



**US Army Corps
of Engineers®**

Regulatory Division
1455 Market Street
San Francisco, CA 94103-1398

**SPECIAL
SAN FRANCISCO DISTRICT
PUBLIC NOTICE**

PROJECT: Permit Modification for Montezuma Wetlands Project

PUBLIC NOTICE NUMBER: 19405N
PROJECT MANAGER: Dominic MacCormack
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RESPONSE REQUIRED BY: October 10, 2011
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1. **INTRODUCTION:** Montezuma Wetlands, LLC applied for, and was issued, a Department of the Army Standard Permit in 2001 to conduct the Montezuma Wetlands Project in Solano County, California. That project is aimed to restore 1,880 acres of tidal and seasonal wetlands, and approximately 480 acres of upland buffer zone habitats on the 2,400-acre site. Due to slight changes in the project description, it was necessary for the US Army Corps of Engineers to consult again with the National Marine Fisheries Service and US Fish and Wildlife Service on potential impacts to federally-listed threatened and endangered species and obtain modifications to those respective biological opinions prior to modifying the previous Corps permit from 2001. This application is being processed pursuant to the provisions of Section 10 of the Rivers and Harbors Act of 1899 (33 U.S.C. Section 403) and Section 404 of the Clean Water Act (33 U.S.C. Section 1344).

2. **PROPOSED PROJECT:** As previously mentioned, this permit is proposed to be modified with regard to some of the project design elements, noncover material, new habitat for California least terns, and Phase I construction stages. The overall project purpose, scope, and project area remain unchanged from the originally-issued permit.

The Project site comprises approximately 2,400 acres at the eastern edge of Suisun Marsh, approximately 17 miles southeast of Fairfield, California (Figure 1). The site currently supports primarily ruderal grasslands with some seasonal wetland habitat. Ground elevations at the site have subsided up to 10 feet since the historical tidal marshes were diked and drained for agricultural purposes more than 100 years ago.

Restoration of wetlands at the site will be accomplished by engineered placement of approximately 17 million cubic yards of approved dredged sediment to raise the subsided site to elevations appropriate for intertidal marsh. The Project will restore approximately 1,880 acres of tidal and seasonal wetlands, and approximately 480 acres of upland buffer zone habitats at the site (see Figure 1).

Restoration efforts will occur in four spatial and temporal phases (Phases I through IV; see Figure 3). Each phase represents a specific area of the site, and the phase names indicate the order in which the phases will be restored. Each phase will be a hydrologically discrete unit with its own tidal connection and channel network. The phases with the lowest existing habitat values will be implemented first, so that temporal impacts to existing biological resources at the site will be minimized and replacement habitat restored before subsequent phases, where more wetland habitat exists, are restored.

In addition to the restoration element of the project, a sediment rehandling facility will be constructed in the water-related industrial area of the site for removing salts and water from sediments that will be reused on site for levee material or sold off-site for beneficial reuse throughout the Bay-Delta.

During later project phases or after project completion, the project site will be deeded or sold to an appropriate entity to manage the site as wetlands, most likely a California agency or non-profit entity (e.g., California Coastal Conservancy, California Department of Fish and Game).

Construction and Sediment Placement

Restoration activities in each phase will start with construction of levees that will form the sediment placement cells (see Figure 3) and the banks of constructed channels. Sediment placement cells will function as the settling basins for the dredged sediment pumped from the barges. Placement cells will be designed to handle either cover sediment only or both cover and noncover sediment; the noncover sediment (comprising no more than 20% percent of the sediment placed in each Phase) will be contained within noncover separation levees and buried by at least 3 feet of cover sediment. Sediment offloading and rehandling facilities and most of the site infrastructure (e.g. power lines and access roads) were constructed as part of Phase I.

Following construction of sediment placement cells and any required infrastructure for each phase, sediment placement will be initiated in that phase. Sediments will be hydraulically offloaded by the Liberty, a specialty vessel designed for offloading sediment from dredge barges. The hydraulic offloading process involves adding water to the sediment in the barge to create a slurry that is about 70 to 85 percent water. This slurry is then pumped through a pipeline to sediment placement cells in the restoration area. Sediment will be placed to marsh plain design elevations, plus or minus a 0.5 foot "tolerance". Sediment intended for rehandling will be pumped to the rehandling facility.

Decant water from sediment placement cells in the restoration area will flow through the return water channel back into the make-up water pond (see Figure 3) where it will be stored, monitored, and reused for sediment offloading. Water in the make-up water pond that is not reused on-site will be periodically discharged into the deep waters of Sacramento River/Suisun Bay in accordance with the project's WDRs. Water reuse allows the project to reduce discharge to a minimum; to date, the project has discharged water for a total of only 27 days since the start of operations in late 2003.

Following completion of sediment placement in each phase of the restoration area, final construction to complete some habitat elements will be conducted (e.g., grading down portions of interior levees, grading seasonal wetlands, excavating intertidal ponds). The perimeter levee will be breached in one location per phase to restore tidal action to the phase.

There are five (5) significant changes to the original permit that necessitated the amended biological opinions are below:

1. Staged Restoration of Tidal Action to Completed Areas of Phase I:

Slower than expected delivery of sediment from Corps dredging contracts will not allow all of Phase I sediment cells to be filled to target elevations and restored to tidal action within the 3-5 year timeframe originally envisioned. Since about 150 acres of Phase I sediment cells have been filled to elevations at or near final design elevations, and it could be years before sufficient sediment is available to complete the entire Phase, Montezuma proposes to return tides to finished portions of the site before all of Phase I is completed. Design and construction flexibility within Phase I will now allow for the tides to be restored in two to four stages, depending on the rate of sediment delivery and Corps contracting decisions.

2. Creation of California Least Tern habitat:

The endangered California Least Tern (*Sterna antillarum browni*) was first observed at the Montezuma site in 2005; nesting has occurred at the site each year from 2006 onward. Although the terns' choice of nesting areas within the site are not sustainable once tides are returned to the site (because those nests are currently located in an area of Phase I designed and constructed as low tidal marsh), nesting successes suggest that another area of the site could provide better long-term tern habitat. After discussions with responsible agencies, the project Technical Review Team, and tern experts, Montezuma proposes to construct nesting habitat consisting of two peninsulas, one surrounded

by high marsh and one surrounded by seasonal wetlands, at the upper edge of the tidal marsh in Phase I. Vegetation management at that site of created habitat will continue for at least ten years.

3. Modification of High Marsh Design for the Salt Marsh Harvest Mouse (*Reithrodontomys raviventris*):

Montezuma proposes to modify the high marsh design in two ways: 1) the target elevation will be raised 1.2 feet to reflect updated tidal reckoning and to ensure more saline conditions for promoting halophytic vegetation; and 2) the original Phase I managed diked area that was designed to grow nearly 100% pickleweed will be changed to a full tidal high marsh in order to promote diverse halophytic vegetation and eliminate a highly engineered marsh element that would rely on permanent active management and maintenance.

4. Expansion of Noncover Capacity in Phase I:

Montezuma has proposed raising the Phase I noncover limit to 1,000,000 cubic yards of material (20% of the Phase I capacity), an increase from the previously-authorized 400,000 cubic yards which was limited due to County permitting processes. The County authorized this change through amendment of its permit in October 2010.

5. Pumping Water Directly from the Sacramento River/Suisun Bay using an Approved Fish Screen:

Montezuma proposes to use the Liberty offloader, now equipped with agency-approved fish screens that were used successfully at the Hamilton Restoration Project, to pump water directly from the Sacramento River/Suisun Bay. The Liberty is moored at the project's southern shoreline. Its purpose is to offload dredged sediments from incoming barges and convey the sediment to the sediment placement cells. The Liberty adds water to sediment in the barges, creating a slurry of sediment and water which then enables dredged material to be moved through a pipeline to the cells. The Liberty is able to pump

water at a rate of approximately 18,000 gallons per minute. The water will be pumped through fish screens installed directly on the ship's hull. The fish screens will achieve an approach velocity of no more than 0.2 feet per second, per FWS/CDFG requirements for protection of delta smelt. Additionally, the project proposes to construct a new 3,000 gallon-per-minute pump with an approved fish screen on the perimeter levee in the offloading area. This intake would pump water from the River/Bay to the existing makeup water pond. The fish screen on this pump will also meet FWS/CDFG requirements for protection of delta smelt. Direct pumping from the River/Bay is a change from the existing methods which use on-site shallow groundwater. Historically, Montezuma has obtained water from on-site shallow groundwater wells that serve to filter adjacent river/bay water through sands located near the Phase IV perimeter levee. However, due to slower than expected deliveries of sediment to the project, the groundwater wells have not been able to keep up with the year-after-year demands to keep the sediment cells ponded with water during the dry season. The Liberty intake and levee-mounted pump will be primarily operated during the dry season to supplement the existing groundwater system, and pumping would take place between August 1 and December 15 to avoid larval delta smelt entrainment. The levee-mounted pump would not be operated during days when the Liberty off-loader intake is in operation to avoid excessive pumping from the River. Total water use will fall well within the amount evaluated in the project EIR/S.

3. COMPLIANCE WITH VARIOUS FEDERAL LAWS:

National Environmental Policy Act of 1969 (NEPA):

The Corps will assess the environmental impacts of the proposed action in accordance with the requirements of the National Environmental Policy Act of 1969 (42 U.S.C. Section 4371 et. seq.), the Council on Environmental Quality's Regulations (40 C.F.R. Parts 1500-1508), and the Corps' Regulations (33 C.F.R. Part 230 and Part 325, Appendix B). Unless otherwise stated, the Environmental Assessment will describe

only the impacts (direct, indirect, and cumulative) resulting from activities within the Corps' jurisdiction. The documents used in the preparation of the Environmental Assessment will be on file with the U.S. Army Corps of Engineers, San Francisco District, Regulatory Division, 1455 Market Street, San Francisco, California 94103-1398.

version of this public notice may be viewed under the Current Public Notices tab on the USACE website: <http://www.spn.usace.army.mil/regulatory/>.

Endangered Species Act of 1973 (ESA): Section 7 of the Endangered Species Act requires formal consultation with the U.S. Fish and Wildlife Service (FWS) and/or the National Marine Fisheries Service (NMFS) if a Corps permitted project may adversely affect any Federally listed threatened or endangered species or its designated critical habitat. The proposed project received an amended Biological Opinion on November 29, 2010 (File No. 81420-2008-F-1861) from the U.S. Fish and Wildlife Service, and an amended Biological Opinion from the National Marine Fisheries Service (File No. 2008/02876) on April 22, 2011 that also addresses impacts to Essential Fish Habitat (EFH) pursuant to the Magnuson-Stevens Fishery Conservation and Management Act.

Clean Water Act of 1972 (CWA):

Water Quality: State water quality certification, pursuant to Section 401 of the Clean Water Act of 1972, as amended (33 U.S.C. Section 1341) will be amended to include these changes. The current Waste Discharge Requirements were issued by the State under Order No. 00-061. Those parties concerned with any water quality issue that may be associated with this project should write to the Executive Officer, California Regional Water Quality Control Board, San Francisco Bay Region, 1515 Clay Street, Suite 1400, Oakland, California 94612 by the close of the comment period of this Public Notice.

6. **CONSIDERATION OF COMMENTS:** During the specified comment period, interested parties may submit written comments to Dominic MacCormack, San Francisco District, Regulatory Division, 1455 Market Street, 16th Floor, San Francisco, California 94103-1398. Mr. MacCormack can also be reached via telephone at 415-298-8221 and by email at dominic.maccormack@usace.army.mil. An electronic