SUPPLEMENTAL ENVIRONMENTAL ASSESSMENT FOR EMERGENCY ACTION TO PROHIBIT FISHING IN WATERS IN THE SOUTHEASTERN UNITED STATES IN RESPONSE TO THE DEEPWATER HORIZON MC252 OIL SPILL

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Abbreviations Used in This Document

APA	Administrative Procedures Act
BiOp	Biological Opinion
CEA	Cumulative Effects Analysis
CEQ	Council on Environmental Quality
DQA	Data Quality Act
EA	Environmental Assessment
EEZ	Exclusive Economic Zone
EFH	Essential Fishery Habitat
EIS	Environmental Impact Statement
ESA	Endangered Species Act
FMP	Fishery Management Plan
FONSI	Finding of No Significant Impacts
Gulf	Gulf of Mexico
HMS	Highly Migratory Species
Magnuson-Stevens Act	Magnuson-Stevens Fishery Conservation and Management Act
MMPA	Marine Mammal Protection Act
NEPA	National Environmental Policy Act
NMFS	National Marine Fisheries Service
NOAA	National Oceanic and Atmospheric Administration
NOS	National Ocean Service
Secretary	Secretary of Commerce
SEFSC	Southeast Fisheries Science Center
SERO	Southeast Regional Office (NMFS)

EXECUTIVE SUMMARY

NOAA Fisheries Service proposes this action to amend the emergency regulations published on May 14, 2010 (75 FR 27217) in response to the evolving nature of the Deepwater Horizon MC252 oil spill. This emergency action continues to allow NOAA Fisheries Service to make timely revisions to the area closed to all fishing, and would extend the areas where NOAA Fisheries Service may prohibit United States (US) registered vessels from fishing to include areas of the high seas in addition to areas of the exclusive economic zone (EEZ) that have been affected by the oil spill. While the majority of the oil spill is presently within state waters and the EEZ, the natural variation of the winds and currents may cause oil dispersion into the high seas. This emergency action revises the protocol for opening previously closed areas to fishing for species not typically consumed by humans (non-consumptive species) such as sponges, liverock, and octocoral. The U.S. Food and Drug Administration (FDA) concurs with the implementation of these fisheries closures in oil-affected areas as an appropriate public health measure to prevent potentially unsafe seafood from being harvested and reaching consumers (Appendix). The FDA considers seafood (fish and shellfish) in oil-affected waters with hydrocarbons above baseline levels to be adulterated. The intent of this emergency action is to prohibit harvest of adulterated seafood while promoting public safety and consumer confidence in seafood products regarding areas affected by the oil spill.

1.0 FINDING OF NO SIGNIFICANT IMPACTS

National Oceanic and Atmospheric Administration (NOAA) Administrative Order 216-6 (NAO 216-6) (May 20, 1999) contains criteria for determining the significance of the impacts of a proposed action. On July 22, 2005, NOAA published a Policy Directive with guidelines for the preparation of a Finding of No Significant Impact (FONSI). In addition, the CEQ regulations at 40 C.F.R. Section 1508.27 state that the significance of an action should be analyzed both in terms of "context" and "intensity". Each criterion listed below is relevant to making a finding of no significant impact and has been considered individually, as well as in combination with the others. The significance of this action is analyzed based on the NAO 216-6 criteria, the recent Policy Directive from NOAA, and CEQ's context and intensity criteria. These include:

1) Can the proposed action reasonably be expected to jeopardize the sustainability of any target species that may be affected by the action?

Response: No, the proposed action cannot be reasonably expected to jeopardize the sustainability of any target stocks. The proposed action is intended to prohibit fishing for and harvesting of marine resources within specified areas affected by the oil spill. Area closures in the exclusive economic zone (EEZ) and/or prohibitions on fishing by United States (US) registered vessels operating on the high seas will be adjusted to reflect past, present, and projected future areas affected by the oil spill, and could reduce or eliminate all fishing mortality on all marine fish stocks within the closed area. Section 3 of the Magnuson-Stevens Fishery Conservation and Management Act defines high seas as "all waters beyond the territorial sea of the United States and beyond any foreign nation's territorial sea, to the extent that such sea is recognized by the United States."

2) Can the proposed action reasonably be expected to jeopardize the sustainability of any non-target species?

Response: No, the proposed action cannot be reasonably expected to jeopardize the sustainability of any non-target species. The proposed action is intended to prohibit fishing and harvesting of marine resources within specified areas affected by the oil spill. Area closures in the EEZ and/or prohibitions to fishing by US registered vessels operating on the high seas will be adjusted to reflect past, present, and projected future areas affected by the oil spill, and can be expected to reduce or eliminate all fishing mortality on all marine fish stocks within the closed area and thus will not jeopardize their sustainability.

3) Can the proposed action reasonably be expected to cause substantial damage to the ocean and coastal habitats and/or essential fish habitat (EFH) as defined under the Magnuson-Stevens Act and identified in FMPs?

Response: The proposed action is not reasonably expected to cause substantial damage to the ocean and coastal habitats and/or EFH. Areas that have already been closed in response to the spill include designated EFH for several of the regional fishery management councils' (Councils) managed species and federally managed Atlantic highly migratory species (HMS). This, in addition to the widespread nature of EFH designated in the Gulf, South Atlantic, and U.S.

Caribbean, makes it likely that the any future spreading of the spill will occur in areas designated as EFH. As the closures are adjusted to encompass past, present, and future areas affected by the spill it can be expected to reduce or eliminate all fishing mortality on all marine fish stocks within the boundaries of the closed area. Reductions in fishing effort can be expected to provide a positive benefit to habitats within any designated closed area by eliminating the impacts of fishing gear, anchoring, or other activities that would normally impact the benthic or water column habitats during an open period.

4) Can the proposed action reasonably be expected to have a substantial adverse impact on public health or safety?

Response: No, the proposed action is not reasonably expected to have a substantial adverse impact on public safety or health. The proposed action is intended to prohibit fishing and harvesting of marine resources in the areas impacted by the oil spill, where adulterated seafood may occur, and thus should have a positive impact on public health and safety. NOAA Fisheries Service may consider allowing the harvest of non-consumptive marine species such as liverock, sponges, and octocorals. To reopen a closed area for the harvest of non-consumptive species (live-rock, sponges, and octocorals, etc.), NOAA Fisheries Service must ensure oil is not visibly present in the area (i.e., there is no oil sheen). NOAA will reopen previously closed areas that were affected by oil only if it is assured that fish products within the closed area meet FDA standards for public health and wholesomeness. To that end, NOAA, in conjunction with FDA, is continuing to refine a reopening protocol titled, *Protocol for Interpretation and Use of Sensory Testing and Analytical Chemistry Results for Re-opening Oil-Impacted Areas Closed to Seafood Harvesting*. These areas will only be reopened if fish from these areas meet the sensory and chemical standards set forth in the reopening protocol agreed to by NOAA and FDA.

5) Can the proposed action reasonably be expected to adversely affect endangered or threatened species, their critical habitat, marine mammals, or other non-target species?

Response: No, the proposed action is not expected to adversely affect endangered or threatened species, marine mammals, or critical habitat of these species. The action may indirectly benefit protected species by reducing the number of vessels in the closed area, thus reducing the potential for ship strikes of marine mammals or sea turtles. Similarly, the prohibition of fishing is expected to reduce the potential for gear entanglements or accidental hooking of marine mammals or sea turtles.

6) Can the proposed action be expected to have a substantial impact on biodiversity and/or ecosystem function within the affected area (e.g., benthic productivity, predator-prey relationships, etc.)?

Response: No, the proposed action is not expected to have a substantial impact on biodiversity and/or ecosystem function within the affected area. Area closures and/or fishing restrictions will be adjusted to reflect past, present, and projected future areas affected by the oil spill, and can be expected to reduce or eliminate all fishing mortality on all marine resources within the changing boundaries of the closed area. In addition, the closures will ensure fishermen do not harvest marine species intended for human consumption (consumptive species) in areas where oil was

present, but is no longer detectable. The opening of areas for the harvest of non-consumptive species will be on a case by case basis in areas where oil spill conditions have abated, i.e. oil is not observed in the area. Reductions in fishing effort from the proposed prohibitions for fishing in the closed areas can be expected to provide a positive benefit to biodiversity and ecosystem function within any designated closed area by eliminating the impacts of fishing gear, anchoring, or other activities that would impact biodiversity or ecosystem function.

7) Are significant social or economic impacts interrelated with natural or physical environmental effects?

Response: No, the proposed action would not create any significant social or economic impacts interrelated with natural or physical environmental effects. The oil spill event itself is expected to lead to significant social and economic impacts on the human environment, but the proposed action to prohibit fishing in areas affected by the oil spill is not expected to exacerbate the situation. Prohibiting fishing for and harvesting of marine resources within the closed area affected by the oil spill will have direct and indirect social and economic impacts to that segment of the fisheries dependent on this region and to the shoreside operations that support these fisheries. However, because of the presence of oil in the closed area, fishing and harvesting of marine resources is not expected to occur in areas where oil is present whether the area is closed or not, thus prohibiting this activity is not expected to alter the manner in which the fisheries would be conducted during this event. Nevertheless, the closures ensure fishermen do not harvest potentially adulterated seafood from areas where oil was present, but is no longer readily observable. Thus, any impacts of the proposed action are not related to, nor have an impact on, the natural or physical environment.

8) Are the effects on the quality of the human environment likely to be highly controversial?

Response: No, the effects on the quality of the human environment are not likely to be highly controversial. Because of the presence of oil in the closed area, fishing and harvesting of marine resources is not expected to occur in areas where oil is present whether the area is closed or not, thus prohibiting this activity is not expected to alter the manner in which the fisheries would be conducted. Nevertheless, the closures ensure fishermen do not harvest marine resources in areas where oil was present, but is no longer readily observable. Physical and biological sampling is underway to monitor possible adulteration of fish and related habitat.

9) Can the proposed action reasonably be expected to result in substantial impacts to unique areas, such as historic or cultural resources, park land, prime farmlands, wetlands, wild and scenic rivers, EFH, or ecologically critical areas?

Response: No, the proposed action is not reasonably expected to result in substantial impacts to unique areas, park land, prime farmlands, wetlands, wild and scenic rivers, EFH, or ecologically critical areas. Park land, prime farmlands, wetlands, wild and scenic rivers are inland and are not affected by this action in the EEZ and high seas of the Gulf, South Atlantic and U.S. Caribbean. Possible beneficial impacts to EFH are discussed in Question 3. The oil spill event itself is expected to lead to significant impacts on the physical, biological, and human environment, but

the proposed action to prohibit fishing in areas affected by the oil spill is not reasonably expected to exacerbate the situation. In regard to ecologically critical areas, should closures be required further east and south of the current closure, the Tortugas Marine Sanctuary already is closed to fishing, and Madison Swanson, Steamboat Lumps, and the Edges ecologically critical areas are closed to bottom fishing. Additionally, Desoto Canyon is closed to pelagic longlining. Should future closures be needed to the west of the current spill area, fishing is already prohibited in the Flower Gardens National Marine Sanctuary, and in other EFH areas to the west, including but not limited to, areas such as Stetson Reef. In the South Atlantic, the Oculina Bank Habitat Area of Particular Concern (HAPC) is permanently closed to fishing, as are several smaller deepwater marine protected areas. Therefore, there would be no additional impacts on these components of the environment from the proposed action.

10) Are the effects on the human environment likely to be highly uncertain or involve unique or unknown risks?

Response: No, the effects on the human environment are not likely to be highly uncertain or involve unique or unknown risks. NOAA Fisheries Service regularly closes fisheries in specific areas when area-specific quotas are met (e.g. king mackerel zones in the Gulf and South Atlantic), or seasonally or permanently closed areas in accordance with regulations established from various fishery management plan actions such as the seasonal Texas Shrimp Closure in the Gulf and the permanently closed Oculina Bank HAPC in the South Atlantic. Closing areas to fishing does not preclude fishermen from shifting their fishing efforts to areas that are open.

11) Is the proposed action related to other actions with individually insignificant, but cumulatively significant impacts?

Response: No, the proposed action is not related to other actions with individually insignificant but cumulatively significant impacts. The proposed action is temporary with closed areas being adjusted according to past, present, and future projections of areas affected by the oil spill. Because of the presence of oil in the closed area, fishing and harvesting of marine resources is not expected to occur in the area where oil is present whether the area is closed or not, thus prohibiting this activity is not expected to alter the manner in which the fisheries would be conducted during this event. In addition, the closures will ensure fishermen do not harvest marine species intended for human consumption (consumptive species) in areas where oil was present, but is no longer detectable. The opening of areas for the harvest of non-consumptive species will be on a case by case basis in areas where oil spill conditions have abated, i.e. oil is not observed in the area. Thus, any impacts of the proposed action are not related to, nor have an impact on, the natural or physical environment. The oil spill event itself is expected to lead to cumulatively significant impacts on the physical, biological, and human environment, but the proposed action to prohibit fishing in areas affected by the oil spill is not expected to exacerbate the situation.

12) Is the proposed action likely to adversely affect districts, sites, highways, structures, or objects listed in or eligible for listing in the National Register of Historic Places or may cause loss or destruction of significant scientific, cultural, or historical resources?

Response: The proposed action is not reasonably expected to affect districts, sites, highways, structures, or objects listed in or eligible for listing in the National Register of Historic Places, except the Monitor National Marine Sanctuary off North Carolina, and the U.S.S. Hatteras located in the EEZ off Texas. The proposed action is not expected to cause loss or destruction of significant scientific, cultural, or historical resources. Any such areas would be beneficially affected by the prohibition of fishing and harvesting of marine resources.

13) Can the proposed action reasonably be expected to result in the introduction or spread of a non-indigenous species?

Response: No, the proposed action is not reasonably expected to result in the introduction or spread of a non-indigenous species. The proposed action restricts fishing activities and harvesting of marine resources, and does not include actions that would lead to the introduction of non-indigenous species. Should marine resources benefit in population growth based on reduced fishing mortality, and those resources feed on non-indigenous species, their increased populations could reduce the spread of non-indigenous species.

14) Is the proposed action likely to establish a precedent for future actions with significant effects or represents a decision in principle about a future consideration?

Response: No, the proposed action does not establish a precedent for future action with significant effects, and it does not represent a decision in principle about future consideration. NOAA Fisheries Service regularly closes fisheries in specific areas when area-specific quotas are met (e.g. king mackerel zones in the Gulf and South Atlantic), or closes areas in accordance with regulations established from various fishery management plan actions, such as the seasonal Texas Shrimp Closure and the permanently closed Oculina Bank HAPC. Temporarily closing areas to fishing does not preclude fishermen from shifting their fishing efforts to areas that are open. NOAA Fisheries Service can, at any time, change its management strategies to best meet the requirements of the Magnuson-Stevens Fishery Conservation and Management Act or other applicable laws such as the Atlantic Tunas Convention Act. In addition, NOAA Fisheries Service may determine it safe to re-open certain areas to harvest marine resouces. The protocol to re-open areas for fishing is described in section 3.0. To reopen a closed area for the harvest of non-consumptive species (live-rock, sponges, and octocorals, etc.), NOAA Fisheries Service must ensure oil is not visibly present in the area (i.e., there is no sheen).

15) Can the proposed action reasonably be expected to threaten a violation of Federal, State, or local law or requirements imposed for the protection of the environment?

Response: No, the proposed action is not reasonably expected to threaten a violation of Federal, State, local law or requirements imposed for the protection of the environment. The proposed action is considered to be in concert with other laws imposed to protect the environment.

16) Can the proposed action reasonably be expected to result in cumulative adverse effects that could have a substantial effect on the target species or non-target species?

Response:
No, the proposed action to temporarily restrict fishing activities or harvesting marine resources in areas within the extent of the oil spill is not reasonably expected to result in cumulative adverse effects that could have a substantial effect on the target species or non-target species. In general, this action could reduce fishing mortality on these marine resources in the affected area, and should reduce the potential for interactions with protected resources.

DETERMINATION:
In view of the information presented in this document and the analysis contained in the supporting Environmental Assessment prepared for the Emergency Action to Prohibit Fishing in Waters In the Southeastern United States in Response to the Deepwater Horizon MC252 Oil Spill, it is hereby determined that this action will not significantly impact the quality of the human environment as described above and in the supporting Environmental Assessment. In addition, all beneficial and adverse impacts of the proposed action have been addressed to reach the conclusion of no significant impacts. Accordingly, preparation of an Environmental Impact Statement for this action is not necessary.

James E. Weaver — 6/17/2010

for Roy E. Crabtree
Regional Administrator
Southeast Regional Office
National Marine Fisheries Service

Date

Emily Menashes — 6/17/2010

Emily Menashes
Acting Director
Office of Sustainable Fisheries
National Marine Fisheries Service

Date

2.0 INTRODUCTION

2.1 Background

On April 20, 2010, an incident involving a deepwater oil drilling platform occurred approximately 50 miles southeast of Venice, Louisiana. An explosion and subsequent fire damaged the oil rig which capsized and sank. Oil has flowed into the Gulf of Mexico (Gulf) from three leaks in damaged piping on the sea floor. The marine response teams have used various techniques to contain the oil spill. BP is currently drilling a relief or cut-off well, but the process will not be complete for several months. Dispersants continue to be applied to the surface and subsurface. In addition, burns are being conducted to address the surface oil sheens. Aerial surveys and satellite imagery are being used to map the spatial extent of the oil spill. Daily updates provide forecasts for the trajectory of the oil plumes based on the NOAA Gulf of Mexico, Texas A&M/GLO, and NAVO models using the overflight data.

The Loop Current in the Gulf creates additional concerns for the dispersion of oil from the spill throughout the exclusive economic zone (EEZ) and associated high seas. Section 3 of the Magnuson-Stevens Fishery Conservation and Management Act (Magnuson-Stevens Act) defines high seas as "all waters beyond the territorial sea of the United States and beyond any foreign nation's territorial sea, to the extent that such sea is recognized by the United States." The Loop Current is the large flow of warm water that dominates circulation within the eastern Gulf (Figure 1). The Loop Current is part of the Gulf Stream, and flows northward between Cuba and the Yucatán peninsula, moves north into the Gulf, loops east and south before exiting to the east through the Florida Straits. The Loop Current may extend across the Mississippi river delta or the Florida continental shelf at speeds up to 2-5 km per day. It can spawn clockwise eddies that carry warm water westward across the Gulf.

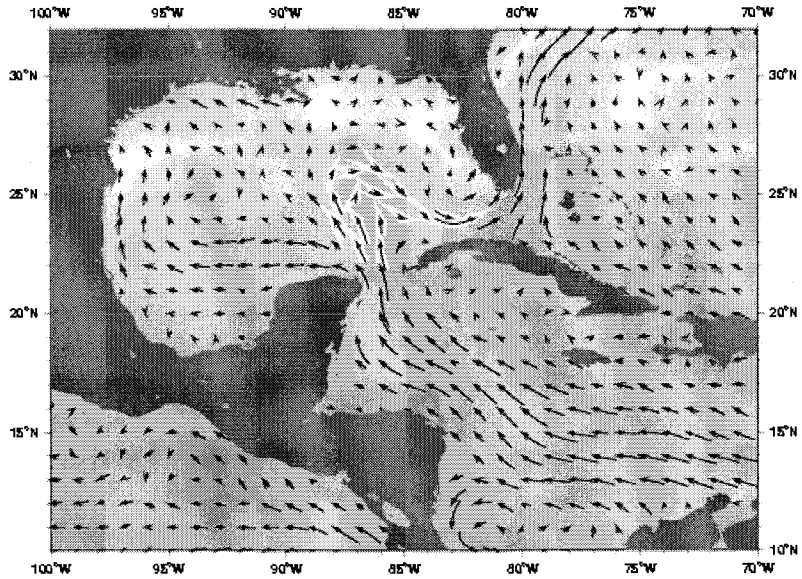

Figure 1. Illustration of the Loop Current in the Gulf of Mexico.
http://oceancurrents.rsmas.miami.edu/atlantic/loop-current.html

In response to the Deepwater Horizon MC252 oil spill, NOAA Fisheries Service issued an emergency rule closing a portion of the Gulf EEZ to all fishing effective May 2, 2010 (75 FR 24822, May 6, 2010). The closure covered an area of the Gulf approximately 6,817 square miles (17,655 square km), or 3 percent of the total area of the Gulf EEZ. Due to the evolving nature of the oil spill, NOAA Fisheries Service revised the closed area in a second emergency rule that became effective May 7, 2010 (75 FR 26679, May 12, 2010). This second emergency rule closed an area of the Gulf approximately 10,807 square miles (27,989 square km), or 4.5 percent of the total area of the Gulf EEZ. Subsequently, NOAA Fisheries Service issued a third emergency rule to establish a more effective process to revise the spatial and temporal scale of the Southeast EEZ areas closed to all fishing, as needed, in response to new information. The third emergency rule became effective May 11, 2010 (75 FR 27217) and included a concise environmental assessment (EA)(NMFS 2010). This third rule allowed NOAA Fisheries Service to alter the extent of the closed area through a public notice process. This supplemental EA considers an additional alternative to analyze the effects on the human environment of closing additional areas outside of the EEZ, which was not originally considered in the original concise EA (NMFS 2010). Also, this supplemental EA considers the potential for NOAA Fisheries Service to re-open previously closed areas considered in the original concise EA (NMFS 2010).

In a letter to Dr. Jane Lubchenco, dated May 18, 2010, the U.S. Food and Drug Administration (FDA) agrees that NOAA's closure of these federal waters is an appropriate public health measure to prevent potentially unsafe seafood from being harvested and reaching consumers (Appendix). The FDA indicated it will also work closely with NOAA on future decisions to reopen the closed fishery. To that end, scientists from NOAA and FDA have agreed on a re-opening protocol that includes both sensory evaluation and chemical testing of seafood harvested from the closed areas that is intended for human consumption. FDA is committed to working with NOAA on an ongoing basis for the duration of this spill and cleanup.

If it is assured that fish products within closed areas meet FDA standards for public health and wholesomeness, NOAA Fisheries Service will reopen previously closed areas that were affected by oil only. To that end, NOAA, in conjunction with FDA, is continuing to refine a reopening protocol titled, *Protocol for Interpretation and Use of Sensory Testing and Analytical Chemistry Results for Re-opening Oil-Impacted Areas Closed to Seafood Harvesting*. These areas will only be reopened if fish from these areas meet the sensory and chemical standards set forth in the reopening protocol agreed to by NOAA and FDA. For NOAA Fisheries Service to reopen a closed area for the harvest of non-consumptive species (live-rock, sponges, and octocorals, etc.), oil must not be visibly present in the area (i.e., there is no sheen).

2.2 Purpose and Need for Action

NOAA Fisheries Service proposes this action to amend the emergency regulations published on May 14, 2010 (75 FR 27217) in response to the evolving nature of the Deepwater Horizon MC252 oil spill. This emergency action would continue to allow NOAA Fisheries Service to make timely revisions to the area closed to all fishing, and would extend the areas where NOAA Fisheries Service may prohibit US registered vessels from fishing to include areas of the high seas in addition to areas of the EEZ that have been affected by the oil spill. While the majority of the oil spill is presently within state waters and the EEZ, the natural variation of the winds and

currents may cause oil dispersion into high seas. This emergency action also revises the protocol for opening areas previously closed to fishing by exempting species not typically consumed by humans (non-consumptive species) such as sponges, liverock, and octocoral from the testing protocol. The FDA concurs with the implementation of these fisheries closures in oil-affected areas as an appropriate public health measure to prevent potentially unsafe seafood from being harvested and reaching consumers (Appendix). The FDA considers seafood (fish and shellfish) in oil-affected waters with hydrocarbons above baseline levels to be adulterated. The intent of this emergency action is to prohibit harvest of adulterated seafood while promoting public safety and consumer confidence in seafood products regarding areas affected by the oil spill.

Under authority of section 305(c)(3)(c) of the Magnuson-Stevens Act, NOAA Fisheries Service can implement emergency regulations that respond to an oil spill and the regulations may remain in effect until the circumstances that created the emergency no longer exist. Under this provision, the public would have an opportunity to comment after the regulation is published.

3.0 MANAGEMENT ALTERNATIVES

Section 1502.14 of the Council on Environmental Quality (CEQ) regulations requires agencies to explore and objectively evaluate all reasonable alternatives for an action, including the no action alternative. The analysis of alternatives shall describe the environment to be affected by the action and the environmental consequences of each of the alternatives (Part 1502.14, CEQ, accessed on October, 1, 2009). Alternatives shall be presented in comparative form to provide a clear basis for why decision makers selected the preferred alternative(s).

Three alternatives are being considered in this environmental assessment (EA). Descriptions of the environmental consequences associated with each alternative can be found in Section 5.0 along with the physical, biological, economic, social, and administrative environments affected by this action.

Action: Restrict fishing activities in the EEZ and high seas affected by the Deepwater Horizon MC252 oil spill.

Alternative 1 – No Action. The no action alternative in this situation is "no change" from the pre oil spill fishing regulations, which is no area closures in response to the Deepwater Horizon MC252 oil spill.

Alternative 2 – *Status quo*. Restrict fishing activities or harvesting marine resources in portions of the EEZ encompassing the spatial and temporal extent of the oil spill.

Preferred Alternative 3 –. Restrict fishing activities or harvesting of marine resources in portions of EEZ and high seas that encompass the spatial and temporal extent of the oil spill.

In section 5.0, potential impacts for the three alternatives are discussed. **Alternative 1** (no action) would allow pre oil spill fishing activities to continue in the EEZ and adjacent high seas regardless of the oil spill. This alternative could result in concerns for public safety from the

harvest of adulterated seafood. **Alternative 2**, *status quo*, allows NOAA Fisheries Service to restrict fishing activities or harvesting marine resources in portions of the EEZ encompassing the spatial and temporal extent of the oil spill according to the emergency rule published on May 14, 2010 (75 FR 27217). **Preferred Alternative 3** would allow NOAA Fisheries Service to restrict fishing activities or harvesting marine resources in portions of the EEZ and adjacent high seas encompassing the spatial and temporal extent of the oil spill. US registered vessels would be required to adhere to the area closures and restrictions. This alternative is not reasonably expected to differ from the preferred alternative in the previous EA (NMFS 2010). Due to natural variation in the currents and winds, the extent of the oil spill will continue to be dynamic throughout the EEZ and adjacent high seas. NOAA Fisheries Service anticipates a potential need to adjust the spatial and temporal extent of the closed area as conditions change to encompass the extent of the oil spill. In addition, once the oil spill conditions are abated, portions of the closed area may be reopened to fishing. NOAA Fisheries Service will reopen previously closed areas that were affected by oil only if it is assured that fish products within the closed area meet FDA standards for public health and wholesomeness. To that end, NOAA, in conjunction with FDA, is continuing to refine a reopening protocol titled, *Protocol for Interpretation and Use of Sensory Testing and Analytical Chemistry Results for Re-opening Oil-Impacted Areas Closed to Seafood Harvesting*. These areas will only be reopened if fish from these areas meet the sensory and chemical standards set forth in the reopening protocol agreed to by NOAA and FDA.For NOAA Fisheries Service to reopen a closed area for the harvest of non-consumptive species (live-rock, sponges, and octocorals, etc.), oil must not be visibly present in the area (i.e., there is no sheen).

4.0 AFFECTED ENVIRONMENTS

Due to the potential of the oil spill to become entrained in the Loop Current and possible dispersion throughout the geographic extent of the Southeast region, as described in section 1.0, the Gulf, South Atlantic, and U.S. Caribbean are considered as potentially affected environments. A brief description of the affected environment is included herein for this EA. More detailed descriptions of the affected environment for the Gulf of Mexico can be found in the environmental impact statement (EIS) to the Generic Essential Fish Habitat (EFH) Amendment (GMFMC 2004a) and Secretarial Amendment 1 to the Reef Fish Fishery Management Plan (FMP)(NMFS 2004a). Similarly, South Atlantic affected environments can be found in the EIS to the FMP for snapper-grouper fishery of the South Atlantic region (SAFMC 1983), and Amendment 10 to the snapper-grouper fishery of the South Atlantic region (SAFMC 1998). Amendment 1 (EFH) to the Consolidated Highly Migratory Species (HMS) FMP covers HMS related environments in the Gulf, South Atlantic, and Caribbean regions. The descriptions in the above amendments are incorporated herein by reference.

4.1 Physical Environment

The EEZ in the Southeast Region consist of the Gulf, South Atlantic, and U.S. Caribbean. The Gulf is bounded by Cuba, Mexico, and the United States, and has a total area of 564,000 km^2. Continental shelves occupy about 35 percent of the total Gulf. This area is managed by the Gulf of Mexico Fishery Management Council (Gulf Council). The Gulf Council federal waters are 9-200 miles off the coast of Texas and Florida, and 3-200 miles off the coast of Louisiana, Mississippi, and Alabama.

The South Atlantic federal waters are from 3-200-mile limit of the Atlantic off the coasts of North Carolina, South Carolina, Georgia, and east Florida (to Key West). This area is managed by the South Atlantic Fishery Management Council.

The U.S. Caribbean is located in the eastern extreme of the Caribbean archipelago, about 1,100 miles east-southeast of Miami, Florida. It comprises the Commonwealth of Puerto Rico in the Greater Antilles and the Territory of the US Virgin Islands (USVI) in the Lesser Antilles island chain, both of which separate the Caribbean Sea from the western central Atlantic Ocean. The USVI are part of the Virgin Islands chain, which lies about 50 mi (80 km) east of Puerto Rico and consist of about 80 islands and cays including St. Croix, St. Thomas, and St. John. The islands of St. Thomas and St. John are bordered by the Atlantic Ocean to the north and the Caribbean Sea to the south. This area is managed by the Caribbean Fishery Management Council. More detailed information on the physical environment can be found in Section 3.1 of the EFH Final Supplemental EIS (CFMC 2004).

The physical environment for Atlantic HMS is the Atlantic Ocean including the Gulf of Mexico, South Atlantic, and U.S. Caribbean described above and the high seas. Atlantic HMS are managed by the Secretary of Commerce.

High seas exist in isolated pockets in the Gulf between the U.S. and Mexico EEZs, seaward of the EEZ along the South Atlantic region, and in the U.S. Caribbean.

4.2 Biological Environment

The biological environment of the Gulf and South Atlantic, including the species addressed in this EA is described in detail in the final EIS for the Generic EFH amendment (GMFMC 2004a), and Amendment 10 to the snapper-grouper fishery of the South Atlantic region (SAFMC 1998). The biological environment for Atlantic HMS is described in the Consolidated HMS FMP and Amendment 1 (EFH) to the Consolidated HMS FMP. These documents are incorporated here by reference.

Council Managed Fisheries

Gulf: The Reef Fish FMP currently encompasses 42 species. Stock assessments have been conducted on 11 species: red snapper, vermilion snapper, yellowtail snapper, gray triggerfish, greater amberjack, hogfish, red grouper, gag, yellowedge grouper, and goliath grouper. A detailed description of the fisheries can be found on the Gulf Council (www.gulfcouncil.org) and SEDAR (www.sefsc.noaa.gov/sedar) Websites.

The Gulf shrimp fishery targets brown, white, pink, and royal red shrimp. Incidental catch in the fishery includes seabobs and rock shrimp. The final EIS for the original Shrimp FMP and the FMP as revised in 1981 contain a description of the Gulf shrimp fishery. Shrimp Amendment 9 (GMFMC 1997) which included an SEIS, updated this information.

The stone crab fishery of the Gulf mainly occurs in state waters during the October through May season. A detailed description of the fisheries can be found on the Gulf Council Web site (www.gulfcouncil.org).

The spiny lobster fishery of the Gulf and South Atlantic includes five species of lobsters; however, only the Caribbean spiny lobster and the ridged slipper lobster have management measures associated with them. The fishery is prosecuted primarily in Monroe County, Florida, where 90 percent of all landings occur. A detailed description of the fisheries can be found on the Councils' Web sites (www.gulfcouncil.org and www.safmc.net).

The coastal migratory fishery of the Gulf and South Atlantic includes Spanish mackerel and king mackerel. A detailed description of the fisheries can be found on the Councils' Web sites (www.gulfcouncil.org and www.safmc.net).

South Atlantic: The Snapper-Grouper FMP includes 73 species. Stock assessments have been completed on red porgy, vermilion snapper, black sea bass, yellowtail snapper, golden tilefish, snowy grouper, king mackerel, goliath grouper, hogfish, gag, greater amberjack, red snapper, mutton snapper, Spanish mackerel, and black grouper. The stock assessments, FMPs, and Amendments can be found on the South Atlantic Council (www.safmc.net) and SEDAR (www.sefsc.noaa.gov/sedar) Web sites.

The South Atlantic shrimp fishery targets brown, white, pink, rock, and royal red shrimp. The final EIS for the original Shrimp FMP (SAFMC 1993) contains a description of this fishery. Shrimp Amendment 7 (SAFMC 2008) is the most recent update for this information. A detailed description of the fishery can be found on the South Atlantic Council's Web site (www.safmc.net).

Managed jointly with the Gulf Council, the Coastal Migratory Pelagics FMP (SAFMC 1982) includes king and Spanish mackerel, cero mackerel, cobia, and little tunny. A detailed description of the fishery can be found on the South Atlantic Council's Web site (www.safmc.net).

The Coral, Coral Reef, and Live/Hardbottom Habitat FMP (SAFMC 1982b) optimizes the benefits generated from the South Atlantic's coral resource while conserving the coral and coral reefs. The FMP prohibits harvest of these resources, with the exception of the limited harvest of soft coral by permit, that serve as essential fish habitat to many species. A detailed description of the fishery can be found on the South Atlantic Council's Web site (www.safmc.net).

The South Atlantic Council, in cooperation with the Mid-Atlantic and New England Councils, developed a Dolphin-Wahoo FMP for the Atlantic (SAFMC 2003). Recognizing the significant importance of the dolphin-wahoo fishery to the recreational fishing community in the Atlantic, the goal of the plan was to maintain the current harvest levels of dolphin and ensure that no new fisheries develop. A detailed description of the fishery can be found on the South Atlantic Council's Web site (www.safmc.net).

The deepwater commercial crab fishery was established in the early 1990s following the prohibition of fish traps in the snapper grouper fishery. The Golden Crab FMP (SAFMC 1995) was developed cooperatively with fishermen to create a sustainable fishery through the establishment of a limited entry system, fishing zones, and protective measures for the crabs. A detailed description of the fishery can be found on the South Atlantic Council's Web site (www.safmc.net).

The final FMP for Pelagic *Sargassum* Habitat in the South Atlantic Region (SAFMC 2002) was approved in 2003 and implemented strict restrictions on commercial harvest of this important fish habitat. The approved plan includes strong limitations on future commercial harvest. A detailed description of the fishery can be found on the South Atlantic Council's Web site (www.safmc.net).

Caribbean: At present, over 137 reef fish species comprise the total Fishery Management Unit in the Caribbean. Of the 137 species, 55 species are associated with the aquarium trade leaving 82 reef fish species subject to management by the Caribbean Council. In addition, the Caribbean conch resource is composed of 13 species of gastropods within the families Strombidae, Cymatiidae, Cassidae, Turbinellidae, Fasciolariidae, and Trochidae. Brief descriptions of these species can be found in the Comprehensive SFA Amendment (CFMC 2005) and are available on the NOAA Fisheries Service Southeast Region Web site (http://sero.nmfs.noaa.gov/).

Protected Resources

Gulf and Caribbean: There are 28 species of marine mammals that may occur in the Gulf. All 28 species are protected under the Marine Mammal Protection Act (MMPA) and six are also listed as endangered under the Endangered Species Act (ESA) (i.e., sperm, sei, fin, blue, humpback, and North Atlantic right whales). Other species protected under the ESA occurring in the Gulf include five sea turtle species (Kemp's Ridley, loggerhead, green, leatherback, and hawksbill); two fish species (Gulf sturgeon and smalltooth sawfish), and two *Acropora* coral species (elkhorn [*Acropora palmata*] and staghorn [*A. cervicornis*]). Information on the distribution, biology, and abundance of these protected species in the Gulf is included in final EIS to the Gulf Council's Generic EFH amendment (GMFMC, 2004a), the 2005 Biological Opinion (BiOp) and 2009 BiOp on the reef fish fishery (NMFS 2005) and *Acropora* Status Review (*Acropora*

Biological Review Team 2005). Marine Mammal Stock Assessment Reports and additional information are also available on the NOAA Fisheries Service Office of Protected Species Web site: (http://www.nmfs.noaa.gov/pr/species/).

South Atlantic: There are 31 different species of marine mammals that may occur in the EEZ of the South Atlantic region. All 31 species are protected under the MMPA and six are also listed as endangered under the ESA (i.e., sperm, sei, fin, blue, humpback, and North Atlantic right whales). Other species protected under the ESA occurring in the South Atlantic include five species of sea turtle (green, hawksbill, Kemp's ridley, leatherback, and loggerhead); the smalltooth sawfish; and two *Acropora* coral species (elkhorn [*Acropora palmata*] and staghorn [*A. cervicornis*]). Designated critical habitat for the *Acropora* corals also occurs within the South Atlantic region. Marine Mammal Stock Assessment Reports and additional information are also available on the NOAA Fisheries Serivce Office of Protected Species Web site (http://www.nmfs.noaa.gov/pr/species/).

Highly Migratory Species

Atlantic Highly Migratory Species (HMS), including tunas, swordfish, sharks, and billfish, are managed throughout the U.S. EEZ in the Atlantic Ocean, Gulf of Mexico, and Caribbean Sea by NOAA Fisheries Service under the dual authority of the Magnuson-Stevens Act and the Atlantic Tunas Convention Act with consideration for the domestic and international aspects of these fisheries. As their name implies, HMS move through large areas of marine habitats and across domestic and international jurisdictions utilizing various habitats during their different life stages. The Gulf is the only known spawning area for western Atlantic bluefin tuna and a habitat area of particular concern (HAPC) was established for spawning bluefin tuna in the June 2009 Final Amendment 1(EFH) to the Consolidated HMS FMP. The HAPC is located west of 86 degrees W. Longitude and seaward of the 100m isobath, extending from the 100m isobath to the EEZ. Additional information about Atlantic HMS fisheries and their management may be found at (http://www.nmfs.noaa.gov/sfa/hms/).

4.3 Administrative Environment

Federal fishery management is conducted under the authority of the Magnuson-Stevens Act (16 U.S.C. 1801 et seq.), originally enacted in 1976 as the Fishery Conservation and Management Act. The Magnuson-Stevens Act claims sovereign rights and exclusive fishery management authority over most fishery resources within the EEZ, an area extending 200 nautical miles from the seaward boundary of each of the coastal states, and authority over U.S. anadromous species and continental shelf resources that occur beyond the EEZ.

Responsibility for federal fishery management decision-making is divided between the Secretary of Commerce (Secretary) and eight regional fishery management councils that represent the expertise and interests of constituent states. Regional councils are responsible for preparing, monitoring, and revising management plans for fisheries needing management within their jurisdiction. The Secretary is responsible for promulgating regulations to implement proposed plans and amendments after ensuring management measures are consistent with the Magnuson-

Stevens Act and with other applicable laws summarized in Section 6. In most cases, the Secretary has delegated this authority to NOAA Fisheries Service. The Secretary is directly responsible for management of Atlantic HMS and has also delegated this authority to NOAA Fisheries Service.

The Fishery Management Councils consist of voting public members appointed by the Secretary; one each from the fishery state agencies; and one from NOAA Fisheries Service. The public is also involved in the fishery management process through participation on advisory panels and through publically open council meetings, with some exceptions for discussing internal administrative matters. The regulatory process is also in accordance with the Administrative Procedures Act, in the form of "notice and comment" rulemaking, which provides extensive opportunity for public scrutiny and comment, and requires consideration of and response to those comments.

Regulations contained within FMPs are enforced through actions of the NOAA's Office of Law Enforcement, the United States Coast Guard (USCG), and various state authorities. To better coordinate enforcement activities, federal and state enforcement agencies have developed cooperative agreements to enforce the Magnuson-Stevens Act.

One reason for state representation at the council level is to ensure state participation in federal fishery management decision-making and to promote the development of compatible regulations in state and federal waters. The state governments have the authority to manage their respective state fisheries. Each state exercises legislative and regulatory authority over its state's natural resources through discrete administrative units. Although each agency is the primary administrative body with respect to the states natural resources, all states cooperate with numerous state and federal regulatory agencies when managing marine resources. A more detailed description of each state's primary regulatory agency for marine resources in the Gulf is provided in Amendment 22 to the Reef Fish FMP (GMFMC 2004a), and Amendment 16 to the Snapper-Grouper FMP in the South Atlantic (SAFMC 2008c).

4.4 Social and Economic Environment

The CEQ NEPA regulations, 40 C.F.R. Sec. 1508.14, define "human environment" to be interpreted comprehensively to include the natural and physical environment and the relationship of people with that environment. Descriptions of the social and economic environments in the Gulf and South Atlantic can be found at (http://sero.nmfs.noaa.gov/sf/socialsci/socialsci.htm), while descriptions of the human environment in the Caribbean can be found at (www.sefsc.noaa.gov/socialscience_memo.jsp). Descriptions of the commercial and recreational fisheries for federally managed species can be found on at (www.gulfcouncil.org) for Gulf species, (www.safmc.net) for South Atlantic species, and (http://sero.nmfs.noaa.gov/) for Caribbean species, and (http://www.nmfs.noaa.gov/sfa/hms) for highly migratory species. Finally, economic data for all marine fisheries in the U.S., including those that occur in both EEZ and state waters, can be found at (www.st.nmfs.noaa.gov/st5/publication/fisheries_economics_2008.html).

5.0 ENVIRONMENTAL CONSEQUENCES

This section provides a comparison of the alternatives described in Section 3.0. The direct, indirect, and cumulative effects on the physical, biological, social, economic, and administrative environments for each management alternative are described below. This section also describes: 1) Any unavoidable adverse effects resulting from the proposed action, 2) the relationship between short-term uses of man's environment and long-term productivity, and 3) any irreversible or irretrievable commitments of resources resulting from implementation of the proposed action.

CEQ regulations (40 CFR 1508.8) define direct effects as those "which are caused by the action and occur at the same time and place." Indirect effects are defined as those "which are caused by the action and are later in time or farther removed in distance, but are still reasonably foreseeable." Cumulative effects are defined as "impacts on the environment that result from the incremental impact of the action when added to other past, present, and reasonably foreseeable future actions regardless of what agency or person undertakes such actions."

Actual implementation of the restriction would be through a series of point-to-point lines based on geographic coordinates. The maps and coordinates for the revised closures would be provided on the NOAA Fisheries Service Southeast Region Web site (http://sero.nmfs.noaa.gov/) as needed. Information would be provided to the public through the distribution of fishery bulletins and announcements on the marine radio and Vessel Monitoring System. Due to the natural variation in currents and winds, the extent of the oil spill will continue to be dynamic throughout the EEZ and high seas. NOAA Fisheries Service anticipates a potential need to adjust the spatial and temporal extent of the closed area as conditions change to encompass the extent of the oil spill. To the extent that these changes are made, NOAA Fisheries Service will evaluate each decision for its anticipated effects and consider whether to amend this Supplemental EA accordingly.

Transit of vessels through closed areas will not be impacted by the proposed action.

5.1 Impacts on the Physical Environment

The Deepwater Horizon MC252 oil spill event itself is expected to lead to significant impacts on EFH, but the proposed action to prohibit fishing in areas affected by the oil spill are not expected to exacerbate the situation. The area to be closed is designated as EFH for several federally-managed species. **Alternative 1** would have no significant adverse effect on the EFH different than those effects already analyzed in previous EAs and EISs for FMPs and FMP amendments for Gulf, South Atlantic, and U.S. Caribbean federally-managed fisheries. **Alternative 2,** and **Preferred Alternative 3,** are not reasonably expected to cause substantial damage to the ocean and coastal habitats and/or EFH. Area closures will be adjusted to reflect past, present, and projected future areas affected by the oil spill, and would reduce or eliminate all fishing mortality on all marine fish stocks within the changing boundaries of the closed area. In addition, this will ensure fishermen do not enter areas where oil was present, but is no longer detectable. Reductions in fishing effort can be expected to provide a positive benefit to habitats within any

designated closed area by eliminating the impacts of fishing gear, anchoring, or other activities that would impact the benthic or water column habitats during the closed period. **Preferred Alternative 3,** would allow the reopening of areas if oil spill conditions are abated. The effects on the physical environment would then be comparable to the effects of **Alternative 1.**

In regard to ecologically critical areas, should closures be required further east and south of the current closure, the Tortugas Marine Sanctuary, Madison Swanson, and Steamboat Lumps are already closed to fishing. The Edges ecologically critical area is closed (January through April) to bottom fishing, and the Desoto Canyon closed area is closed to pelagic longlines. Should future closures be needed to the west of the current spill area, fishing is limited in the Flower Gardens National Marine Sanctuary, and in other EFH areas to the west, including, but not limited to areas such as Stetson Reef. In the South Atlantic, the Oculina Bank HAPC is permanently closed to fishing, as are several smaller deepwater marine protected areas. Therefore, there would be no additional impacts on these components of the environment from the proposed action.

5.2 Impacts on the Biological Environment

Although the biological environment may be greatly impacted by the oil spill, NOAA Fisheries Service's proposed action should not additionally adversely affect the resource. **Alternative 1** would continue pre oil spill fishing regulations and would not be reasonably expected to affect the target or non-target species, biodiversity, ecosystem function, or protected resources differently from those effects previously analyzed in the EAs and EISs prepared for FMPs and FMP amendments in the Gulf, South Atlantic, and U.S. Caribbean because the regulations would allow fishing at certain levels already analyzed, despite potential biological impacts from the oil spill itself. **Alternative 2** and **Preferred Alternative 3** would restrict fishing activities and harvest of marine resource in areas encompassing the spatial extent of the oil spill and are not reasonably expected to jeopardize the sustainability of any target or non-target stocks from fishing. Area closures will be adjusted to reflect the spatial and temporal areas affected by the oil spill, and would reduce or eliminate all fishing mortality on all marine resources within the closed area. The closed areas may cause a geographic shift in fishing effort and associated impacts; however, because fishing effort is controlled under FMPs in the area and effort is greatly reduced due to the spill, it is not anticipated to cause significant effects on the biological environment. Although the fishing pressure may increase in other areas, the species are managed under regulations such as catch shares, quotas, and seasonal closures, which restrict the total catch.

Alternative 2 and **Preferred Alternative 3** are not reasonably expected to have a substantial impact on biodiversity and/or ecosystem function within the affected area. Reductions in fishing effort from the proposed prohibitions for fishing in the closed areas can be expected to provide a positive benefit to biodiversity and ecosystem function within any designated closed area by eliminating the impacts of fishing gear, anchoring, or other activities that would impact biodiversity or ecosystem function. **Preferred Alternative 3** allows NOAA Fisheries Service to extend the closure for oil spill affected areas for the high seas for US registered vessels. The closure of these areas is not reasonably expected to significantly affect the biological

environment. In addition, **Alternative 2** and **Preferred Alternative 3** are not expected to adversely affect endangered or threatened species, marine mammals, or critical habitat of these species. The action may indirectly benefit protected species by reducing the number of vessels in the closed area, thus reducing the potential for ship strikes or incidental takes.

Preferred Alternative 3 intends to refrain from fishing until conditions are safe to resume fishing; however, when the oil spill conditions are abated, NOAA Fisheries Service will evaluate the closed areas according to protocol and may reopen these areas. This alternative also includes a process to re-open areas to the harvest of non-consumptive when oil sheen is no longer present and consumptive species according to the seafood testing guidelines. While re-opening areas to fishing would increase the effect on the biological environment, it is not reasonably expected to exceed the affect of the baseline fishing effort. Additionally, the portion of the fishing year affected by the spatial and temporal area closure would be reflected in the overall effect of the biological environment. The effects on the biological environment are not reasonably expected to differ significantly from those of the preferred alternative in the previous EA(NMFS 2010).

5.3 Impacts on the Economic and Social Environments

Although the economic and social environments may be greatly impacted by the oil spill, NOAA Fisheries Service's proposed action is not reasonably expected to create any substantially adverse affects. **Alternative 1** would continue pre oil spill fishing regulations as per the current fishing regulations and would not significantly affect the economic, social, or human environment, or public safety different from those effects previously analyzed in the EA and EISs prepared for FMPs and plan amendments for Gulf of Mexico, South Atlantic and Caribbean federally managed fisheries. However, allowing fishing to continue in areas impacted by the oil spill could result in the catch (and sale) of adulterated seafood.

Alternative 2 and **Preferred Alternative 3** would restrict fishing activities and harvest of marine resources in areas encompassing the spatial extent of the oil spill. These alternatives would not be reasonably expected to create significant social or economic impacts interrelated with natural or physical environmental effects. Restricting fishing for and harvesting marine resources within the closed area affected by the oil spill may have direct and indirect social and economic impacts to the segment of the fisheries that normally operate in the closed areas and the associated shoreside operations that support these fisheries. However, due the presence of oil in the closed area, substantial fishing and harvesting of marine resources is not expected to occur in areas within the extent of the oil spill whether the area is closed or not, thus prohibiting this activity is not expected to alter the manner in which the fisheries would be conducted during this event. Nevertheless, the closures will ensure fishermen do not enter areas where oil was present, but is no longer detectable. Areas may be closed due to the projected movement of oil. This alternative is not reasonably expected to have a substantial adverse impact on the public safety or health. Area closures encompassing the spatial and temporal extent of the oil spill may promote safety for the public, fishermen, and marine response personnel. The effects on the quality of the human environment are not likely to be highly controversial. Additionally, the effects on the human environment are not likely to be highly uncertain or involve unique or unknown risks. NOAA Fisheries Service regularly closes fisheries in specific areas when area-specific quotas are met (e.g., king mackerel zones in the Gulf of Mexico and South Atlantic), or closes areas in

accordance with regulations from various fishery management plan actions such as the seasonal Texas Shrimp Closure and the permanently closed Oculina Bank HAPC. Closing areas to fishing does not preclude fishermen from shifting their fishing effort to areas that are open.

Preferred Alternative 3 intends to refrain from fishing until conditions are safe to resume fishing; however, when the oil spill conditions are abated, NOAA Fisheries Service will evaluate the closed areas according to protocol and may reopen these areas. This alternative also includes a process to re-open areas to the harvest of non-consumptive when oil sheen is no longer present and consumptive species according to the seafood testing guidelines. Re-opening these areas would minimize the social and economic impacts. The effects on the economic, social, and human environments are not reasonably expected to differ significantly from those of the preferred alternative in the previous EA(NMFS 2010).

A list of commercial and recreational fisheries for the Gulf of Mexico and South Atlantic (Section 9.0) provides additional information on the potentially affected fisheries.

5.4 Cumulative Effect Analysis (CEA)

As directed by National Environmental Policy Act (NEPA), federal agencies are mandated to assess not only the indirect and direct impacts, but cumulative impacts of actions as well. NEPA defines a cumulative impact 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 non-federal) or person undertakes such other actions. Cumulative impacts can result from individually minor but collectively significant actions taking place over a period of time" (40 C.F.R. 1508.7). Cumulative effects can either be additive or synergistic. A synergistic effect is when the combined effects are greater than the sum of the individual effects. Detailed CEAs for the reef fish fishery have been conducted in recent amendments to the FMP (Amendments 27, 29, 30A, 30B, and 31) in the Gulf. In the South Atlantic, CEAs have been completed for Amendments 13A, 13C, 14, 15A, 15B, and 16 to the Snapper-Grouper FMP. These CEAs evaluated the immediate areas affected by the actions and includes the EEZ of the Gulf and South Atlantic, and are incorporated here by reference.

The proposed action is not related to other actions with individually insignificant but cumulatively significant impacts. In general, this action will eliminate fishing mortality on these marine resources in the affected area, and should reduce the potential for interactions with protected resources. The proposed action is temporary, with closed areas being adjusted according to past, present, and future projections of areas affected by the oil spill. In addition, this will ensure fishermen do not enter areas where oil was present, but is no longer detectable. NOAA Fisheries Service's proposed action is not anticipated to have significant direct, indirect, or cumulative effects on the biological, physical and administrative environment. To the extent that future closures, longer-term fisheries management actions, and restoration decisions are made, NOAA Fisheries Service will conduct future environmental reviews and consider the oil spill within the environmental context of the effects of a proposed action and alternatives. The oil spill event itself is expected to lead to cumulatively significant impacts on the physical,

biological, and human environment, but the proposed action to prohibit fishing in areas affected by the oil spill is not expected to exacerbate the situation. However, if the Loop Current entrains the oil, it may cause extensive dispersion of the oil spill throughout the EEZ and adjacent high seas, and, in turn, lead to additional direct, indirect, and cumulative effects. Living marine resources that come into contact with the oil spill are likely to have increased levels of polycyclic aromatic hydrocarbons. The Food and Drug Administration has determined that these living resources are "adulterated seafood" and thus should not be harvested until properly tested and cleared.

Several federal, state, and local government and non-governmental agencies are participating in oil spill response activities. Clean-up efforts on the water and along the shoreline aspire to minimize the effects of the oil spill. The cumulative effects of these activities and their affect on the physical, biological, and human environment are undetermined.

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Ms. Amanda Frick	GIS	Maps	SERO
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Ms. Kate Michie	Fishery Management Plan Coordinator	S. Atlantic FMPs, and Review	SERO
Ms. Britni Tokotch	Biologist	Caribbean Fisheries	SERO

8.0 LIST OF AGENCIES CONSULTED

NOAA Southeast Fishery Science Center

NOAA SERO Protected Resources Division

NOAA SER General Counsel

NOAA HMS Management Division

9.0 LIST OF FISHERY REGULATIONS

Gulf of Mexico

Federal Regulatory Season/Area Closure Information

Commercial Fisheries

- Shellfish (spiny lobster CLOSED; all other OPEN)
  - Stone crab closed May 16 through October 14
  - Spiny lobster closed April 1 through August 5
  - Penaeid shrimp (white, pink, brown shrimp) open year-round, except for waters off Texas, which are closed May 15 until (usually) July 15
  - Royal red shrimp open, but subject to quota (quota has never been met)
- Reef Fish (Greater amberjack, goliath grouper, and Nassau grouper CLOSED; all other OPEN)
  - Open year round- Grouper, Snapper, Tilefish
  - Greater amberjack closed March through May; also subject to quota closure
  - Gray triggerfish open year-round, but subject to quota closure
  - Goliath and Nassau grouper closed year-round
    - Madison-Swanson & Steamboat Lumps areas are closed to all fishing from November through April; surface trolling is allowed from May through October.
    - The Edges 40 Fathom Contour is closed to all fishing from January through April.
- Coastal migratory pelagic species (King mackerel CLOSED; all other OPEN)
  - Cobia open year-round
  - King mackerel subject to quota; western zone (TX-AL) and most eastern zone (AL-FL) CLOSED until July 1
  - Spanish mackerel open year-round; subject to quota closure
- Highly Migratory Species
  - Tuna fishery open year-round for all species (bluefin, bigeye, albacore, yellowfin, skipjack), but bluefin tuna are subject to quota closures. Targeting of bluefin tuna is prohibited in Gulf of Mexico.
  - Swordfish fishery open year-round but subject to quota (currently open)
  - Sharks
    - Non-sandbar large coastal sharks subject to quota (currently closed until December 31, 2010)
    - Sandbar sharks – research fishery only (research fishery currently open)
    - Non-blacknose small coastal sharks subject to quota (currently open until further notice)
    - Blacknose sharks subject to quota (currently open until further notice)
    - Pelagic sharks (other than blue sharks and porbeagle) subject to quota (currently open until further notice)
    - Blue sharks subject to quota (currently open until further notice)
    - Porbeagle sharks subject to closure (currently open until further notice)
    - Many other species of sharks are prohibited
  - Commercial fishing for billfish (blue marlin, white marlin, sailfish, longbill spearfish) is prohibited year-round
  - Area closures applicable to HMS fishing:

        - DeSoto Canyon is closed year-round to pelagic longline gear only
        - Madison-Swanson & Steamboat Lumps are closed year-round, except that surface trolling is allowed from May through October
        - The Edges 40 Fathom Contour is closed from January through April

Recreational

- Shellfish (spiny lobster CLOSED; stone crab OPEN)
    - Stone crab closed May 16 through October 14
    - Spiny lobster closed April 1 through August 5
- Reef Fish (red snapper, goliath grouper, and Nassau grouper CLOSED; all other OPEN)
    - Grouper
        - Shallow-water grouper closed February through March
        - Deep-water grouper open year-round
        - Goliath and Nassau grouper closed year-round
    - Snapper
        - Red snapper currently closed; scheduled to open June 1 and close July 23 through May 2011
        - Other snapper and Tilefish open year-round
    - Greater amberjack and Gray triggerfish open year-round; subject to quota closure
- Coastal migratory pelagic species (OPEN)
    - Cobia, King mackerel, and Spanish mackeral open year-round
- Highly Migratory Species (OPEN with exception of prohibited species)
    - Tunas
        - Targeted fishing for bluefin tuna is prohibited in Gulf of Mexico, but one trophy fish per year is allowed
        - All other tuna species (bigeye, albacore, yellowfin, & skipjack) are open year-round
    - Select shark species open year-round; others prohibited year-round
    - Swordfish open year-round
    - Select billfish species (blue marlin, white marlin, sailfish) open year-round; others (longbill spearfish) prohibited year-round
    - Area closures applicable to recreational HMS fishing:
        - Madison-Swanson & Steamboat Lumps closed to all fishing year-round, except that high speed surface trolling is allowed from May through October
        - The Edges 40 Fathom Contour closed to all fishing from January through April
        -

South Atlantic

Federal Regulatory Season/Area Closure Information

Commercial fisheries for black sea bass, vermilion snapper, golden tilefish, and red snapper in the South Atlantic are currently closed due to seasonal closures or quota closures. However, black sea bass are due to open June 1 and vermilion snapper is scheduled to open July 1, 2010. Nearshore fisheries would be most likely to be directly affected by oil traveling up the east coast via the Gulf Stream current. Information on HMS fisheries that may be impacted can be found at the following web site: http://www.nmfs.noaa.gov/sfa/hms.

Commercial

- Vermilion snapper: Currently closed. To reopen July 1.
- Red snapper: Harvest prohibited through December 5, 2010.
- Black sea bass: Currently closed. To reopen June 1.
- Golden tilefish: Currently closed. To reopen January 1.
- Greater amberjack: Closed during April.
- Mutton snapper: Currently closed. To reopen July 1.
- Shallow water grouper: Closed January 1-April 30.
- Red porgy: Closed January 1–April 30.
- Wreckfish: Closed January 15–April 15
- Sargassum: Closed July–October
- King mackerel: Currently closed in East coast Zone. Atlantic group will close when quota is met
- Spanish mackerel: Currently open, will close when quota is met.
- Other major federally managed fisheries with no seasonal or quota closures (there are a total of 73 species in the snapper grouper fishery management unit many of which have no seasonal or quota closures):
    - Blackfin snapper
    - Cubera snapper
    - Dog snapper
    - Gray snapper
    - Gray triggerfish
    - Hogfish
    - Lane snapper
    - Mahogany snapper
    - Queen snapper
    - Schoolmaster
    - Silk snapper
    - Speckled hind
    - Warsaw grouper
    - Yellowtail snapper
    - Golden crab
    - Dolphin
    - Wahoo
    - Penaeid shrimp
    - Rock shrimp
    - Highly Migratory Species
        - Tuna fishery open year-round for all species (bluefin, bigeye, albacore, yellowfin, skipjack), but bluefin tuna are subject to quota closures.

- Swordfish fishery open year-round but subject to quota (currently open)
- Sharks
  - Non-sandbar large coastal sharks subject to quota (currently closed until July 15, 2010)
  - Sandbar sharks – research fishery only (research fishery currently open)
  - Non-blacknose small coastal sharks subject to quota (currently open until further notice)
  - Blacknose sharks subject to quota (currently open until further notice)
  - Pelagic sharks (other than blue sharks and porbeagle) subject to quota (currently open until further notice)
  - Blue sharks subject to quota (currently open until further notice)
  - Porbeagle sharks subject to closure (currently open until further notice)
  - Many other species of sharks are prohibited
- Commercial fishing for billfish (blue marlin, white marlin, sailfish, longbill spearfish) is prohibited year-round
- Area closures applicable to HMS fishing:
  - East Florida Coast Closed Area is closed year-round to pelagic longline gear only
  - Charleston Bump is closed from February through April to pelagic longline gear only
  - Mid-Atlantic Closed Area is closed from January through July to bottom longline gear only

Recreational

- Vermilion snapper: Closed November 1–March 31.
- Red snapper: Harvest prohibited through December 5, 2010.
- Goliath and Nassau grouper: Prohibited.
- Shallow water grouper: Closed January 1–April 30.
- Highly Migratory Species (OPEN with exception of prohibited species)
  - Tunas (bluefin, bigeye, albacore, yellowfin, & skipjack) are open year-round
  - Select shark species open year-round; others prohibited year-round
  - Swordfish open year-round
  - Select billfish species (blue marlin, white marlin, sailfish) open year-round; others (longbill spearfish) prohibited year-round

10.0 APPENDIX

DEPARTMENT OF HEALTH AND HUMAN SERVICES

Food and Drug Administration
Silver Spring MD 20993

May 18, 2010

Jane Lubchenco
Administrator
National Oceanic and Atmospheric Administration
1315 East West Highway
Silver Spring, MD 20910

Dear Ms. Lubchenco:

The National Oceanic and Atmospheric Administration (NOAA) has requested the views of the U.S. Food and Drug Administration (FDA) regarding efforts to protect the safety of seafood harvested in the Gulf of Mexico during the ongoing Deepwater Horizon oil spill. Under the Federal Food, Drug, and Cosmetic Act, FDA is the regulatory authority for seafood safety in the United States, including finfish, crustaceans, and molluscan shellfish intended for human consumption or the manufacture of animal feed.

FDA is aware that NOAA issued an emergency rule, applicable on May 2, 2010, closing indefinitely certain areas of the Gulf of Mexico due to oil spill impacts. NOAA issued a second emergency rule on May 7, 2010, that revises the original closure due to the evolving nature of the oil spill. Today, NOAA has extended the boundaries of the closure.

Due to the unprecedented and ongoing discharge of oil, FDA agrees that NOAA's closure of these federal waters is one appropriate public health measure to prevent potentially unsafe seafood from being harvested and reaching consumers. We understand that it will be necessary to continually evaluate the boundaries as the situation evolves.

FDA will also work closely with NOAA on future decisions to reopen the closed fishery. To that end, scientists from our agencies have agreed on a re-opening protocol that includes both sensory evaluation and chemical testing of seafood harvested from the closed areas.

FDA is committed to working with NOAA on an ongoing basis for the duration of this spill and cleanup. Please do not hesitate to contact me at any time.

Sincerely,

Margaret A. Hamburg

Margaret A. Hamburg, M.D.
Commissioner of Food and Drugs