



SACRAMENTO - SAN JOAQUIN

DELTA CONSERVANCY

A California State Agency



Proposition 1 Grant Program

2016-17 Staff Recommendation

I. Project Overview

Project Title	Dutch Slough Tidal Marsh Restoration Project Revegetation (Phase 2 of full project)		
Applicant	Reclamation District 2137		
Project Number	Prop 1-1602		
Category	2	Funding Request	\$2,900,000.00
County	Contra Costa	Total Project Cost	\$4,295,400.00
Score	88.7	Funding Recommended	\$2,900,000.00
Staff Recommendation	<p>Approve the Responsible Agency CEQA findings and complete necessary actions as Responsible Agency under CEQA.</p> <p>Approve requested funds conditional upon submittal and approval of:</p> <p>(1) updated budget; and</p> <p>(2) Water Conservation and Efficiency Program for RD 2137.</p>		

II. Staff Recommendations

Delta Conservancy staff recommends that the Board approve funding for the Dutch Slough Tidal Marsh Restoration Project - Revegetation (Phase 2) (#Prop 1-1602) proposed by Reclamation District 2137 (RD 2137) conditional upon the submittal and approval, by July 2017, of:

- (1) an updated budget and financial information as noted in the budget section, below; and
- (2) a Water Conservation and Efficiency Program for RD 2137.

Delta Conservancy staff recommends that the Board consider the Final Supplemental Environmental Impact Report (SEIR, 2014) prepared by the Department of Water Resources (DWR) as the lead agency in accordance with the California Environmental Quality Act (CEQA), make the CEQA responsible agency findings, including a finding of overriding consideration, adopt relevant portions of the Mitigation Monitoring and Reporting Plan, and direct staff to file the Notice of Determination with the State Clearinghouse and Contra Costa County Clerk. All materials noted above are included with this report.

Staff has prepared the text below based on staff's best understanding of the information provided in the application. The Conservancy has received comments on the proposal from the Professional Review Panel, the Delta Stewardship Council, the Office of the Delta Watermaster, and any local governments and districts, water agencies, and tribes that responded to the local notification process. Prior to entering into a grant agreement, staff will work with the applicant to further refine the project's scope of work and to address any remaining comments.

III. Project Overview

Project Description: The overall Dutch Slough Tidal Marsh Restoration Project will benefit native species by re-establishing natural ecological processes and habitats, it will contribute to scientific understanding

of ecological restoration, and it will provide shoreline access on two parcels in Contra Costa County. Restoration of the Emerson and Gilbert parcels will create 400 acres of tidal marsh, 50 of acres riparian woodland, 18 acres of native grassland, and 110 acres of subtidal open water (578 acres total restored); and enhance 70 acres of managed marsh. Implementation of the overall Dutch Slough Tidal Restoration project will occur in phases. If awarded, funds from this grant will be applied toward Phase 2, Revegetation, which is a critical component for the project to attain its full habitat benefits.

- Phase 1, Construction. Grading will occur in 2017 and 2018. Levee breaching will occur after Phase 2 Revegetation reaches a satisfactory level of tule percent cover (late 2019 or in 2020). Construction is being funded by multiple other state and federal agencies.
- Phase 2, Revegetation. After grading is complete (late 2018), habitats will be planted with native plants according to a detailed planting plan. The marsh plain will be vegetated with tule plugs from an on-site nursery. Riparian and grassland habitats will be planted with nursery stock, cuttings, and seeds. The plants will be maintained on a regular basis to assure that they are getting enough water and nutrients and to control weeds and pests. Plants will also be monitored to measure progress toward success criteria. Maintenance will occur weekly to monthly until breaching, and possibly longer, if deemed necessary. This phase will utilize funds from this Delta Conservancy grant, if approved.
- Phase 3, Monitoring. Monitoring will occur during and after construction. Monitoring includes reporting to the Project Manager as well as to permitting agencies, and will be funded primarily by DWR, except for the Revegetation monitoring. This phase will include the Adaptive Management monitoring, for which DWR is currently seeking funding.

This project is a category 2 project that will provide watershed benefits that align with Proposition 1 and State priorities, and that will be maintained for at least 15 years.

The staff from the applicant, RD2137, Department of Water Resources (DWR), and their consultants MBK Engineers and Environmental Science Associates (ESA) have been involved in the Dutch Slough Project for more than five years, have successfully completed the majority of the necessary planning and environmental compliance tasks, and have secured multiple sources of funding. Also, they have extensive experience on other ecosystem restoration projects in San Francisco Bay-Delta funded through State and federal grant programs.

Location & Site Description: The project site is in Contra Costa County in the City of Oakley. DWR owns the site in fee title, except for a portion of the Marsh Creek levee on the Emerson parcel. DWR is currently working with the Contra Costa Water Conservation and Flood Control District to purchase this levee segment. The land use is currently armored or vegetated levees and grazing/pasture land. A location map and the restoration plan are included below (Attachments 1 and 2).

Consistency with State Priorities

The benefits of the Dutch Slough Tidal Marsh Project Revegetation (Phase 2) will help implement the priorities of the State. The project's consistency with State plans is listed below. The list below was provided by the applicant and has been reviewed and edited by staff to include consistencies that agree with the intent of the project.

Prop. 1

- Section 79710(b): To the extent feasible, in implementing subdivision (k) of Section 79731, the Sacramento-San Joaquin Delta Conservancy shall seek to achieve wildlife conservation objectives through projects on public lands or voluntary projects on private lands.

- Section 79732(12): Assist in the recovery of endangered, threatened, or migratory species by improving watershed health, instream flows, fish passage, coastal or inland wetland restoration, or other means, such as natural community conservation plan and habitat conservation plan implementation.

California Water Action Plan

- Action 3: Achieve the Co-equal Goals for the Delta.

Delta Conservancy's enabling legislation

- Section 32300(i)(1): Protect and enhance habitat and habitat restoration.

Delta Conservancy's Strategic Plan

- Goal 3: Lead efforts in protecting, enhancing, and restoring the Delta ecosystem in coordination with other governmental and non-governmental entities and citizens in the Delta.
 - Objective 3.2: Lead Delta ecosystem restoration activities consistent with Conservancy authorities, the Delta Plan and other regional plans and guidance, through a voluntary Delta Restoration Network, and based on adaptive management.
 - Strategy 3.2.1: Protect, enhance and restore large areas of interconnected intertidal marsh, floodplain, transitional and upland habitats.

Delta Plan

- ER P2: Restore Habitats at Appropriate Elevations.
- ER R2: Prioritize and Implement Projects that Restore Delta Habitat.

Budget: The overall cost for the Phase 2, Revegetation project is \$4,295,400, of which \$2,900,000 is being requested from the Delta Conservancy. Additional funds are being contributed by the State Coastal Conservancy (SCC) from two federal grants (USEPA, \$371,400 and USFWS, \$100,000) and a state grant (\$230,000) it received. DWR will provide \$444,000 as cash match and \$250,000 as in-kind match. DWR will also fund the wildlife surveys within the restored habitats.

Staff recommends approval of the project that is conditional upon submittal and approval of:

- A revised Cost Allocation Plan that clarifies employee service compensation allocation across multiple programs.
- A revised budget tables that clarify if and how funds for California Conservation Corps will be allocated.
- Properly-formatted subcontractor budget tables.

Readiness: DWR as the lead agency has completed and certified a [Final Environmental Impact Report](#) (2010, EIR) and a [Final Supplemental EIR](#) (2014) for the project. DWR has also approved the necessary CEQA findings (Exhibit 1), a Statement of Overriding Considerations (Exhibit 2), and a Mitigation Monitoring and Reporting Program (Exhibit 3) for the project. The Delta Conservancy, as a responsible agency, has reviewed these documents and findings and staff recommends that the Board approve the responsible agency findings (attached), concluding that all necessary mitigation measures have been included in the project to eliminate any significant effects on the environment and that any remaining unavoidable impacts are acceptable in light of the project's benefits. Specifically the project, in creating habitat for native fish species, will also create habitat that may be utilized by non-native fish species.

This impact is considered potentially significant and there are no mitigation measures available to avoid it. This impact, however, is considered acceptable because of the project's myriad of benefits that will:

1. Restore a diversity of habitats historically present in the Delta including freshwater emergent marsh, tidal channels, riparian woodland, and native grassland.
2. Provide habitat for native species, including listed and sensitive species.
3. Contribute to the recovery of endangered and other at-risk species and native biotic communities.
4. Support the Delta food web by producing and exporting nutrients.
5. Contribute to scientific understanding of restoration processes and increase the success of other Delta restoration projects.

The overall Dutch Slough Tidal Restoration project has been in the planning stages since the property was acquired in 2003. Plans are complete or nearly complete for grading and planting, and a tule nursery is established. Compliance with environmental requirements including CEQA and all permits is complete except for California Department of Fish and Wildlife Incidental Take Permit (ITP; see below). DWR submitted a certification of consistency with the Delta Plan to the Delta Stewardship Council's website on December 15, 2014 and no appeals were received during the 30-day appeal period; the project is certified to be consistent with the Delta Plan. The revegetation phase of the project will begin in the fall of 2018, after the first two parcels are graded and the site is ready for planting. Potential delays in the ITP and the purchase of the levee may cause delays in the projected start date for the revegetation phase. However, the project proponents are aware of the issues and have been working diligently to obtain these. David Okita, EcoRestore Lead for Natural Resources Agency, is facilitating efforts to obtain the ITP.

Long Term Management & Maintenance: DWR has owned the project site since 2003 and is committed to the ongoing maintenance of the project benefits for a minimum of 15 years. DWR has secured on-going State Water Project funding for long-term management of the entire project site, with an annual budget of \$200,000. Work will be performed by DWR staff or a qualified contractor. The primary management action will be regular site inspections to assess the site conditions, such as levee maintenance, unauthorized human impacts, plant health, and natural damage from weather or tides, and to correct any problems. If funding is approved, the applicant will be required to enter into a landowner access agreement as a condition of the Delta Conservancy's grant agreement.

IV. Scientific Merit

A project's scientific merit is based upon its use of best available science, adaptive management approach, performance measures, and monitoring and assessment plan.

DWR and its consultants established a Project Management Team that developed a Conceptual Plan and Feasibility Report, an Adaptive Management Plan, and a Draft EIR. The team used best available science to design project features, including the planting plan that utilized the San Francisco Estuarine Institute's [Delta Landscapes Project](#) and tidal-elevation/plant species relationships collected at a nearby reference site. Based on an average accretion rate for Delta marshes, the project marsh is expected to persist through at least 2100. In addition, the project design includes levee alignment with adequate setback on the inboard side to allow future levee raising to keep pace with sea level rise for at least the next 50 years.

DWR, in coordination with a technical advisory team, completed an updated Adaptive Management Plan for the overall project in 2016. The plan incorporated the tidal marsh and riparian vegetation conceptual models from the Sacramento-San Joaquin Delta Regional Ecosystem Restoration Implementation Plan. If

plant health monitoring reveals localized areas or individual species with relatively high mortality, soil amendments, replacements, or a change in plant palette will be proposed.

The project's performance measures, excerpted below, indicate how the project will meet its stated objectives. If the project is approved, staff will work with the applicant to focus performance measures more specifically on the Phase 2, Revegetation portion during the negotiation of the grant agreement.

Outputs:

- Tule is established on approximately 400 acres of marsh plain, as per planting plan.
- Vegetation is established on approximately 50 acres of riparian woodland habitat areas, as per planting plan.
- Vegetation is established on upland and transitional habitats (including approximately 18 acres of native grassland), as per planting plan.

Outcomes:

- Habitat for fish and wildlife dependent on emergent tidal marsh has increased.
- Bird and mammal diversity and use of the restored tidal marsh has increased from 2018 (planting) to 2021 (end of grant period).
- Native bird use of the high marsh/upland transition and grassland habitats has increased for some portion of their life history by 2020.
- Native reptile (snakes, pond turtles) use of the high marsh/upland transition habitat has increased for some portion of their life history by 2020.

Monitoring and assessment for Phase 2 of the Dutch Slough Tidal Restoration Project will be conducted using standard methods as described in protocols published by the Wetlands Regional Monitoring Program (WRAMP). Specific metrics and the methods include annual plant survival and percent cover (by species and overall natives), visual assessment of health during maintenance visits, and height of riparian plantings. Monitoring and assessment plans may be revised as a condition of the grant agreement.

V. Local Support

The Project team has been coordinating actively with all affected local agencies to discuss issues of mutual interest. The proposal includes five letters of support from local municipalities and districts, and a County supervisor. A county resolution was not included.

Attachment 1: Project Location Map

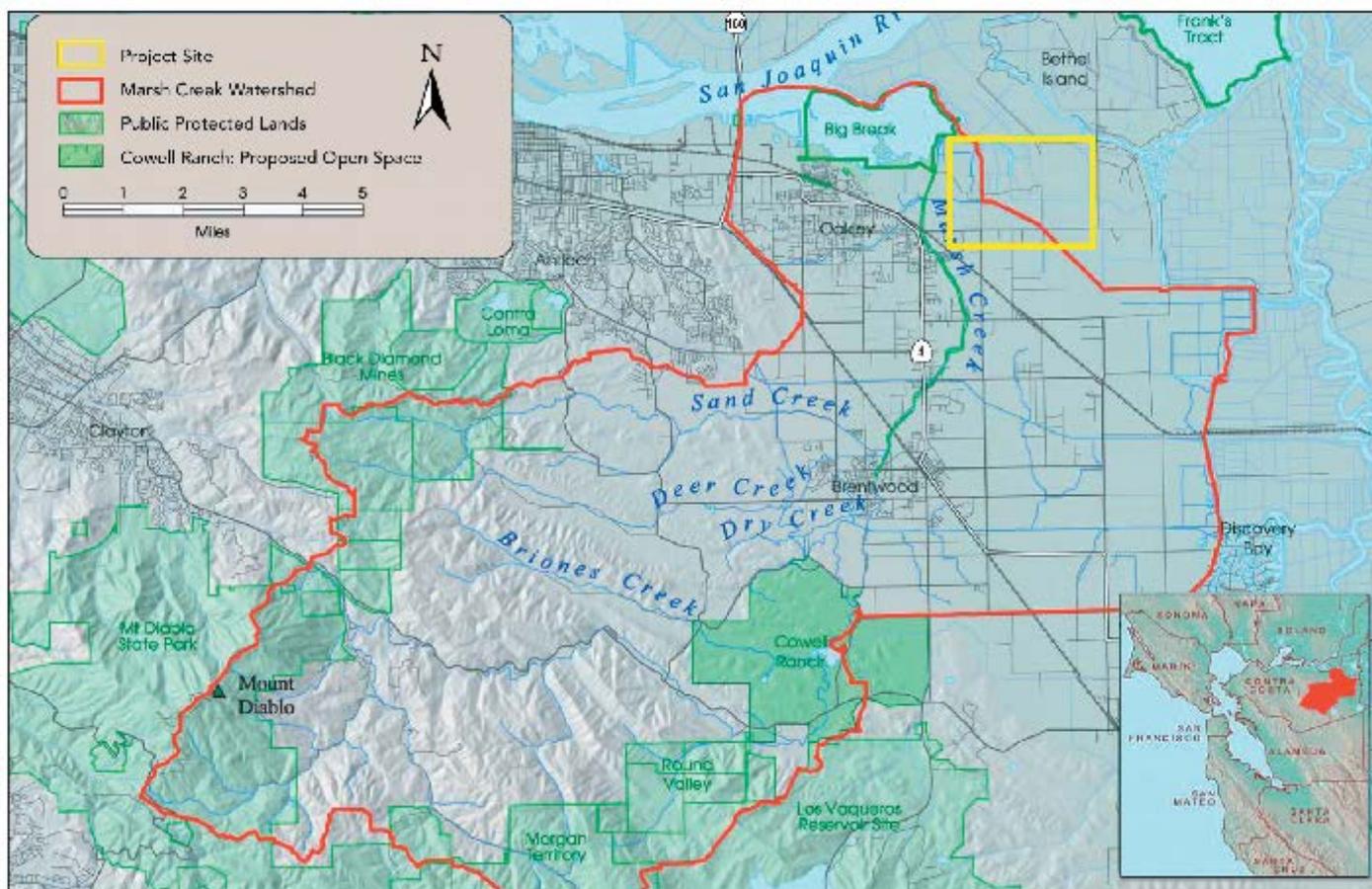


Figure 2-1
Regional Location

Sources: USGS, TIGER, EBRPD, GreenInfo Network

Attachment 2: Restoration Plan

