



SEP 9 2010

To All Interested Government Agencies and Public Groups:

Under the National Environmental Policy Act, an environmental review has been performed on the following action.

TITLE: Finding of No Significant Impact (FONSI) and Targeted Supplemental Environmental Assessment (TSEA) for the City of Arcata McDaniel Slough Expansion Project, to support NOAA Grant Award # NA10NOS4630226

LOCATION: Arcata, California

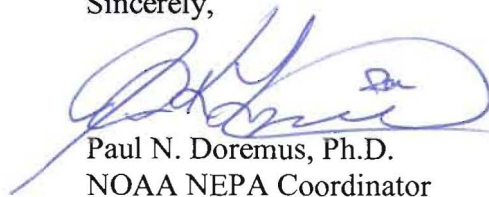
SUMMARY: The purpose of this project is to create a self-sustaining tidal estuary and restore the natural geomorphic and biologic processes within McDaniel Slough, which drains into Humboldt Bay in coastal northern California. The Project will be funded by NOAA through the Estuary Restoration Act.

RESPONSIBLE  
OFFICIAL: Patricia A. Montanio  
Director, Office of Habitat Conservation  
National Oceanic and Atmospheric Administration  
1315 East-West Highway  
Silver Spring, MD 20910

The environmental review process led us to conclude that this action will not have a significant effect on the human environment. Therefore, an environmental impact statement will not be prepared. A copy of the FONSI including the supporting TSEA is enclosed for your information.

Although NOAA is not soliciting comments on this TSEA or FONSI, we will consider any comments submitted that would assist us in preparing future NEPA documents. Please submit any written comments to the responsible official named above.

Sincerely,



Paul N. Doremus, Ph.D.  
NOAA NEPA Coordinator

Enclosure



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## **Targeted Supplemental Environmental Assessment For the City of Arcata McDaniel Slough Expansion Project**

The Estuary Restoration Act (ERA) directs the National Oceanic and Atmospheric Administration (NOAA) and certain other federal agencies to encourage the restoration of estuary habitat through more efficient project financing and enhanced coordination of Federal and non-Federal restoration programs. Consistent with the goals and requirements of the ERA, NOAA's National Marine Fisheries Service (NMFS) proposes to provide financial assistance to a habitat restoration activity entitled "The City of Arcata McDaniel Slough Expansion Project".

### **Purpose and Need for Action**

Tidal estuary habitat in Humboldt Bay has been degraded over time by various causes, including urban development, agriculture, water pollution, limiting the ability to conserve several sensitive fish species. There is a need to restore suitable habitat for such species. The purpose of the proposed action is to restore historic natural geomorphic and biologic processes to create a self-sustaining restored tidal estuary, and enhance freshwater wetlands on 285.5 acres within Humboldt Bay. This project will provide access to habitat for numerous species including federally listed salmon, steelhead, and tidewater goby.

### **Description of the Proposed Action**

The City of Arcata McDaniel Slough Expansion Project is a result of collaboration between numerous partners. In addition to the participation of the City and NOAA, there are several partners involved in this project including the United States Army Corps of Engineers (USACOE), the United States Fish and Wildlife Service (USFWS), the Natural Resources Conservation Service (NRCS), and the California Department of Fish and Game (DFG). The USACOE has been designated as the lead federal agency for this project and has issued a 404 permit for the action. In addition, the ACOE has completed consultations pursuant to Section 7 of the Endangered Species Act with the NMFS and USFWS. Furthermore, the USACOE has completed an Environmental Assessment for the proposed action in which the USFWS and NRCS have adopted as cooperating agencies. The NRCS, USFWS, and DFG have all provided funding and technical expertise throughout the permitting, design and implementation phases of the project. The City has prepared an Environmental Impact Report (EIR) under the California Environmental Quality Act (CEQA), which has been adopted by DFG, the lead CEQA agency.

After reviewing the proposed project, we determined that the action described below falls within the scope and effect of activities analyzed in the February 6, 2002 Programmatic Environmental Assessment (PEA) for the Community-based Restoration Program Implementation Plan and the June 23, 2006 Supplement (SPEA), except for potential impacts to certain species that are listed and managed under the requirements of the Endangered Species Act (ESA). The PEA and the SPEA are incorporated by reference into this targeted supplemental environmental assessment (TSEA). A formal ESA section 7 consultation was initiated by the United States Army Corps of Engineers (USACOE) with the U.S. Fish and Wildlife Service (USFWS), Arcata Office on September 15<sup>th</sup>, 2006 due to potential adverse impacts to the Tidewater Goby (*Eucyclogobius newberryi*). A Biological Opinion (BiOp) was issued by the USFWS on June 18th, 2008. The BiOp concluded that the proposed action is likely to adversely affect Tidewater Goby but not likely to jeopardize the continued existence of the species or result in adverse modification or

destruction of designated critical habitat. In 2007, the California Department of Fish and Game (CDFG) was able to acquire an additional 45.5 acres of property adjacent to the restoration site, allowing the project to expand to 285.5 acres, increasing tidal estuarine habitat by 22 acres and enhancing 23.5 additional acres of freshwater wetlands. The USACOE reinitiated consultation with USFWS to include the additional acreage in the project on January 9, 2009. The USFWS reissued a BiOp on September 9, 2009 that concluded that the proposed action is likely to adversely affect Tidewater Goby but not likely to jeopardize the continued existence of the species or result in adverse modification or destruction of designated critical habitat.

The USACOE conducted an informal ESA section 7 consultation with the National Marine Fisheries Service's (NMFS) Regional Protected Resources Office in Arcata, CA for the federally threatened Central California Coast (SONCC) Coho Salmon (*Oncorhynchus kisutch*), Northern California steelhead trout (*O. mykiss*) and California Coastal (CC) Chinook (*O. tshawytscha*). The USACOE also conducted an Essential Fish Habitat (EFH) consultation with the NMFS Regional Habitat Conservation Office in Arcata under provisions of the Magnuson-Stevens Fishery Conservation and Management Act of 1976 (MSA). The NMFS concurred with USACOE's determination that the proposed action is not likely to adversely affect coho salmon, Chinook salmon, steelhead, or EFH. It prepared this TSEA specifically to evaluate the effects of the proposed action on Tidewater Goby and its habitat. This level of review is described in this SPEA and reflects the analysis provided in the BiOp.

This Targeted Supplemental Environmental Assessment (TSEA) tiers to and incorporates by reference the above referenced PEA and SPEA in accordance with 50 C.F.R. §1502.20 and NAO 216-6, subsection 5.09a. The TSEA also incorporates evaluations and determinations from the USFWS BiOp, the ACOE Environmental Assessment, and DFG's EIR by reference. This TSEA level of review is conducted in accordance with the implementation procedures described in the SPEA and appropriately focuses on consideration of effects to species listed under the Endangered Species Act, 16 U.S.C. 1531 et seq. Beyond consideration of site-specific effects to the ESA-listed species, our [NMFS] review of the proposed action has not revealed any substantial changes in the proposed action or new potentially significant adverse effects to other elements of the human environment which would require additional review in the TSEA or supplementation of the pre-existing NEPA documents.

## **Alternatives Considered**

### **I. No Action Alternative**

Under the no-action alternative, the NOAA RC would not fund the proposed project to increase and enhance habitat. The 285.5 acre site would remain as it currently exists as agricultural pasture and diked former tideland. Wildlife diversity would remain low due to the predominance of agricultural wetland with low plant species composition. The cutoff sloughs intended for historic channel excavation would remain aggraded with sediment and would provide little wildlife or aquatic habitat value. The deepening and channeling of these sloughs have the potential to provide enhancements to endangered tidewater goby habitat. McDaniel Slough would remain a degraded stream for fishery migration or rearing and would remain confined to a narrow channel with limited flow capacity. The City lands would continue to be grazed by livestock, the DFG lands would remain as grasslands with potential succession to shrub and wooded area, and the McDaniel Slough/Janes Creek channel would continue to aggrade, thereby increasing the flood hazard level for adjacent area.

## **II. Preferred Alternative**

The City of Arcata proposes to conduct the following work at the above project site: (1) **Phase I** - Continue Phase I freshwater pond excavation and construction (East Pond and West Pond), enhance historic tidal slough channels on the eastern portion of the site (1,400 linear feet), remove portions of levee bordering McDaniel Slough to create wildlife islands (1,200 linear feet and 3.02 acres in area), contour the bottom of the future brackish pond, build and vegetate islands in the brackish pond, provide access to PG&E for reinforcing utility towers, construct trails, viewing structure and information kiosks and install storm water Best Management Practices throughout the project site; (2) **Phase II** - Mute or close the lowest elevation culvert at the mouth of McDaniel Slough, reinstall a tide gate or flapper gate at this culvert, place 53,500 cubic yards of soil onto agricultural wetland to construct new flood levees and eco levees on the western portion of the site just west of the turn on V Street and Old Samoa Boulevard, replace two 24-inch diameter culverts with a 48-inch diameter culvert at the southwest corner of the project where a proposed flood levee would be constructed adjacent to the Reclamation District bay front levee, isolate the borrow ditch area, dewater the borrow ditch area, and install, replace and remove culverts at various locations, modify and excavate remnant tidal channels located on the western portion of the site inboard of the new levees; (3) **Phase III** - Remove tide gates from all four culverts at the mouth of McDaniel Slough with the culverts remaining in place for one full construction season, after one year of tidal exchange remove all four 48-inch culverts and breach the Humboldt Bay front levee at the culvert location, place rock slope protection on both side of the levee breach, and complete design and build infrastructure for and begin operation of the brackish marsh. A more detailed description of the preferred alternative, including measures to minimize adverse effects to Tidewater Goby and its habitat, is provided on pp. 4-11 of the June 18, 2008 BiOp.

## **Affected Environment**

For purposes of this analysis NOAA has determined that the description of the “action area” “status of the species,” and “environmental baseline” in the BiOp, pp. 11-24, serve as the description of the affected environment.

## **Environmental Effects**

### **I. No Action Alternative**

Under the no-action alternative, NOAA would not fund the proposed grant. Other agencies would still have the option to fund this project, however, the need for coastal habitat restoration is great, and fewer important projects would be funded if NOAA did not fund the project type outlined in the preferred alternative.

### **II. Preferred Alternative**

#### **Direct Effects**

The McDaniel Slough Expansion Project will occur within proposed critical habitat for a small estuarine fish, the endangered tidewater goby (*Eucyclogobius newberryi*), listed by the USFWS. The USACOE has determined that this project may affect and is likely to adversely affect the tidewater goby. The proposed action would occur within unit HUM-3 designated as critical

habitat under the ESA for the Tidewater Goby and would negatively affect the function of the primary constituent elements of this designated critical habitat within the McDaniel Slough project area. However, effects to primary constituent elements from channel excavation and levee breaching would be confined to only 8.8 acre (0.06 acre permanently affected and 8.8 acre temporarily affected) or < 0.5% of the suitable habitat within HUM-3. Furthermore, the long-term beneficial effects of the proposed action include the creation of 4 acres of additional brackish water habitat directly adjacent to suitable habitat. All of these affects are described in detail in the attached September 12, 2009 USFWS BiOp pp. 17-21.

Existing aquatic organism habitat within the former tidelands inside the dikes bordering Humboldt Bay is limited. McDaniel Slough, which upstream is also known as Janes Creek in its non-tidal reaches historically has been a migration, rearing and spawning corridor for anadromous fish including coho salmon, steelhead and coastal cutthroat trout. However, a series of culverts located under Highway 255 north of the project area appear to be barriers to fish migration (these culverts are not in the project area but are maintained by the California Department of Transportation). Throughout the 240 acre project area, there is just enough diversity in vegetation, topography and hydrology to attract a variety of small amphibians, reptiles, small and some large mammals such as deer, mice or grey fox, a variety of passerine birds or shorebirds such as herons, egrets, sparrows, warblers, raptors such as hawks, and the occasional peregrine falcon (no longer listed). Many of the raptors use telephone or high tension wires or fence lines to scout for prey in the fields below. Some of the terrestrial species may be scared off or disturbed by the presence of heavy equipment conducting excavation, fill or grading activities within the project, and with the presence of vehicles and personnel. This is expected to be a short-term, minor adverse affect on existing populations of both terrestrial and aquatic species in this area. Upon completion of the project, it is anticipated that the quality and number of aquatic and terrestrial fish and wildlife habitat would increase and result in a net, long-term beneficial impact on habitat for fish, other aquatic organisms, and wildlife.

### **Indirect Effects**

In addition to the direct effects within the construction footprint, there will be indirect affects throughout the entire Janes Creek watershed, defined by the Janes Creek watershed ridge tops located in Arcata, CA. Removing the tide gates will improve access to 4.9 miles of freshwater spawning and rearing habitat for anadromous salmonids within the Janes Creek watershed. In addition, the removal of the tide gates will allow storm flows to drain more rapidly and reduce flooding impacts to upstream properties and municipalities adjacent to Janes Creek.

### **Cumulative Effects**

Cumulative: Federal regulations implementing NEPA (40 C.F.R. 1500-1508) require that the cumulative impacts of a proposed action be assessed. NEPA defines a *cumulative impact* as an "impact on the environment, which results from the incremental impact of the action when added to other past, present, and reasonably foreseeable future actions" (40 C.F.R. 1508.7). The project area and adjacent properties are surrounded by approximately 5 miles of rock and earthen levees maintained by Reclamation District 768, a conglomeration of ranch owners and public or other private ownership within the interior of the levees. Some portions of these levees and the parallel borrow ditches were constructed in 1890 or shortly after the turn of the century. The proposed project involving interior levee construction and removal, pond excavation and slough excavation would be the first major cumulative impact since the use of the project area for agricultural use starting in the 1890's with the exception of the construction of Highway 255, the

railroad line located east of the project area, construction of the Arcata Marsh wastewater complex to the east in the 1980's and increasing residential and commercial construction adjacent to the project area. NOAA has not identified any other reasonably foreseeable Federal, State or local actions within the action area that are likely to have cumulative impacts.

### **Summary of Effects**

The BiOp issued by the USFWS concluded that the proposed action will not jeopardize the federally endangered Tidewater Goby. In addition, this project will improve access to 4.9 miles of spawning and rearing habitat for federally listed coho and Chinook salmon and steelhead trout. An Incidental Take Statement (ITS) was included in the USFWS BiOp along with reasonable and prudent measures and terms and conditions to be adhered to. The USACOE is responsible for complying with the requirements described in the ITS, implementing the terms and conditions, and all monitoring, mitigation and reporting requirements associated with the BiOp.

### **List of Agencies/Persons Consulted**

Lynn Roberts, Greg Goldsmith  
U.S. Fish and Wildlife Service, Arcata California Fish and Wildlife Office

Leslie Wolf  
NOAA Fisheries, Protected Resources Division, Arcata, California

David Ammerman  
U.S. Army Corps of Engineers, Eureka, California

**Attachment** – USFWS' June 18, 2008 and September 9, 2009 Biological Opinions

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#### **Direct Effects**

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habitat under the ESA for the Tidewater Goby and would negatively affect the function of the primary constituent elements of this designated critical habitat within the McDaniel Slough project area. However, effects to primary constituent elements from channel excavation and levee breaching would be confined to only 8.8 acre (0.06 acre permanently affected and 8.8 acre temporarily affected) or < 0.5% of the suitable habitat within HUM-3. Furthermore, the long-term beneficial effects of the proposed action include the creation of 4 acres of additional brackish water habitat directly adjacent to suitable habitat. All of these affects are described in detail in the attached September 12, 2009 USFWS BiOp pp. 17-21.

Existing aquatic organism habitat within the former tidelands inside the dikes bordering Humboldt Bay is limited. McDaniel Slough, which upstream is also known as Janes Creek in its non-tidal reaches historically has been a migration, rearing and spawning corridor for anadromous fish including coho salmon, steelhead and coastal cutthroat trout. However, a series of culverts located under Highway 255 north of the project area appear to be barriers to fish migration (these culverts are not in the project area but are maintained by the California Department of Transportation). Throughout the 240 acre project area, there is just enough diversity in vegetation, topography and hydrology to attract a variety of small amphibians, reptiles, small and some large mammals such as deer, mice or grey fox, a variety of passerine birds or shorebirds such as herons, egrets, sparrows, warblers, raptors such as hawks, and the occasional peregrine falcon (no longer listed). Many of the raptors use telephone or high tension wires or fence lines to scout for prey in the fields below. Some of the terrestrial species may be scared off or disturbed by the presence of heavy equipment conducting excavation, fill or grading activities within the project, and with the presence of vehicles and personnel. This is expected to be a short-term, minor adverse affect on existing populations of both terrestrial and aquatic species in this area. Upon completion of the project, it is anticipated that the quality and number of aquatic and terrestrial fish and wildlife habitat would increase and result in a net, long-term beneficial impact on habitat for fish, other aquatic organisms, and wildlife.

### **Indirect Effects**

In addition to the direct effects within the construction footprint, there will be indirect affects throughout the entire Janes Creek watershed, defined by the Janes Creek watershed ridge tops located in Arcata, CA. Removing the tide gates will improve access to 4.9 miles of freshwater spawning and rearing habitat for anadromous salmonids within the Janes Creek watershed. In addition, the removal of the tide gates will allow storm flows to drain more rapidly and reduce flooding impacts to upstream properties and municipalities adjacent to Janes Creek.

### **Cumulative Effects**

Cumulative: Federal regulations implementing NEPA (40 C.F.R. 1500-1508) require that the cumulative impacts of a proposed action be assessed. NEPA defines a *cumulative impact* as an "impact on the environment, which results from the incremental impact of the action when added to other past, present, and reasonably foreseeable future actions" (40 C.F.R. 1508.7). The project area and adjacent properties are surrounded by approximately 5 miles of rock and earthen levees maintained by Reclamation District 768, a conglomeration of ranch owners and public or other private ownership within the interior of the levees. Some portions of these levees and the parallel borrow ditches were constructed in 1890 or shortly after the turn of the century. The proposed project involving interior levee construction and removal, pond excavation and slough excavation would be the first major cumulative impact since the use of the project area for agricultural use starting in the 1890's with the exception of the construction of Highway 255, the

railroad line located east of the project area, construction of the Arcata Marsh wastewater complex to the east in the 1980's and increasing residential and commercial construction adjacent to the project area. NOAA has not identified any other reasonably foreseeable Federal, State or local actions within the action area that are likely to have cumulative impacts.

### **Summary of Effects**

The BiOp issued by the USFWS concluded that the proposed action will not jeopardize the federally endangered Tidewater Goby. In addition, this project will improve access to 4.9 miles of spawning and rearing habitat for federally listed coho and Chinook salmon and steelhead trout. An Incidental Take Statement (ITS) was included in the USFWS BiOp along with reasonable and prudent measures and terms and conditions to be adhered to. The USACOE is responsible for complying with the requirements described in the ITS, implementing the terms and conditions, and all monitoring, mitigation and reporting requirements associated with the BiOp.

### **List of Agencies/Persons Consulted**

Lynn Roberts, Greg Goldsmith  
U.S. Fish and Wildlife Service, Arcata California Fish and Wildlife Office

Leslie Wolf  
NOAA Fisheries, Protected Resources Division, Arcata, California

David Ammerman  
U.S. Army Corps of Engineers, Eureka, California

**Attachment** – USFWS' June 18, 2008 and September 9, 2009 Biological Opinions

## **Finding of No Significant Impact For City of Arcata McDaniel Slough Expansion Project**

In August 2010, NOAA's National Marine Fisheries Service (NMFS) Office of Habitat Conservation prepared a Targeted Supplemental Environmental Assessment (TSEA) for a restoration activity funded through the Estuary Restoration Act. This proposed project was funded with monies provided to the City of Arcata (City) through the NOAA Estuary Restoration Act (ERA) and the City will assume the role of project manager for this action. The proposed action is a project entitled "City of Arcata McDaniel Slough Expansion Project." The purpose of this project is to create a self-sustaining tidal estuary and restore the natural geomorphic and biologic processes within McDaniel Slough, which drains into Humboldt Bay in coastal northern California. The TSEA assesses the potential adverse environmental impacts of this project specific to Tidewater Goby, a species listed as endangered pursuant to the Endangered Species Act, and its designated critical habitat. The USACOE initiated formal Section 7 consultation under the Endangered Species Act and received from the USFWS a Biological Opinion (BiOp) for Tidewater Goby (*Eucyclogobius newberryi*). The BiOp concluded that the restoration project would not jeopardize the continued existence of the Tidewater Goby or result in the destruction or adverse modification of critical habitat designated for the species and provided authorization for incidental take of a specified number of individuals likely to be harmed and/or harassed through project implementation as long as the project is implemented in accordance with specified terms and conditions. The additional potential impacts to other elements of the human environment for this type of project are analyzed in the February 6, 2002 Programmatic Environmental Assessment (PEA) for the Community-based Restoration Program's Implementation Plan and the June 23, 2006 Supplement (SPEA); the PEA and SPEA and BiOp are incorporated by reference into the TSEA. The TSEA and USFWS BiOps are expressly incorporated by reference in this FONSI.

National Oceanic and Atmospheric Administration Administrative Order 216-6 (May 20, 1999) contains criteria for determining the significance of the impacts of a proposed action. In addition, the Council on Environmental Quality (CEQ) regulations at 40 C.F.R. §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 in 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 and CEQ's context and intensity criteria. These include:

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

Response: No. Implementation of this project is designed to enhance or restore coastal habitats, and/or fish habitats that are essential to federally managed fish as defined under the Magnuson-Stevens Act or identified in Fishery Management Plans.

The proposed action would occur within unit HUM-3 designated as critical habitat under the ESA for the Tidewater Goby and would negatively affect the function of the primary constituent elements of this designated critical habitat within the McDaniel Slough

project area. However, effects to primary constituent elements from channel excavation and levee breaching would be confined to only 8.86 acre (0.06 acre permanently affected and 8.8 acre temporarily affected) or < 0.5% of the suitable habitat within HUM-3. Furthermore, the long-term beneficial effects of the proposed action include the creation of 4 acres of additional brackish water habitat directly adjacent to suitable habitat.

*2) 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: There will be no significant adverse impacts on biodiversity and/or ecosystem function. As concluded by the USFWS BiOp for Tidewater Goby, the proposed action will impact an extremely small percentage of the Tidewater Goby within the McDaniel Slough project area based on the following: (1) a minimal amount of habitat loss for the Tidewater Goby would be permanently (0.06 acre) affected initially by the proposed action; (2) this project will create 4 acres of goby habitat that is adjacent to current suitable habitat (3) a number of conservation measures would be implemented to avoid or minimize potential adverse effects to individual Tidewater Goby's and their habitat during implementation of the proposed action. The action is expected to have long-term beneficial impacts on biodiversity and/or ecosystem function through restoration of natural estuarine habitat.

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

Response: This criterion was adequately considered in the SPEA, which analyzed a broad range of restoration activities. The response included in the SPEA's associated FONSI states:

"No. Implementation of the CRP is designed to enhance habitat and be beneficial to the environment, as well as public health and safety. Projects that would alter floodplains or modify storm water management structures to prevent erosion or improve water quality, and projects that would remove contaminated sediments to restore habitat would beneficially affect public health and safety. No adverse impacts on public health and safety are expected."

*4) 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: Yes. NMFS Protected Resources and the USFWS have reviewed any potential effects to species listed as threatened or endangered under the ESA. USFWS has issued a Biological Opinion that concludes that the project will not jeopardize the continued existence of Tidewater Goby or result in the adverse modification or destruction of designated critical habitat. NMFS has concluded that the proposed action is not likely to adversely affect SONCC Coho Salmon, NC steelhead, CC Chinook, or their critical habitat

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

Response: This criterion was adequately considered in the SPEA, which analyzed a broad range of restoration activities. The response included in the SPEA's associated FONSI states:

"No significant social or economic impacts are expected. CRP-implemented habitat restoration projects, especially those having an education component, may have a substantial beneficial effect to habitats supporting coastal or marine resources; the projects would likely have a directly related economic and/or social benefit as well. Beneficial impacts would result because education of local citizens and youth about environmental issues in the community and beyond, especially habitat restoration and conservation, would promote environmental understanding of living coastal and marine resources, stewardship, and sustainability of the resources. The sustainability of these resources contributes positively to the long-term economic stability of the affected community."

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

Response: It is not likely that the effects of this project on the quality of the human environment would be highly controversial. Professional engineers and project planners have designed the habitat restoration project. The project will be monitored for both its effectiveness at restoring habitat, and for increased fish use of the site. Reports on the project outcome will be required by the NOAA Restoration Center and shared with NMFS Protected Resources and USFWS personnel.

*7) 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, essential fish habitat, or ecologically critical areas?*

Response: No. The impacts of the proposed work will include enhancement of the McDaniel Slough estuary to improve in-stream habitat and fish survival. Impacts will only affect a very small proportion of the project area. The site was surveyed for cultural and archaeological resources and no cultural or archaeological resources were found at the site.

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

Response: No. Any uncertainty or associated risk will not be significant and will be minimized by sound design, implementation techniques and adaptive project management to address any concerns, should they arise. As noted in the criterion 4 response, the informal and formal Section 7 consultations concluded that the project will not adversely affect three listed fish species in the project area or jeopardize the continued existence of the Tidewater Goby, the only listed species likely to sustain adverse effects..

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

Response: This criterion was adequately considered in the SPEA, which analyzed a broad range of restoration activities. The response included in the SPEA's associated FONSI states:

"The proposed action, when combined with related past, present, or reasonably foreseeable future actions will not cause cumulative significant impacts to the human environment. Any impacts caused by the proposed action would generally be temporary, minor to moderate impacts due to ground disturbance or other construction-related activities from implementing specific projects, which then result in net long-term or permanent, moderate to substantial beneficial impacts on the affected communities, resources, and ecosystems of the United States. Due to the CRP's national scope and infrequency of projects occurring within the same geographic areas, the temporary negative impacts related to implementation would only be moderate, and isolated to project locations. Also, these negative impacts can be avoided, minimized or mitigated by best management practices and other measures, as described in the SPEA.

Many other federal, state, and local government agencies and private organizations implement similar beneficial projects across the United States to help restore and maintain natural ecosystems. Consequently, if and when other unrelated projects are planned or identified in a project area with spatially or temporally cumulative adverse impacts, the CRP staff can work with grantees to implement best management practices, and/or require project timing that will avoid cumulative adverse impacts, by using special award conditions as described in the SPEA. The net beneficial impacts resulting from past projects, the proposed actions, and foreseeable future projects would be long-term and beneficial impacts. Overall, the sustainability of resources, especially living coastal and marine resources, would be enhanced."

NOAA's review of the project did not identify any past present or reasonably foreseeable future actions within the action area likely to have synergistic cumulative impacts of concern.

*10) 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: This criterion was adequately considered in the SPEA, which analyzed a broad range of restoration activities. (In addition, during our review it was determined that this specific action did not have the potential for adverse impacts to historic or cultural resources.) The response included in the SPEA's associated FONSI states:

"No. Implementation of the CRP is not expected to result in significant adverse impacts to sites in or eligible for listing in the National Register of Historic Places. As described in the SPEA, if a project has a potential for adverse impacts to historic or cultural resources, the CRP will conduct an evaluation of the effects and prepare a project-specific historical and cultural resource assessment to determine the impacts. Depending on the level of impact, the CRP will initiate consultation(s) on a project-level basis with either the State Historic Preservation Officer (SHPO) and/or Tribal Historic Preservation Officer (THPO), as appropriate. Consultations completed with the SHPO or THPO will ensure that the CRP is implemented in accordance with all applicable cultural and

historic resource protection laws and regulations. If project impacts are not described in the SPEA, a targeted supplemental EA or EIS will be completed to ensure compliance with NEPA.”

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

Response: This criterion was adequately considered in the SPEA, which analyzed a broad range of restoration activities. The response included in the SPEA’s associated FONSI states:

“No. Implementation of the CRP should not cause or promote the introduction or spread of non-indigenous species, and as described in section 2.2 and 4.1 of the SPEA, some project-specific actions may intentionally be conducted to prevent or avoid the introduction or spread of invasive species, and protect habitat for native species.”

*12) 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: The proposed action is not likely to establish a precedent for future actions with significant effects or represent a decision in principle about future considerations. This project would not be likely to have significant effects due to the project’s scale. Additionally, commitment of funds for this action does not obligate NOAA’s involvement in or approval of future similar actions. Any future proposed action would require additional NEPA analysis and projects that may adversely affect ESA-listed species would require ESA Section 7 consultation. Consultation with NMFS Protected Resources and USFWS on this project and any others that may impact ESA-listed species listed ensures that this action and other actions have no significant adverse effects to ESA-listed species.

*13) 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: This criterion was adequately considered in the SPEA, which analyzed a broad range of restoration activities. The response included in the SPEA’s associated FONSI states:

“No. As described in Section 6.0 of the SPEA, implementation of the CRP will comply with all federal regulatory requirements, and to the extent possible with and state and local laws, and is expected to enhance or restore habitats and the environment that support coastal and marine living resources.”

*14) 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: This criterion was adequately considered in the SPEA, which analyzed a broad range of restoration activities. The response included in the SPEA’s associated FONSI states:



"No. As explained in the above response to criterion 9, the proposed action can reasonably be expected to result in cumulative *beneficial* effects on target species (i.e., federally protected or managed species or fisheries). The net cumulative effect could have a positive impact on the target species. The net additive effects resulting from past projects, the proposed action, and reasonably foreseeable future projects that would affect target species would constitute a long-term beneficial impact to those species." In addition, the September 1, 2009 USFWS BiOp pp. 21 states that they do not anticipate any cumulative effects to occur within the action area.

In addition, as noted above, NOAA reviewed the effects of the action on the Federally-endangered Tidewater Goby and found that there were no past, present or reasonably foreseeable future actions occurring within the action area likely to result in cumulative impacts of concern.

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#### DETERMINATION

In view of the information presented in this document and the analysis contained in the supporting Targeted Supplemental Environmental Assessment prepared for the City of Arcata McDaniel Slough Expansion Project and the related BiOps, it is hereby determined that this project will not significantly impact the quality of the human environment as described above and in the TSEA. 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 EIS for this action is not necessary.



Date

9/7/10

Patricia Montanio  
Director, Office of Habitat Conservation  
National Marine Fisheries Service  
National Oceanic and Atmospheric Administration  
U.S. Department of Commerce