COASTAL CONSERVANCY

Staff Recommendation
December 3, 2015

ELKHORN SLOUGH TIDAL MARSH RESTORATION

Project No. 12-014-02
Project Manager: Rachel Couch

RECOMMENDED ACTION: Authorization to disburse up to $1,000,000 of grant funds from the U.S. Fish and Wildlife Service to the Elkhorn Slough Foundation for restoration of tidal wetlands and connected uplands in Elkhorn Slough, Monterey County.

LOCATION: Elkhorn Slough, Monterey County

PROGRAM CATEGORY: Resource Enhancement

EXHIBITS

Exhibit 1: Project Location and Site Map

Exhibit 2: Figures and Photos

Exhibit 3: Project Letters

Exhibit 4: Initial Study/Mitigated Negative Declaration

Exhibit 5: Mitigation and Monitoring Reporting Program

RESOLUTION AND FINDINGS:

Staff recommends that the State Coastal Conservancy adopt the following resolution pursuant to Sections 31251-31270 of the Public Resources Code:

"The State Coastal Conservancy hereby authorizes disbursement of up to one million dollars ($1,000,000) in grant funds awarded to the Conservancy by the U.S. Fish and Wildlife Service under its National Coastal Wetlands Conservation Grant Program, to the Elkhorn Slough Foundation ("ESF") to prepare final engineering designs and undertake restoration of tidal wetlands and connected uplands in Elkhorn Slough, as shown on Exhibit 1 to the accompanying staff recommendation. This authorization is subject to the following condition:

1. Prior to the disbursement of funds, ESF shall submit for review and approval of the Executive Officer of the Conservancy:

   a. A work program, budget, schedule, and list of contractors to be retained for the project.

b. Evidence that all necessary permits and approvals have been obtained.

c. A signing plan for the project acknowledging Conservancy funding."

Staff further recommends that the Conservancy adopt the following findings:

"Based on the accompanying staff report and attached exhibits, the State Coastal Conservancy hereby finds that:

1. The proposed project is consistent with the purposes and objectives set forth in Chapter 6 of Division 21 the Public Resources Code (Section 31251-31270) regarding enhancement of coastal resources.
2. The proposed project is consistent with the current Conservancy Project Selection Criteria and Guidelines.
3. Elkhorn Slough Foundation is a nonprofit organization existing under section 501(c)(3) of the U.S. Internal Revenue Code, and whose purposes are consistent with Division 21 of the Public Resources Code.
4. As a responsible agency, the Conservancy independently reviewed and considered the California Department of Fish and Wildlife's "Initial Study/Mitigated Negative Declaration for the Elkhorn Slough Tidal Restoration Project," adopted on August 27, 2015, and finds that based on the record as a whole the proposed project, as mitigated, will not have a significant adverse effect on the environment."

PROJECT SUMMARY:

Staff recommends that the Conservancy provide up to $1,000,000 in grant funds awarded to the Conservancy by the U.S. Fish and Wildlife Service ("USFWS") from the National Coastal Wetland Conservation Grant Program ("USFWS grant") to the Elkhorn Slough Foundation ("ESF") to prepare final engineering designs and undertake restoration of a tidal marsh ecosystem (including connected uplands) located in Elkhorn Slough, Monterey County (Exhibit 1). ESF, in partnership with the California Department of Fish and Wildlife ("CDFW") and the Elkhorn Slough National Estuarine Research Reserve ("ESNERR"), proposes to restore at least 61 acres of tidal wetland habitat at Minhoto-Hester marsh, in the southern area of Elkhorn Slough, through placement of sediment to raise subsided land to the elevation necessary to enable formation of tidal marsh. The project includes monitoring the restored tidal wetlands. Between the land to be restored to tidal marsh and existing farmland is approximately 35 acres of former agricultural land. ESF's goal is to restore the entire 35 acres to native grassland habitat; the restored habitat will continue to serve as a buffer between the farmland and restored tidal marsh. As part of this project, ESF will restore 5 acres of that land to grassland habitat and, as a temporary measure, plant perennial forbes on the remaining 30 acres. At a future time, ESF will convert the 30 acres to native grassland and restore an additional 112 acres in Elkhorn Slough to tidal marsh.

The Elkhorn Slough estuary, containing California's second largest tract of salt marsh, is currently facing unprecedented rates of tidal wetland loss and degradation. Fifty percent of the tidal salt marsh in Elkhorn Slough has been lost in the past 150 years. This habitat loss is a result

of diking and draining, increased tidal flooding which "drowns" vegetation, and bank erosion which causes the marsh to collapse into the channel. It is predicted that the dramatic rates of tidal wetland loss and degradation in Elkhorn Slough will continue in the near future if no management actions are taken.

The proposed project is in an area that was previously diked and drained for agricultural use and consequently subsided by approximately two feet. As a result, the project area is too low to sustain healthy tidal marsh and too high to support healthy mudflats.

Restoring this area of Elkhorn Slough to tidal marsh will result in several ecosystem-wide benefits including: reduced tidal erosion; increased sea-level rise resilience; improved water quality; increased carbon sequestration; and improved ecosystem function. Reduction in tidal erosion will be accomplished through filling deep areas left from past erosion and subsidence, which compete with tidal marsh for sediment suspended in the water column. Setting the marsh relatively higher in the tidal frame will likely increase marsh resiliency to erosion and rising sea levels. Increasing the extent of tidal marsh in Elkhorn Slough will increase the capacity of the marshes to filter excess nutrients and pollutants from the water column while sequestering additional carbon in the new marsh roots. The restored habitat will help restore ecosystem functions and will benefit eight federally- or state-listed special status species including Brown pelican, Ridgway's rail, Southern sea otter, California red-legged frog, and Tidewater goby, California Least tern, Burrowing owl, American White Pelican, and Northern Harrier.

The proposed project entails completing final engineering plans for and restoration of approximately 66 acres of habitat consisting of 61 acres of tidal wetlands and 5 acres of upland ecotone and native grassland habitat. The project also includes planting of perennial forbes on 30 acres of adjacent upland as a temporary measure. This area will be returned to native dominated grassland in a later phase of the project as funding and seed source becomes available. The 35 acres of upland (5 restored and 30 planted with forbes) is located between the farmland and the estuary; this area will intercept stormwater runoff, provide transitional habitat, and provide a space for marsh migration with sea-level rise.

The restoration area is shown in greater detail in Exhibit 2 and includes subareas M1, M2, M3, H1, and the adjacent buffer area. The project requires approximately 140,000 CY of fill to raise the marsh plain an average height of 2.4 feet. The revegetation process includes reducing the weed seed bank, decompacting the soil, and potentially adding an organic matter amendment.

ESF is currently coordinating with the Monterey and Santa Cruz County flood management agencies for potential sources of sediment for the project. Through the management activities, both of these agencies generate sediment that could potentially be used in the project, although other potential opportunities will also be explored. To date, 50,000 CY of sediment have been acquired through Santa Cruz County's Pajaro Bench Excavation Project and is stockpiled on an upland portion of the site.

The proposed project will increase the extent of tidal marsh in Elkhorn Slough for the first time in 60 years and will demonstrate an innovative approach that, when fully implemented in all construction phases, will result in an 8-10 percent increase in tidal marsh in the estuary. If extended to other parts of the estuary, this approach could increase the extent of marsh by 50 percent over existing acreage, approaching the historic extent of tidal salt marsh in Elkhorn Slough. Because sediment addition wetland restoration projects are still relatively rare in

California (two projects have occurred in San Francisco Bay and one is underway in Southern California), this project is considered a pilot project that can inform strategic planning for this system as well as other wetland ecosystems in California, especially given existing need at Elkhorn Slough as well as projections of future impacts from sea level rise.

The Elkhorn Slough National Estuarine Research Reserve is an educational facility that reaches 40,000 people each year. The lessons learned through this project will increase public education about the need for collaboration to solve complex environmental issues, as well as on the ecological benefits of wetland restoration.

The proposed project will be led by ESF in partnership with ESNERR, a partnership that is now 30 years old. ESF is a community non-profit and, working with the Conservancy, serves as the fiscal agent for receiving and administering federal grant funding from the National Oceanic and Atmospheric Administration ("NOAA") for the support of ESNERR staff. ESNERR, a member of the national network of estuarine research reserves, is a partnership between NOAA and CDFW. Successful restoration projects have resulted from this partnership including restoration of 24 acres of wetlands at Azevedo Ranch and installation of the Parsons Slough Sill to reduce tidal scour and sediment loss in the slough.

Site Description:

Elkhorn Slough, an estuary extending inland for seven miles from the midpoint of Monterey Bay in Central California, provides extraordinary biological diversity and recreational opportunities. The estuary contains many distinctive habitat types including subtidal channels, tidal creeks, mudflats, salt marshes, and tidal brackish marshes. These habitats provide a rich ecosystem essential for over 340 bird species, 550 marine invertebrate, and 102 fish species. Elkhorn Slough is an important nursery for commercial and recreational fish and a premier migratory stopover for birds. Estuaries like Elkhorn Slough are among the most threatened ecosystems in California, and as a result, a disproportionate number of rare, threatened, and endangered species reside in these areas. In the Elkhorn Slough watershed, two dozen species are included in these categories. The estuary also provides many beneficial human uses such as recreational boating, hiking, and bird watching. Moreover, the coastal wetlands minimize shoreline erosion and filter polluted waters.

The Elkhorn Slough estuary hosts one of the largest extents of tidal marshes on the 600-mile stretch of coast between San Francisco and Mexico, supporting remarkable biological diversity and serving as an important breeding area for many marine species including sharks, rays and commercially harvested flatfish. Elkhorn Slough has been recognized as a Globally Important Bird Area by the National Audubon Society and a Western Hemisphere Shorebird Reserve Network by the Manomet Center for Conservation Sciences. Portions of the slough are designated a State Ecological Reserve and Wildlife Management Area and a Marine Protected Area.

The project area, known as the Minhoto-Hester marsh, is located entirely within the Elkhorn Slough Reserve, which is owned by CDFW. The project site was historically a rich coastal ecosystem, with grassland transitioning to extensive salt marshes drained by narrow, meandering tidal creeks. By the late 1930s and 40s all of the salt marsh in the project area had been diked and drained for agricultural use, leading to sediment compaction and land subsidence. Over time the dikes began to fail, reintroducing tidal waters to the reclaimed wetlands. As a result of

subsidence, the area converted to a high elevation intertidal mudflat instead of converting back to salt marsh.

Surrounding the project area are agricultural lands, a dairy operation, and some light industrial activities. In the near vicinity is a natural gas-burning power plant and the Moss Landing Harbor. Human alterations to the landscape have significantly decreased the abundance of native grassland species in the watershed. Grasslands adjacent to the project area were converted to agriculture, where crops historically extended to the edge of the Slough and agricultural runoff drained directly into its wetlands and surface waters. After the land was acquired and added to ESNERR, the footprint of the existing agricultural fields was reduced from 140 to 105 acres, to decrease direct agricultural runoff, and the 35-acre buffer was planted in non-native annual grasses for purposes of erosion control.

Southern sea otters, a federally threatened species, have recently moved into the project area and new data suggests that the salt marsh in Elkhorn Slough may be an important refuge and foraging habitat for mother and pup otters. The greatest density of mother and pups in their entire range is found in Elkhorn Slough. The loss of additional marsh may impact otter populations struggling to recover. Increasing the salt marsh in the slough may aid in recovery of this iconic species.

Project History:

The project is the outcome of an ecosystem based management initiative that began in 2004. The Elkhorn Slough Tidal Wetland Project ("TWP") has engaged over 100 scientists, agency staff, and elected officials in planning and implementing activities for the restoration of the physical processes that support the long-term vitality of the slough's estuarine habitats. Conservancy staff has participated on the Strategic Planning Team for the TWP.

In 2008, the Conservancy secured a $200,000 grant from the U.S. Environmental Protection Agency and added $100,000 of its own funds for planning the Parsons Slough Wetland Restoration Project, which included investigating sediment addition as a method to restore tidal marsh in the slough. This information helped lead to the current project proposal. In 2012, the Conservancy provided $600,000 in funds for the planning phase of this project, which was the highest priority project identified in the TWP Strategic Plan in 2007. The planning project included preparation of 30% designs, environmental analysis and permit application documents.

PROJECT FINANCING

Coastal Conservancy (USFWS grant)	$1,000,000
Department of Water Resources	$443,877
Wildlife Conservation Board	$980,000
CDFW	$2,200,000
Total Project Costs	**$4,623,877**

In 2014, the Conservancy was awarded a $1 million grant from the USFWS National Coastal Wetland Conservation grant program for restoration of tidal marsh and adjacent uplands at the

project site. USFWS has agreed that $60,000 of the grant may be used for pre-implementation activities including preparation of final engineering plans.

In-kind contributions to the project will be provided by ESF in the amount of $50,000, CDFW in the amount of $10,500, and Santa Cruz Public Works Department in the amount of $130,000.

CONSISTENCY WITH CONSERVANCY'S ENABLING LEGISLATION:

Conservancy funding of the proposed project is consistent with Chapter 6 (Sections 31251-31270) of the Conservancy's enabling legislation, Division 21 of the Public Resources Code, regarding enhancement of coastal resources. Pursuant to Section 31251, the Conservancy may award grants to nonprofit organizations for the purpose of enhancement of coastal resources that, because of human-induced events, or incompatible land uses, have suffered loss of natural and scenic values. Such grants must be used for assembly of parcels of land, relocation of improvements or for other corrective measures that will enhance the natural and scenic character of the area. The proposed project consists of corrective measures, i.e., restoration, that are necessary to enhance the natural and scenic character of the Elkhorn Slough complex, which has been significantly degraded by historical diking and farming of the property.

Consistent with Section 31252, Elkhorn Slough has been identified in the Monterey County Local Coastal Program as requiring public action to resolve existing resource protection problems. Specifically, Section 2.3.4.2 of the North Monterey County Local Coastal Program calls for all appropriate agencies to participate in the development and financing of a comprehensive wetland management plan for Elkhorn Slough, and for an agency to accept management responsibility for implementing the plan. CDFW, in partnership with ESF and NOAA have taken responsibility in implementing actions to manage the wetlands of Elkhorn Slough.

Section 31253 states that the Conservancy may provide up to the total cost of a coastal resource enhancement project. Consistent with Section 31253, the following factors were considered in determining the amount of Conservancy funding for this project: the total amount of funding available for coastal resource enhancement projects, the fiscal resources of the applicant, the urgency of the project, and the Conservancy's project selection criteria, as described in detail below, under the heading "Consistency With Conservancy's Project Selection Criteria & Guidelines."

CONSISTENCY WITH CONSERVANCY'S 2013 STRATEGIC PLAN GOAL(S) & OBJECTIVE(S), AS REVISED JUNE 25, 2015:

Consistent with **Goal 5, Objective B** of the Conservancy's 2013-2018 Strategic Plan, the proposed project will restore and enhance 66 acres of coastal habitats, including coastal wetlands and intertidal areas.

Consistent with **Goal 5**, **Objective G**, the project will improve water quality to benefit coastaland ocean resources.

Consistent with **Goal 5**, **Objective H**, the project will support the recovery of the southern sea otter.

Consistent with **Goal 7**, **Objective D**, the project is an adaptation pilot project that will experiment with an innovative technique of sediment addition to wetlands to reduce hazards from sea level rise and extreme storm events, and protect natural resources and maximize public benefits.

CONSISTENCY WITH CONSERVANCY'S PROJECT SELECTION CRITERIA & GUIDELINES:

The proposed project is consistent with the Conservancy's Project Selection Criteria and Guidelines, last updated on October 2, 2014, in the following respects:

Required Criteria

1. **Promotion of the Conservancy's statutory programs and purposes:** See the "Consistency with Conservancy's Enabling Legislation" section above.
2. **Consistency with purposes of the funding source:** See the "Project Financing" section above.
3. **Promotion and implementation of state plans and policies:** By restoring the historic tidal wetland habitats of the subject property the project serves to promote and implement several state plans including:
   - *California Water Action Plan*. Goal #4, "Protect and Restore Important Ecosystems", identifies restoration of coastal watersheds as a priority action.
   - *California @ 50 Million: The Environmental Goals and Policy Report* (Governor's Office of Planning and Research, 2013 Draft). Key Action #3 of the "Preserve and Steward State Lands and Natural Resources" calls for building resilience in natural systems and specifically calls out the need for well-maintained watersheds and floodplains.
   - *CA Climate Adaptation Strategy/Safeguarding California: Reducing Climate Risk Plan (*CA Natural Resources Agency, July 2014). The plan identifies "Actions Needed to Safeguard Biodiversity and Habitats" including #1: Improve habitat connectivity and protect climate refugia. The restoration will add to the effort to preserve the tidal wetland ecosystem of the Elkhorn Slough, which drains to Monterey Bay.
   - This proposed project also aligns with the goals listed in the *CA Climate Adaptation Strategy/Safeguarding California: Reducing Climate Risk Plan* (CA Natural Resources Agency, July 2014) in terms of improving management practices for coastal and ocean ecosystems and resources by including climate adaption strategies.
4. **Support of the public:** The project has the support of state and local elected officials including U.S. Congressman Sam Farr, Senator Bill Monning, Assemblymember Mark Stone, and Monterey County Supervisor Lou Calcagno, as well as the NOAA National Estuarine Reserve Division, U.S. Fish and Wildlife Service, Department of Fish and

Wildlife, Department of Water Resources, and the Regional Water Quality Control Board. See Exhibit 4: Project Letters.

5. **Location:** The proposed project is located within the coastal zone of Monterey County.
6. **Need:** While Elkhorn Slough Foundation has obtained in-kind commitments and matching funds from public agencies and partnering organizations, Conservancy assistance is needed at this point to enable the proposed project to move forward.
7. **Greater-than-local interest:** Elkhorn Slough is one of the most ecologically important and largest estuarine systems in California as signified by its designation as a National Estuarine Research Reserve. The proposed restoration will provide water quality and habitat benefits for the Elkhorn Slough complex, as well as enhance significant tidal wetland habitat for state and federally endangered species.
8. **Sea level rise vulnerability:** One of the proposed project's primary goals is to provide resilience to sea level rise into the foreseeable future as marsh vegetation traps sediment and builds upon itself. Elkhorn Slough has been the subject of numerous studies that include vulnerability assessments and ongoing monitoring of existing marsh conditions and conditions projected under various sea level rise scenarios. ESF will monitor the restoration work and restored marsh to gain a better understanding of the effectiveness of sediment addition restoration projects in Elkhorn slough and which local factors most affect marsh viability.

Additional Criteria

9. **Urgency:** Human actions have altered the tidal, freshwater and sediment processes essential to supporting and sustaining Elkhorn Slough's estuarine habitats. Historic marshes in this area are lost or in poor condition and are in need of restoration to once again function viably. A unique opportunity exists to restore a rare ecosystem in coastal California and improve habitat for rare and declining estuarine dependent species through the use of these grant funds.
10. **Resolution of more than one issue:** The project will restore drowning marsh areas while providing a beneficial use for sediment produced from flood control projects.
11. **Leverage:** See the "Project Financing" section above.
12. **Conflict resolution:** The Monterey Bay National Marine Sanctuary currently prohibits the beneficial reuse of sediment in areas within its jurisdiction. This policy eliminates creative options for beneficial reuse of sediments in many areas and complicates sediment management for numerous local government entities. The proposed project is not subject to this prohibition because it is outside the Sanctuary, but given its proximity to the Sanctuary and the importance of the Elkhorn Slough ecosystem, the proposed project could provide information that could help facilitate a change in the Sanctuary policies regarding beneficial reuse of sediment.
13. **Innovation:** The project employs an experimental design involving sediment addition to restore tidal marsh function.
14. **Readiness:** ESF is ready to commence the proposed project in 2016.

15. **Realization of prior Conservancy goals:** The Conservancy has worked with ESF and other organizations for almost two decades to preserve and restore the resources of Elkhorn Slough. Tidal erosion and marsh loss within the Slough threaten the resources the Conservancy has worked hard to protect. The proposed project will evaluate one option for protecting these resources from continued erosion. See also the "Project History" section above."
16. **Minimization of greenhouse gas emissions:** Because this is a tidal marsh restoration project, it will not emit greenhouse gases ("GHGs") once construction is completed. Further, it is expected to reduce GHG effects through sequestering about 130 metric tons of carbon per year indefinitely. The IS/MND found that the GHGs from construction emissions will be less than significant.

CONSISTENCY WITH LOCAL COASTAL PROGRAM POLICIES:

The proposed project is consistent with the North Monterey County Local Coastal Program as discussed below.

Section 2.3 defines environmentally sensitive habitats as "areas in which plant or animal life or their habitats are rare or especially valuable because of their special nature or role in an ecosystem and which could be easily disturbed or degraded by human activities and developments." Section 2.3.1 states that environmentally sensitive habitats of North County "shall be protected, maintained, and where possible, enhanced and restored." This project will facilitate enhancement and restoration of the Elkhorn Slough through a sediment addition pilot project. Section 2.3.3.B.5 states "all wetland areas of the north County Coastal Zone shall be protected and preserved for their plant and wildlife values, including but not limited to...Elkhorn Slough..." Section 2.3.4.5 states "the County shall encourage the restoration of sensitive plant habitats on public and private lands."

The proposed project will restore tidal wetland habitat, thereby implementing one of the top priorities of the Tidal Wetland Management Program, developed by a multi-organization group of stakeholders including state and federal resource agencies.

COMPLIANCE WITH CEQA:

To comply with the California Environmental Quality Act ("CEQA"), CDFW, which is the land owner and lead agency for the proposed project, prepared the "Initial Study/Mitigated Negative Declaration for the Elkhorn Slough Tidal Restoration Project," ("ID/MND") (Exhibit 4). No public comments were received on the draft IS/MND. CDFW adopted the IS/MND, approved the project, and adopted a Mitigation, Monitoring and Reporting Program ("MMRP") (Exhibit 5) on August 27, 2015.

The IS/MND identifies potential effects of the proposed project in the areas of: Air Quality, Biological Resources, Cultural Resources, Geology and Soils, Hazards and Hazardous Materials, and Transportation and Traffic. The IS/MND identifies mitigation measures to avoid, reduce or mitigate all of the possible significant environmental effects to less than significant. The project's significant effects and mitigation measures, which are summarized below, are set forth in the IS/MND and summarized in the attached Mitigation and Monitoring and Reporting Program (Exhibit 5).

Air Quality

Temporary, localized emissions of Particulate Matter10 during construction have the potential to exceed ambient air quality standards and contribute to regional violations of the ambient air quality standards. The Monterey Bay Unified Air Pollution Control District has a list of construction dust control measures (sweeping, watering, etc.) that will be implemented for all construction phases to reduce these impacts to a less than significant level.

Biological Resources

The proposed project could result in direct and indirect impacts to federal and/or state listed plant and animal species, including marine mammals (Southern sea otter) and (harbor seal). Mitigation measures to reduce potential impacts to special status species to less than significant include seasonal avoidance, education program for construction workers, biological monitoring during construction, and project compliance with all state and federal permits. The loss of a large number of nesting birds would represent a potentially significant impact. Implementation of mitigation measures including seasonal avoidance, pre-construction surveys, and buffer zones will reduce potential impacts to nesting birds to less than significant levels. Further, the project is subject to the federal Migratory Bird Treaty Act (MBTA; 16 U.S.C., §703, Supp. I, 1989) and California Fish and Game Code (§§3503, 2513, and 3800), which protect active bird nests from destruction.

Cultural Resources

The project could have potential significant impacts on buried paleontological or cultural resources including human remains. To reduce this potential impact to a less-than-significant level, construction contractors will be required to stop work in the vicinity of the find if any cultural deposits are encountered during construction so that the discovery can be appropriately assessed by a qualified expert.

Geology

Landslides
Excavation in the upland area of the project site could destabilize adjacent areas and increase the risk of landslides until completion of the project, when the restored upland area will have a gentle slope that is unlikely to fail. Adherence with sound grading practices (e.g., bracing or underpinning of excavated faces) in accordance with California Occupational Safety and Health Administration (OSHA) regulations, as required for all California construction projects, will generally ensure that construction activities do not create new areas of instability during excavation. This would adequately protect workers, construction equipment, and nearby buildings from effects of excavation. To adequately protect workers and construction equipment from unexpected slope failure of the sediment stockpiles, all sediment or soils stockpiled onsite will be sloped at an angle not steeper than one and one half horizontal to one vertical.

Erosion
The project would expose soil to erosive forces during construction by stockpiling sediments, spreading earth materials on the surface of the marsh, and potentially excavating upland sediments onsite. If erosion from these areas is not adequately controlled, gullies could form and propagate upslope and cut into the agricultural land to the west of the buffer area. To mitigate this impact, excavation for the project will require a National Pollutant Discharge Elimination System General Construction Permit and a required Storm Water Pollution Prevention Plan ("SWPPP"). The SWPPP will include soil stabilization and sediment control best management practices ("BMPs") to limit the amount of sediment entrained in runoff from the excavation and stockpile areas. In addition, Mitigation Measure AIR-1 requires that exposure of construction areas to wind erosion be minimized by covering inactive storage piles and prohibiting grading during periods of winds over 15 mph. Implementation of Mitigation Measures AIR-1 and the geology mitigation measures, in addition to the erosion control BMPs included in the SWPPP will limit erosion and loss of topsoil to less than significant levels.

Once the project is complete the upland area will be vegetated, stabilizing the upland portion of the project site. In addition, the project is designed to protect the marsh area from future erosion by raising marsh elevation to limit tidal scour and to encourage regrowth of native marsh vegetation.

Hazards and Hazardous Materials

Construction activities will include the use of hazardous materials such as fuels, oils, lubricants, petroleum products, and solvents in the operation of construction equipment, creating the potential for accidental releases of small quantities of hazardous materials, which could degrade soil and water quality. This potential effect will be mitigated to less than significant through compliance with the BMPs in the SWPPP and through a mitigation measure that requires any spill to be contained, reported and cleaned up.

Transportation and Traffic

The project will impact traffic and roads surrounding the project area as a result of trucks trips hauling sediment and worker travel trips to the worksite during construction. To reduce the impacts on local roads, especially SR 1, SR 156, and SR 183, mitigation measures will be implemented including: preparation and submission a Construction Traffic Control Plan to Monterey County and CalTrans District 5; obtaining all necessary permits for the use of oversized/overweight vehicles that will utilize county-maintained roads, which may require California Highway Patrol or a pilot car escort; and coordination with the Monterey County Public Works Department to ensure completion of sediment importation prior to the County's repaving of Dolan Road.

Conclusion

Conservancy staff has independently reviewed the ID/MND and concludes that the proposed project as mitigated poses no potential for significant environmental impacts. Accordingly, staff

recommends that the Conservancy find that there is no substantial evidence that the proposed project, as mitigated, will have a significant effect on the environment.

Staff will file a Notice of Determination upon the Conservancy's approval of the project.