

SAN FRANCISCO BAY CONSERVATION AND DEVELOPMENT COMMISSION

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August 20, 2009

Application Summary

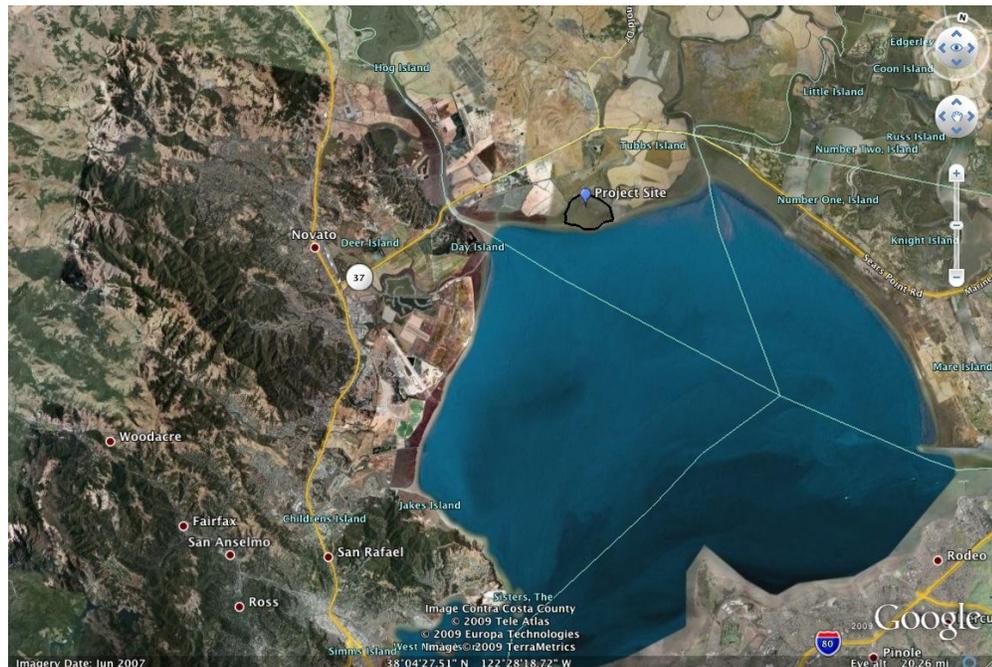
(For Commission consideration on September 3, 2009)

Number: Material Amendment No. One to BCDC Consistency Determination No. CN 11-93
Date Filed: August 18, 2009
75th Day: November 1, 2009
Staff Assigned: Max Delaney (415-352-3668, maxd@bcdc.ca.gov)

Summary

Applicant: U.S. Fish and Wildlife Service (USFWS)

Location: In the Commission's Bay and shoreline band jurisdictions, within the 295-acre Lower Tubbs Island marsh and the 445-acre Tolay Creek marsh at the San Pablo Bay National Wildlife Refuge (the Refuge), located at the mouth of Tolay Creek along the shores of San Pablo Bay in Sonoma County (see Exhibit A). The project site is bordered to the east by the Tubbs Island Levee Setback Restoration Project (constructed in 2002), to the northeast by agricultural fields owned by the Vallejo



Bay Conservation and Development Commission

Sanitation District, to the north and west (across Tolay Creek) by the site of the future Sears Point Restoration Project, and to the south by San Pablo Bay (see Exhibit B).

Project: The goal of the project is to enhance approximately 65 acres of tidal habitat within the Lower Tubbs Island and Tolay Creek marshes. The proposed activities would include: (1) enlarging existing tidal channels; (2) creating new tidal channels to connect to isolated ponded areas; (3) breaching and lowering interior berms and levees; (4) placing fill to raise the marsh plain in low lying areas throughout the project site; and (5) repairing and strengthening the outboard levee of Lower Tubbs Island (see Exhibit C).

The project would improve habitat by creating and enlarging channels thereby increasing tidal circulation throughout the project site. Improved tidal circulation would increase the amount of shallow channel habitat, promote plant vigor, and increase shallow, open water mudflats. Improved habitat would also expand available habitat for special status species (such as the California clapper rail and the salt marsh harvest mouse) as well as other sensitive marsh species. Reducing ponding would also reduce mosquito production and help provide a long-term solution to controlling mosquitos that reduces the need to apply chemical treatments to the marshes.

Table 1. Area of Tidal Marsh to be Enhanced (in acres)

Marsh	Habitat Type	Acres to Be Enhanced
Lower Tubbs Island	Tidal Marsh	35
Tolay Creek Marsh	Tidal Marsh	30
TOTAL		65

Issues

Raised: The staff believes that the application raises five primary issues: (1) whether the project is consistent with the McAteer-Petris Act and *San Francisco Bay Plan* (Bay Plan) policies regarding fill; (2) whether the project would provide maximum feasible public access consistent with the project; (3) whether the project is consistent with the Commission's safety of fills policies, including sea level rise; (4) whether the project is consistent with the Commission's natural resource policies, including fish, other aquatic organisms and wildlife; and tidal marshes

and tidal flats; and (5) whether the project is consistent with the Commission's dredging policies.

Background

The San Pablo Bay National Wildlife Refuge, located along the northern edge of San Pablo Bay, was established in 1970 for the purpose of protecting habitat for migratory birds and endangered and/or threatened species. Both the Lower Tubbs Island and Tolay Creek marshes are managed by the U.S. Fish and Wildlife Service (USFWS) as part of the Refuge.

The Lower Tubbs Island unit was historically managed as a diked managed wetland for duck hunting. Levees, culverts, and borrow ditches were constructed to control water exchange with the Bay. The Nature Conservancy acquired the property in the early 1970's and transferred it to the Refuge in 1978. Over the course of its management, the USFWS has undertaken enhancement activities to return the marsh complex to a more natural tidal marsh system. The site is currently managed as a muted tidal marsh. The Tolay Creek marsh is an undiked tidal marsh bordering the lower end of Tolay Creek and San Pablo Bay. Human activities such as levee construction, the creation of Highway 37, and conversion of wetlands to agriculture altered the watershed Tolay Creek, decreasing the size of the tidal flood plain and associated marsh and severely limiting upstream freshwater flows. Tolay Creek was acquired by the USFWS in 1981. In 1997, the USFWS and California Department of Fish and Game (CDFG) constructed the Tolay Creek Restoration Project, a 56-acre restoration project designed to improve habitat by enlarging and extending the existing Tolay Creek channel, increasing the tidal prism to improve water circulation throughout Lower (below Highway 37) Tolay Creek.

Past human activities, including enclosing Lower Tubbs Island with levees, building berms, and modifying the hydrology, have caused decreased tidal circulation within both Tolay Creek and Lower Tubbs marshes. In addition, many of the tidal channels in these areas have filled in with sediment due to poor connections to the tidal source, or have blockages that prevent drainage on the outgoing tides. As a result, extended periods of water ponding on the marsh plain occur when high water inundate the marshes and remain within topographic depressions. This ponding results in decreased vigor of marsh vegetation, especially pickleweed, and periodic die-offs that reduce habitat functions. Ponding can also lead to high levels of mosquito production. While these areas have produced relatively low numbers of mosquitos in the last few years, they have historically been problematic. The Marin-Sonoma Mosquito and Vector Control District (MSMVCD or District) has been treating these marshes since at least the

1970's. Treatments consist of applying approved insecticides to the marshes when mosquito numbers exceed established thresholds. Ultimately the chemicals wash into the Bay and other wetlands. Additionally, accessing the tidal marshes for mosquito management and surveillance

causes direct disturbance to wildlife and plant populations and can degrade habitats. Therefore, the reduction of pesticide application in waters connected to San Pablo Bay is preferred from both an environmental health and economic perspective.

On February 8, 1994, the Commission approved BCDC Consistency Determination No. 11-93, authorizing the USFWS to place approximately 10-20 cubic yards of dirt and 140 cubic yards of rip rap along the southern edge of Lower Tubbs Island to strengthen the out-board levee in order to protect habitat within the island. The proposed Material Amendment No. One to BCDC Consistency Determination No. 11-93 would authorize enhancing approximately 65 acres of tidal wetlands within the Lower Tubbs Island marsh and the Tolay Creek marsh.

Project Description

Project

Details:

The applicant, the U.S. Fish and Wildlife Service (USFWS), describes the project as follows:

In the Bay:

a) Within Lower Tubbs Island Marsh (Area 2)

- 1) Excavate approximately 1,065 cubic yards of material over approximately 13,925 square feet (0.32 acres) to enlarge seven existing channels, create three new channels, and breach an interior levee in four locations to improve tidal circulation and drainage; and
- 2) Place approximately 700 cubic yards of material over 55,728 square feet (1.28 acres) to fill in depressions.

b) Within Lower Tolay Creek Marsh (Areas 1 and 3)

- 1) Excavate approximately 1,000 cubic yards of material over approximately 6,480 square feet (0.15 acres) to enlarge one existing channel and create six new channels to improve tidal circulation and drainage;
- 2) Place approximately 1,000 cubic yards of material over approximately 118,100 square feet (2.71 acres) to fill in depressions; and
- 3) Excavate up to 250 cubic yards of material over approximately 6,705 square feet (0.15 acres) by lowering a 300-foot-long section of interior berm.

Within the shoreline band:

a) Within Tolay Creek Marsh (Areas 1 and 3)

- 1) Excavate approximately 290 cubic yards of material over an area of approximately 1,650 square feet (0.04 acres) to create two 15-foot-wide breaches in an interior levee (the Lower Tubbs Island perimeter levee);

- 2) Excavate approximately 250 cubic yards of material over an area of approximately 6,858 square feet (0.16 acres) by lowering a 535-foot-long section of interior levee (the Lower Tubbs Island perimeter levee); and

- 3) Place up to 790 cubic yards of the material excavated from the interior levee and interior berm over an area of approximately 16,000 square feet (0.40 acres) on the outboard levee of Lower Tubbs Island adjacent to San Pablo Bay to repair and strengthen the levee.

b) Along the Tubbs Island Setback Levee

- 1) Create and maintain a new approximately 2,000-foot-long by 15-foot-wide (30,000 square feet) public access trail along the interior levee, immediately east of the Lower Tubbs Island loop trailhead; and
- 2) Install an interpretive panel at the east end of the Tubbs Island Setback levee trail.

Fill: The proposed project would place approximately 2,200 cubic yards of fill over approximately 173,828 square feet (4.0 acres) of Bay tidal marsh to eliminate ponding and improve the health of marsh vegetation. Most of the fill to be placed on the marsh plain would be excavated and dredged from within the project site. Approximately 790 cubic yards of material would be placed over an area of approximately 16,000 square feet (0.40 acres) in the shoreline band to repair and reinforce the outboard levee along the southern edge of Lower Tubbs Island adjacent to San Pablo Bay (see Exhibit D).

Public Access:

Currently, there is an approximately 2.65-mile-long multi-use, public access loop trail encircling Lower Tubbs Island on the project site. In addition, there is an approximately 2.75-mile long public access trail on the inland base of the Tolay Creek levee which connects the Lower Tubbs Island loop trail with Highway 37 (see Exhibit E). At the trailhead along Highway 37, there is a small parking lot with parking for six vehicles. This parking lot is accessed from the eastbound lanes of Highway 37. In addition, at the trailhead of the Lower Tubbs Island loop trail, there are a couple of interpretive kiosks and two benches.

The proposed project would eliminate approximately 585 linear feet of the levee supporting the Lower Tubbs Island loop trail. Removing this section of trail would change the existing loop trail and leave two spur trails. To mitigate for the loss of this public access, the USFWS proposes to allow and maintain access on approximately 2,000 feet of levee on adjacent land (Tubbs Island Setback levee). An interpretive kiosk would be installed at the east end of this trail. The trail would provide a link to a potential future Bay Trail segment, which would run atop the levee immediately south of the Vallejo Sanitation District Agricultural Fields (see Exhibit E). No new parking is proposed for the project.

Type of Public Access	Square Feet	Acres	Shoreline Length (miles)	Amount (US\$)	Yes/No
On-Site (new)	30,000	0.70	2,000		
Off-Site (new)					
Protected or Maintained					
Monetary Contribution					
View Corridor					

<i>Total</i>	30,000	0.70	2,000		
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Priority

Use: The proposed project is located in an area designated as a Wildlife Refuge priority use area on *San Francisco Bay Plan* Map No. One.

Schedule and Cost:

The USFWS proposes to begin the project by November 1, 2009 and complete all proposed activities in December 2009. Following the completion of the enhancement work, the USFWS would continue to monitor the site for five years after completing the construction in order to assess enhancement success. The USFWS estimates that the total project cost would be approximately \$478,000.00.

Staff Analysis

A. **Issues Raised:** The staff believes the application raises five primary issues: (1) whether the project is consistent with the McAteer-Petris Act and San Francisco Bay Plan (Bay Plan) policies regarding fill; (2) whether the project would provide the maximum feasible public access consistent with the project; (3) whether the project is consistent with the Commission's safety of fills policies, including sea level rise; (4) whether the project is consistent with the Commission's natural resource policies, including fish, other aquatic organisms and wildlife; and tidal marshes and tidal flats; and (5) whether the project is consistent with the Commission's dredging policies.

1. **Fill.** The project would result in 173,828 square feet (4.0 acres) of fill in Bay tidal marshes. The fill would fill in low lying areas to reduce ponding and thereby improve marsh plant health. The filled areas would remain tidal and are expected to support healthier plants within a few years. The Commission may allow fill only when it meets certain fill requirements identified in Section 66605 of the McAteer-Petris Act, which states, in part, that: (a) the public benefits from fill must clearly exceed the public detriment from the loss of water areas, and fill should be limited to water-oriented uses, such as wildlife refuges; (b) no alternative upland location exists for the fill; (3) the filled authorized should be the minimum necessary to achieve the purpose of the fill; (d) the fill should minimize harmful effects to the Bay including the water volume, circulation, and quality fish and wildlife resources, and marsh fertility; (e) the fill should be authorized when the applicant has valid title to the properties in question. Further, the Bay Plan Tidal Marshes and Tidal Flats policies state, in part, that "a minor amount of fill may be authorized to enhance or restore fish, other aquatic organisms or wildlife habitat if the Commission finds that no other method of enhancement or restoration except filling is feasible."
 - a. **Public Benefit and Water Oriented Use.** The proposed fill would be used to enhance approximately 65 acres of tidal wetlands within the San Pablo Bay National Wildlife Refuge, a water-oriented use. The project would improve habitat and water quality within the marshes, thereby, contributing to the overall health of San Francisco Bay, which benefits the public. In addition, enhancing marsh functions would improve the public's experience of walking the trails at the site by providing greater opportunities for wildlife viewing and eliminating areas that currently die back each year. The project would place fill to depressions where ponding occurs throughout the site, also resulting in decreased mosquito production.
 - b. **Alternative Upland Location.** There is no alternative upland location for the project because the purpose of the project is wetland enhancement within an

existing tidal marsh.

- c. **Minimum Amount Necessary.** The project proposes to place approximately 2,200 cubic yards of material over an area of approximately 173,828 square feet (4.0 acres) in the Bay jurisdiction. The USFWS believes that this is the minimum amount necessary to meet the goals of the project. The consistency determination states that “the configuration and nature of the enhancement activities proposed in the project area are based in large part on the existing topography and hydrology of the site, and what alterations would need to be made to improve tidal flow and water circulation. A variety of alternative, on-site configurations were assessed during project design to determine which would best meet the objectives of the proposed project. The volume and area of low elevation marsh plain that would be subject to fill is based on the site design that best meets those objectives.” A small amount of additional fill, up to approximately 790 cubic yards of solid fill, would be placed over an area of approximately 16,000 square feet (0.40 acres) along the outboard levee of Lower Tubbs Island to provide shoreline protection and protect a portion of the existing public access trail. The majority of fill would be generated from on-site activities, such as levee and berm lowering and channel excavation, and would be redistributed within the site.
- d. **Minimize Harmful Effects to the Bay.** The proposed fill would be used to enhance existing tidal marsh habitat by raising depressions within the marsh to improve circulation and drainage and reduce ponding. The consistency determination states that “the soil placement areas were carefully selected based on two criteria: (1) low elevation depressions that routinely produce shallow ponded conditions, and (2) location along pre-established equipment access routes so that additional marsh trampling by construction equipment is not needed to place the material.” The consistency determination further states “soil deposition within the project area would not result in a net loss of wetlands habitat in any focus area, and over the long term, would greatly improve habitat function.” Fill would also be placed to reinforce the outboard levee of Lower Tubbs Island, which would protect the existing tidal habitat within the island from erosion and flooding.

In addition to Section 66605 of the McAteer-Petris Act regarding effects of fill on water volume and circulation, the Bay Plan policies on water surface area and volume state that, “[w]ater circulation in the Bay should be maintained, and improved as much as possible. Any proposed fills, dikes or piers should be thoroughly evaluated to determine their effects on water circulation and then modified as necessary to improve circulation or at least to minimize any harmful effects.” The proposed project would result in better drainage and consequently increased tidal circulation throughout the project site, increasing plant health and improving habitat conditions for clapper rails, black rails, salt marsh harvest mice and other marsh-dependent species.

- e. **Valid Title.** The USFWS acquired the Lower Tubbs Island Marsh from the Nature Conservancy in 1978. The Tolay Creek marsh is owned by the State Lands Commission and is managed by the USWFS under a 66-year lease that was issued in 1980.

The Commission should determine whether the project is consistent with its law and policies regarding fill in the Bay.

2. **Maximum Feasible Amount of Public Access.** Section 66602 of the McAteer-Petris Act states that "...existing public access to the shoreline and waters of the...[Bay] is inadequate and that maximum feasible public access, consistent with a proposed project, should be provided." Further, the Bay Plan Public Access Policy 1 states: "[a] proposed fill project should increase public access to the Bay to the maximum extent feasible, in accordance with the policies for Public Access to the Bay." The Bay Plan Public Access Policy 6 states, in part: "[p]ublic access improvements provided as a condition of any approval should be consistent with the project and the physical environment...and provide for the public's safety and convenience. The improvements should be designed and built to encourage diverse Bay-related activities and movement to and along the shoreline should permit barrier free access for the physically handicapped..., include an ongoing maintenance program, and should be identified with appropriate signs." The Bay Plan Public Access Policy 8 states, in part: "[a]ccess to and along the waterfront should be provided by walkways, trails, or other appropriate means to connect the nearest public thoroughfare where convenient parking or public transportation may be available." The Bay Plan Public Access Policy 12 also states, in part: "public access should be integrated early into the planning and design of Bay habitat restoration projects to maximize public access opportunities and to avoid significant adverse effects to wildlife."

In assessing whether a proposed project, such as the USFWS's proposed project, would provide the maximum feasible public access consistent with the project, the Commission should evaluate whether the proposed public access is reasonable given the scope of the project.

Currently, the Tolay Creek unit of the Refuge has almost six miles of public access trails and provides the most significant public access in the entire North Bay. The project site can be reached by the approximately 2.75-mile-long Tolay Creek trail that runs along the inland base of the creek levee and connects the small parking lot (with six spaces) adjacent to Highway 37 with the approximately 2.65-mile-long loop trail around Lower Tubbs Island. The USFWS has stated that few people use the Lower Tubbs Island trail because it is isolated and users have to walk nearly three miles adjacent to an oat hay field before the trail brings them to tidal marshes and outstanding Bay views. More people use the upper portion of the Tolay Creek trail to access Upper Tolay Creek Lagoon for fishing. Over the last six years, the USFWS has made various improvements to the Lower Tubbs Island trail by placing rip rap and dirt along several hundred feet of the outboard levee to protect the island, constructing a double kiosk, and installing two benches, two interpretive panels, and an interactive bird identification post.

The USFWS proposes to remove approximately 565 linear feet of the Lower Tubbs Island loop trail in order to breach the levee to provide increased tidal flows into the Lower Tubbs Island marsh and to generate fill material to place on the outboard levee. The USFWS's consistency determination, submitted on April 16, 2009, states that "the Refuge's long-term goal for managing the project area is focused on enhancement of the wildlife habitat for sensitive species" and that "the Refuge is in the long term process of allowing some of the existing internal berms and levees to degrade, in part to restore habitats to their natural condition and in part to reduce

costs associated with their maintenance.” The USFWS has stated on several occasions that the levee trail surrounding Lower Tubbs Island has degraded as a result of flooding and storm activity over the last ten years.

While the USFWS contends the trail gets little use, it is the only existing public access within the Refuge (along with the Tolay Creek trail), and is one of the few access opportunities within the entire North Bay where the public has direct access to the Bay. It also provides a loop trail and affords superb views of marshlands and the open waters of San Pablo Bay. While some segments of the levee show signs of erosion, much of the levee top trail, including the segment to be removed, is in relatively good condition. Though the USFWS is concerned about its ability to maintain the levee, the trail may be usable for years to come.

Projects that propose to remove public access typically have been required to provide new public access that is of equal or greater value than the access that is lost. Loop trails and continuous trails also tend to have greater value and appeal to the public than a non-loop trail. In an effort to provide the USFWS with guidance as to possible access opportunities at Lower Tubbs Island, staff suggested a number of possible options that could offset the loss of the loop trail. These options included: (1) placing culverts instead of breaching the levee to introduce more tidal action to Lower Tubbs Island marsh; (2) constructing bridges over the two proposed breaches; (3) providing another loop trail in the vicinity; (4) providing a public access trail on top of the Tolay Creek levee instead of its current location at the inland base of the levee (this option would require reconfiguring the levee substantially and working with the land owner and tenant farmer to acquire rights for the public); (5) constructing a bicycle/pedestrian bridge across Tolay Creek to provide access from the Sears Point Restoration Project site (currently in the planning stages) to the access at Lower Tubbs Island; and (6) developing a Bay water trail access area, including camping and/or picnicking, at Lower Tubbs Island.

The first two options would allow the loop trail to remain intact. USFWS rejected the culvert option by stating that “the National Marine Fisheries Service (NMFS) strongly discourages the installation of culverts in salt marsh restoration projects as culverts can have negative impacts on marine animals and fish” because non-native predatory fish species may use the culverts as hiding places to prey on native fish species. In addition, the USFWS alleges that “the existing culverts originally installed by Ducks Unlimited are also succumbing to age and tides.” Regarding the bridge option, the USFWS has stated that the project lacks adequate funding to purchase bridges. The USFWS has not explored the remaining options other than to note that each would be difficult and costly to implement. USFWS believes the existing loop trail is located on a levee that is threatened by sea level rise and increasing storm intensity and it has decided that it is not cost effective to invest more time and money to protect the trail given “the substantial cost of maintaining this levee, which is rapidly deteriorating.”

The USFWS has recently modified its consistency determination to propose allowing public access along an approximately 2,000-foot-long trail along the Tubbs Island Setback interior levee, immediately east of the Lower Tubbs Island loop trailhead, and installing an interpretive panel. Nothing currently prohibits the public from accessing this levee though the USFWS has not designated the trail as officially open to the public. Maintenance activities would include biannual mowing (or as needed

during the growing season), monthly checks and repair of structures (interpretive panel), and *Lepidium latifolium* eradication (May through June). The trail would provide a vital link to a potential future Bay Trail segment to the east, which would originate at the Highway 37 crossing of Sonoma Creek and run atop the levee bordering the Vallejo Sanitation District Agricultural Fields and San Pablo Bay (see Exhibit E). Planning and coordination efforts are already underway between the Bay Trail staff, the County of Sonoma Parks Department and the Vallejo Sanitation District (which owns the levee) but there is no known timetable for the completion of this discussion.

The Commission should determine whether the proposed project or whether any one or some combination of the alternatives suggested by staff would provide the maximum feasible public access consistent with the project.

3. **Safety of Fills / Sea Level Rise.** The Bay Plan policies on Safety of Fills state in part that, “[t]o prevent damage from flooding, structures on fill or near the shoreline should have adequate flood protection including consideration of future relative sea level rise as determined by competent engineers.” Additionally, these policies state in part that, “[t]o minimize the potential hazard to Bay fill projects and bayside development from subsidence, all proposed development should be sufficiently high above the highest estimated tide level for the expected life of the project or sufficiently protected by levees...”

The proposed fill for this project would not be for the purpose of building structures or new development but for the enhancement of tidal wetlands. Tidal wetlands provide natural protection against coastal flooding along shorelines. The consistency determination states that “the proposed project lies within the 100-year floodplain of San Pablo Bay and is regularly inundated with water during tidal cycles... and increasing tidal exchange, restoring the natural tidal prism, and increasing the amount of native marsh vegetation would likely benefit floodplain function, which would be consistent with FEMA floodplain management requirements.”

As climate change continues, the project site may become more vulnerable to sea level rise. The consistency determination further states that the proposed project “is being conducted in anticipation of future climate change effects on weather patterns and water levels of the San Francisco Estuary and in particular, San Pablo Bay. Our actions will reduce water impoundments, improve tidal connectivity, and improve habitat conditions for estuarine-dependent species. These actions are expected to buffer current and future climate-related changes to tidal and sub-tidal environments of the Refuge.” Given that climate change and sea level rise may cause more erosion of levees in and around the project site, public access trails may become more vulnerable. The USFWS has not provided information as to how they would protect these trails, with the exception of the proposed repair and strengthening of the southern outboard levee. They have stated that certain trails may be too costly to maintain over the long term. For further discussion of this issue, see the “Maximum Feasible Public Access” section under “Issues Raised” (above).

The Commission should determine whether the proposed project is consistent with the policies on safety of fills and sea level rise.

4. **Natural Resources Policies**

- a. **Tidal Marshes and Tidal Flats.** The Bay Plan policies on tidal marshes and tidal flats state, “where and whenever possible, former tidal marshes and tidal flats that have been diked from the Bay should be restored to tidal action in order to replace lost historic wetlands or should be managed to provide important Bay habitat functions...” The policies also state, “[a]ny tidal restoration project should include clear and specific long-term and short-term biological and physical goals, and success criteria and a monitoring program to assess the sustainability of the project. Design and evaluation of the project should include an analysis of: (a) the effects of sea level rise; (b) the impact of the project on the Bay’s sediment budget; (c) localized sediment erosion and accretion; (d) the role of tidal flows; (e) potential invasive species introduction, spread and their control; (f) rates of colonization by vegetation, where applicable; (g) expected use of the site by fish, other aquatic organisms and wildlife; and (h) site characterization. If success criteria are not met, corrective measures should be taken...” The policies further state that “[b]ased on scientific ecological analysis and consultation with the relevant federal and state resource agencies, a minor amount of fill may be authorized to enhance or restore fish, other aquatic organisms or wildlife habitat...”

The proposed project would “increase tidal flows and increase the amount of shallow channel habitat, promote improved vigor of marsh vegetation, and promote some increase in shallow, open water mudflats. The increased tidal prism

resulting from enhancement activities may also widen and deepen existing deep channels to the benefit of fish and diving ducks. Improved vegetation conditions and tidal flushing within the tidal marsh would expand habitat for endangered estuarine marsh species such as the California clapper rail and the salt marsh

harvest mouse. Expansion of marsh interior open water mudflats would provide important high tide roosting and foraging environments for migratory and wintering shorebirds and waterfowl.”

The USFWS has developed a monitoring program as part of the Enhancement Plan for the project. The project would be monitored for five years after construction has been completed. The Enhancement Plan and revised monitoring information describe the specific biological and physical parameters (such as plant measurements, invasive species, hydrology, etc.) to be monitored and incorporates project performance measures (positive or negative trends) towards the project goal of improving tidal marsh conditions. The consistency determination further states that “if negative trends in the project area are detected, the Refuge will identify the physical conditions causing the trend and work to take corrective action.”

- b. **Fish, Other Aquatic Organisms and Wildlife.** The Bay Plan policies on Fish, Other Aquatic Organisms and Wildlife state: “[T]o assure the benefits of fish, other aquatic organisms and wildlife for future generations...the Bay’s tidal marshes, tidal flats, and subtidal habitat should be conserved, restored, and increased.” These policies also state that “[t]he Commission should consult with the California Department of Fish and Game and the U.S. Fish and Wildlife Service or the National Marine Fisheries Service whenever a proposed project may adversely affect an endangered or threatened plant, fish, other aquatic organism or wildlife species...(and) give appropriate consideration of (their) recommendations in order to avoid possible adverse impacts of a proposed project on fish, other aquatic organisms and wildlife habitat.” The policies further state that “[t]he Commission may permit a minor amount of fill or dredging in wildlife refuges, shown on the Plan Maps, necessary to enhance fish, other aquatic organisms and wildlife habitat or to provide public facilities for wildlife observation, interpretation, and education.”

The proposed project would enhance approximately 65 acres of tidal habitat. As stated above (in section “a” of the “Natural Resources” section under “Issues Raised”), the project would likely result in an increase in shallow channel habitat, tidal marsh, and shallow open water mudflats, which would provide increased habitat for a broad range of species.

On May 14, 2009, NOAA National Marine Fisheries Service (NMFS) issued a consultation letter, pursuant to Section 7 of the Clean Water Act, for the project. The letter made a determination that the proposed project “is not likely to adversely affect ESA-listed species or designated critical habitat” and is likely to provide “overall beneficial effects to EFH (Essential Fish Habitat).” On May 20, 2009, the U.S. Fish and Wildlife Service (USFWS) issued a Biological Opinion that states that the proposed project “is not likely to adversely affect the California clapper rail or threatened Delta smelt” and “not likely to jeopardize the continued existence of the [salt marsh harvest mouse].” Both of these documents recommended specific conservation measures to be employed during construction to avoid impacts to the marshes and Bay.

The Commission should determine whether the project is consistent with its laws and policies regarding natural resources.

5. **Dredging.** Bay Plan policies on dredging state in part, that “[d]redging and dredged material disposal should be conducted in an environmentally and economically sound manner. Dredgers should reduce disposal in the Bay and certain waterways over time...” According to Dredging Policy 2, the Commission should authorize dredging when it can find that (a) it serves a water-oriented use or other important public purpose; (b) the materials to be dredged meet the water quality requirements of the San Francisco Bay Regional Water Quality Control Board; (c) important fisheries and Bay natural resources would be protected through seasonal restrictions; (d) the project will result in the minimum dredging volume necessary; and (e) the materials would be disposed of in accordance with Policy 3.” Dredging Policy 3 states in part, that dredged materials should, if feasible, be reused or disposed outside the Bay and certain waterways. Except when reused in an approved fill project, dredged material should not be disposed in the Bay....”

As part of the proposed project, sediment would be dredged from the Commission’s Bay jurisdiction to: (1) create and enlarge tidal channels. This material would then be beneficially reused to raise within depressions and strengthen the outboard levee of Lower Tubbs Island. The proposed dredging would be for a water-oriented use, namely the enhancement of tidal wetlands within a designated wildlife refuge. In addition, the dredged material would be beneficially reused on-site and would provide habitat benefits for marsh-dependent wildlife and special status species.

The consistency determination states that “no specific investigations of the excavated materials are proposed” and that there are no known pollutants or toxic contamination sites within the project area.” The California Regional Water Quality Control Board (RWQCB) has issued a conditional Water Quality Certification (WQC), on August 18, 2009, which does not require the USFWS to perform testing of the sediment proposed for dredging and finds the proposed dredging activities consistent with the provisions of the Clean Water Act.

The Commission should determine whether the project is consistent with its laws and policies regarding dredging.

B. Review Boards

1. **Engineering Criteria Review Board.** The Commission’s Engineering Criteria Review Board (ECRB) will not review the proposed project.
2. **Design Review Board.** The Commission’s Design Review Board has not reviewed the proposed project because the USFWS only recently proposed to provide and maintain the setback levee for public access, on August 11, 2009, and the only proposed public access improvement would be an interpretive kiosk.

- C. **Environmental Review.** The California Regional Water Quality Control Board (RWQCB) issued a conditional Water Quality Certification (WQC) on August 18, 2009. As part of the WQC, acting as the lead environmental agency, the RWQCB found that the project is categorically exempt from the requirements of the California Environmental Quality Act (CEQA).

D. Relevant Portions of the McAteer-Petris Act

1. Section 66602.1
2. Section 66605

3. Section 66632

E. Relevant Portions of the San Francisco Bay Plan

1. *San Francisco Bay Plan* Policies on Fish, Other Aquatic Organisms, and Wildlife (page 15)
2. *San Francisco Bay Plan* Policies on Water Surface Area and Volume (page 20)
3. *San Francisco Bay Plan* Policies on Tidal Marshes and Tidal Flats (page 21)
4. *San Francisco Bay Plan* Policies on Subtidal Areas (page 26)
5. *San Francisco Bay Plan* Policies on Public Access (page 57)
6. *San Francisco Bay Plan* Policies on Salt Ponds (page 64)
7. *San Francisco Bay Plan* Policies on Safety of Fills (page 31)

Exhibits

- A. **Project Vicinity Map**
- B. **Project Area Map**
- C. **Project Design Overview**
- D. **Levee and Berm Material Disposal Locations**
- E. **Public Access Overview (Existing and Proposed)**