island Parks and Public Beach Improvements (Parcels B and C), and Gulf State Park Lodge and Associated Public Access Amenities

Overview

Projects are currently being evaluated as potential restoration projects to restore natural resources in Alabama that were injured as a result of the *Deepwater Horizon* (*DWH*) oil spill. We have reviewed six of these projects in accordance with Section 7 of the ESA. One of these projects will have no effect to protected species (Bayfront Park Restoration and Improvement (E&D)). One project (Laguna Cove Little Lagoon Natural Resource Protection) requires formal consultation, which we will request through a separate letter. For the other four projects, we've made the determination they may affect, but would not likely adversely affect any listed species or their critical habitat and we request your concurrence. A brief description of five of the projects is provided in Table 1 below.

Background

After the *DWH* oil spill, federal and state natural resource trustee agencies (Trustees) came together to assess the effects of the spill and plan for the restoration of injured natural resources. As part of the legal settlement reached with BP in 2016, the Trustees prepared a Final Programmatic Damage Assessment and Restoration Plan and Final Programmatic Environmental Impact Statement (Final PDARP/PEIS), to provide the framework for *DWH* oil spill restoration across the Gulf.

The Final PDARP/PEIS established Trustee Implementation Groups (TIGs) that develop plans for, choose, and implement specific restoration actions under the Final PDARP/PEIS. The Alabama Trustee Implementation Group (AL TIG) is made up of the following agencies: Alabama Department of Conservation and Natural Resources (ADCNR); U.S. Department of the Interior, as represented by the National Park Service, U.S. Fish and Wildlife Service, and Bureau of Land Management; National Oceanic and Atmospheric Administration, on behalf of the U.S. Department of Commerce; U.S. Department of Agriculture; and U.S. Environmental Protection Agency.

Statement: Provide and Enhance Recreational Opportunities (RP/EIS), which was released for public review and comment on December 16, 2016. If the AL TIG selects the subject projects, the ADCNR would implement the projects. A brief description of the subject projects is provided in Table 1 below.

These facts lead us to the conclusion that consultation under Section 7 of the Endangered Species Act of 1973 (ESA), as amended (16 U.S.S 1531 *et seq.),* is required for the proposed projects and we wish to engage in such consultation. We have reviewed each of the projects for potential impacts to listed, candidate, and proposed species, and designated and proposed critical habitats in accordance with Section 7 of the ESA. Potential effects, conservation measures, and justifications for our determinations are presented in the attached Biological Evaluation (BE) forms. Our determinations are summarized in Table 2 below.

Consultations and permits are current for the Gulf State Park Lodge and Public Access Amenities project. Take of Alabama beach mouse is authorized under existing permits and consultations. We are not seeking authorization for additional take.

Within the BE forms, we have also reviewed the proposed projects for impacts to bald eagles and migratory birds in accordance with the Bald and Golden Eagle Protection Act (BGEPA) of 1940 (16 U.S.C. 668-668c) and the Migratory Bird Treaty Act (MBTA) of 1918 (16 U.S.C. 703–712), respectively and we determined take would be avoided.

This letter requests your concurrence. To facilitate your response, should you concur with our determinations, we have attached a template response letter. If you have questions or concerns regarding this request for informal consultation, please contact Ashley Mills, Fish and Wildlife Biologist, at 812-756-2712 or ashley_mills@fws.gov.

Attachments (6)

- Biological Evaluation (BE) forms (5) which include project maps
- Template response letter

Table 1. Brief descriptions of five proposed projects in AL TIG RP/EIS.

Proposed Projects	Brief Description
Dauphin Island Eco-Tourism and Environmental Education	Approximately 100 acres of land would be acquired, owned, and managed by the Town of Dauphin Island. Project would include developing a parking area and visitor amenities, including boardwalks, a gazebo, and public restrooms.
Fort Morgan Pier Rehabilitation	Rehabilitate the pier on its existing foundations, increasing publicly available opportunities for pier-based fishing in Baldwin County.
Mid Island Parks and Public Beach Improvements (Parcels B and C)	Acquisition and construction of access improvements on two separate parcels of property to collectively offer public parking and restroom/shower facilities at Dauphin Island.
Gulf State Park Lodge and Associated Public Access Amenities	Partial funding to rebuild the GSP Lodge and add associated visitor enhancements and amenities including educational/interpretive lobby, public education programs, expansive viewing porches, public beach access, public restrooms and post-beach shower facilities, a restaurant, café, a bike share program, a public tram system, free public Wi-Fi, and overnight accommodations. This project is covered under existing consultations and permits.
Bayfront Park Restoration and Improvement (E&D)	Engineering and design (E&D) work to evaluate the construction of a living shoreline and/or sandy beach along the Mobile Bay shoreline within the park. The E&D funding would also allow for the development of a plan for additional signage and interpretive materials to promote environmental education at Bayfront Park. It would additionally evaluate other recreational amenities, such as improved restroom and playground facilities, a renovated wetland boardwalk and nature trail, expanded birdwatching opportunities, and a geocaching trail. These evaluations would be conducted through site visits and in an office setting. We anticipate these E&D activities will not affect any protected species.

Table 2. Summary of ESA determinations for five proposed projects in the AL TIG.

Species or Critical Habitat	Status	Dauphin Island Eco-Tourism, Environmental Education Area	Fort Morgan Pier Rehabilitation	Mid-Island Parks and Public Beach Improvements	Gulf State Park Lodge and Public Access Amenities *	Bayfront Park Restoration, Improvement (E&D)
Loggerhead sea turtle – terrestrial	Threatened	NLAA	NLAA	NLAA	NLAA	NE
Loggerhead sea turtle – terrestrial - CH	Designated	--	--	--	NDAM	--
Green sea turtle – terrestrial	Threatened	NLAA	NLAA	NLAA	NLAA	NE
Kemp's ridley sea turtle - terrestrial	Endangered	NLAA	NLAA	NLAA	NLAA	NE
West Indian Manatee	Endangered	NLAA	NLAA	NE	NE	NE
Piping plover	Threatened	NLAA	NLAA	NLAA	NLAA	NE
Piping plover - CH	Designated	--	--	--	--	--
Red knot	Threatened	NLAA	NLAA	NLAA	NLAA	NE
Wood stork	Threatened	NLAA	NLAA	NLAA	NE	NE
Alabama beach mouse	Endangered	--	NE	--	LAA	--
Alabama beach mouse- critical habitat	Designated	--	--	--	DAM	--
Gopher tortoise	Threatened; Candidate**	--	NE	--	NLAA	NE
Eastern indigo snake	Threatened	--	NE	--	NE	NE
Alabama red-belly turtle	Endangered	--	NE	--	NE	NE

-- indicates the species or critical habitat does not occur in the project area

* Consultations and permits are current for this project.

**In Alabama, the gopher tortoise is threatened west of the Mobile and Tombigbee rivers, and is a candidate for listing in the eastern part of its range.