

COASTAL CONSERVANCY

Staff Recommendation  
October 2, 2014

**ALISO CREEK ESTUARY  
RESTORATION PLAN**

Project 14-022-01  
Project Manager: Deborah Ruddock

**RECOMMENDED ACTION:** Authorization to disburse up to \$300,000 to The Ocean Foundation for preparation of a restoration plan for the Aliso Creek estuary in Laguna Beach, Orange County (Exhibit 1).

**LOCATION:** Aliso Creek and Aliso Beach, in the City of Laguna Beach, County of Orange

**PROGRAM CATEGORY:** Coastal Resource Enhancement

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**EXHIBITS**

- Exhibit 1: [Project Location](#)
  - Exhibit 2: [Project Site](#)
  - Exhibit 3: [Aliso Creek Estuary – 1930s](#)
  - Exhibit 4: [Aliso Creek Estuary – 1972](#)
  - Exhibit 5: [Aliso Creek Estuary – 2008](#)
  - Exhibit 6: [Project Letters](#)
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**RESOLUTION AND FINDINGS:**

Staff recommends that the State Coastal Conservancy adopt the following resolution pursuant to Sections 31111 and 31251-31270 of the Public Resources Code:

“The State Coastal Conservancy hereby authorizes disbursement of an amount not to exceed three hundred thousand dollars (\$300,000) to The Ocean Foundation to develop a restoration plan for the Aliso Creek Estuary, subject to the condition that no funds shall be disbursed until the Executive Officer of the Conservancy has approved in writing a detailed work program, schedule, budget, and the names of any contractors the grantee intends to employ.”

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 authorization is consistent with Chapter 6 (§§ 31251-31270) of Division 21 of the Public Resources Code regarding enhancement of coastal resources, and with § 31111 regarding preparation of plans and feasibility studies.
2. The proposed project is identified in several Local Coastal Programs as requiring action to resolve existing or potential resource protection problems.
3. The proposed project is consistent with the current Conservancy Project Selection Criteria and Guidelines.
4. The Ocean Foundation is a nonprofit organization existing under section 501(c)(3) of the Internal Revenue Service, and has purposes consistent with Division 21 of the Public Resources Code.”

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### **PROJECT SUMMARY:**

Staff recommends the Conservancy authorize a grant of up to \$300,000 to The Ocean Foundation to support development of a restoration plan to restore and enhance coastal wetland habitat and function at the Aliso Creek estuary (Exhibits 1 and 2). The Marisla Foundation and the Laguna Ocean Foundation (LOF) will contribute \$20,000 and \$10,000 respectively to the project, and LOF will secure in-kind services valued at \$20,000 to cover the estimated total project cost of \$350,000.

The Ocean Foundation will serve as fiscal sponsor for the project, which will be undertaken and managed locally by the non-profit LOF. The Wetland Managers Group of the Southern California Wetlands Recovery Project (WRP) approved the project in November 2013 for inclusion in the WRP Work Plan.

Aliso Creek drains a 30-square-mile, mostly urbanized watershed in south Orange County. It originates in the Santa Ana Mountains inside the boundaries of the Cleveland National Forest (Exhibit 2). The watershed includes portions of the cities of Aliso Viejo, Laguna Beach, Laguna Hills, Laguna Niguel, Lake Forest, Mission Viejo and unincorporated Orange County. The Creek once drained to the Pacific through a broad, expansive estuary with extensive wetlands, as evidenced in historical photographs and maps (Exhibits 3-5). Today, as outlined in the Aliso Creek Watershed Management Plan, the watershed suffers from a number of problems related to the impact of human activities and demands on water resources (See the plan at <http://media.ocgov.com/civicax/filebank/blobdload.aspx?BlobID=9487>).

Aliso Creek’s estuarine habitat has suffered degradation through modification of its hydrologic regime (from urbanization of the watershed) and physical modification of the mouth of the creek and its banks. In its current condition, the mouth of Aliso Creek is a degraded lagoon that suffers from seasonal fluctuations in water level, obstructed discharge to the ocean and frequent episodes of poor water quality including eutrophication.

Despite its degraded condition, the Aliso Creek estuary possesses high restoration value due to its key geographic location between two regionally significant ecosystems: the terrestrial greenbelt, or ‘*superpark*’ comprised of approximately 15,000 acres of preserved natural habitats in the San Joaquin Hills, and the bluebelt of the coastal and offshore Laguna State Marine Reserve recently established through the Marine Life Protection Act. The Aliso Creek estuary is the only location in south-central Orange County where a viable habitat linkage between these

two systems can be developed. It is also the only location between Newport Bay in Orange County and San Mateo Creek in San Diego County where the possibility exists to link protected freshwater and coastal marine ecosystems.

Although restoration of the Aliso Creek estuary would yield many public benefits, there has been no prior effort to define a restoration project for the site. The goal of the proposed project is to develop a feasible restoration plan for evaluation under the California Environmental Quality Act and the National Environmental Policy Act.

LOF will manage development of the restoration plan through a facilitated consensus-building process involving local landowners, government agencies and other stakeholders, guided by the expertise of skilled restoration ecologists. The proposed planning project will summarize estuary restoration goals and objectives and identify opportunities and constraints. Project components will include a public outreach and education program; modeling of habitat, hydrologic, and water quality conditions; development of illustrative plans and drawings of the restoration site; a conceptual grading plan; and a conceptual landscape plan addressing plant palettes and infrastructure. Other project tasks will include identification of implementing actions, permitting requirements, responsible parties for implementation, a management entity, schedule, budget estimates, and potential funding sources. If approved, the proposed project is expected to be complete by December 2016.

At the regional scale, the Aliso Creek estuary restoration project provides an important early opportunity to couple local objectives with the emerging regional wetland restoration goals developed as part of the WRP's *Regional Strategy* update. A design charrette will help ensure that design for Aliso Creek estuary is consistent with the larger regional goals being developed through the WRP Science Panel. It will support development of an approach that reflects not only the functions inherent in small coastal lagoons, but also considers the contribution of such systems to overall regional wetland functions. This process will serve as a case study for how to approach small-river-mouth estuaries and lagoons in southern California. It will assist the WRP's Science Advisory Panel to refine regional restoration objectives and demonstrate how local-regional coordination can be accomplished. The project will thus directly benefit regional wetlands restoration planning and enhance other restoration efforts supported by the WRP.

The 10-year-old Laguna Ocean Foundation is actively involved in coastal resource management issues and activities in Laguna Beach. In addition to developing and managing popular coastal and marine education and docent programs, LOF has developed and maintains a science-based inventory of coastal Laguna Beach inter-tidal habitats in GIS format and conducts quarterly shorebird surveys. Using this and other original research, LOF has assumed the lead in developing a Coastal Resources Management Plan for the Laguna Coast, a key habitat management tool called for in the City of Laguna Beach Local Coastal Program. The organization's governing board includes marine biologists, conservation planners and community outreach specialists. LOF is a founding member of the Orange County Marine Protected Areas Council (OCMPAC) and has developed long-standing relationships with the City of Laguna Beach, the Bureau of Land Management (BLM), Surfrider Foundation and academic researchers at several universities.

While LOF has the technical and scientific expertise and relationships to manage development of the plan, the small organization possesses a modest budget and administrative capacity. LOF has entered into contract with The Ocean Foundation (TOF) for fiscal sponsorship services,

including financial oversight, grant management, legal compliance and insurance. TOF currently provides these services for the Ocean Connectors Program, a project funded through the Conservancy’s Explore the Coast Program. The Washington D.C.-based TOF, formerly the Coral Reef Foundation, is a not-for-profit 501(c)(3) international community foundation with a mission “to support, strengthen and promote those organizations dedicated to reversing the trend of destruction of ocean environments around the world.”

The proposed project is supported by State Assemblyman Allan Mansoor; Orange County Supervisor Patricia Bates; Surfrider Foundation; Conservation Fund; Endangered Habitats League; San Diego Zoo Institute for Conservation Research; Laguna Blue Belt; Laguna Canyon Foundation; South Laguna Civic Association; and Victoria Skimboards, Inc. (See Project Letters, Exhibit 6).

**Site Description:** The lagoon and its immediate surroundings encompass approximately six acres. The banks of the lagoon are vegetated primarily by invasive and ornamental species (including giant reed (*Arundo donax*)). Upland areas on nearby slopes are occupied by high quality coastal sage scrub. The lagoon is bounded on the east by the Aliso Creek Beach Park (owned and operated by the County of Orange) with landscaped areas, turf and a parking lot; to the south by Pacific Coast Highway (with its single span bridge) and Aliso Beach; and to the west by a paved access road to the privately owned golf course, inn and restaurant known as ‘the Ranch at Laguna’, storage sheds (owned by South Coast Water District) and unimproved staging areas (bare earth and invasive vegetation). Aliso Creek flows through Aliso and Wood Canyons Regional Park before reaching the golf course of the Ranch at Laguna and the lagoon. The lagoon is identified as Critical Habitat for the Tidewater Goby, which historically occupied the site (Swift, et al. 1989). Western Pond Turtles are known to occupy upstream reaches and may also occupy the lagoon. Once restored, the site has the potential to provide habitat for Least Bell’s Vireo, as well as Yellow-breasted Chat and Yellow Warbler (both California Species of Special Concern).

**Project History:** The proposed project was submitted for consideration to the Southern California Wetlands Recovery Project in early 2013. It has been approved for inclusion in the Wetlands Recovery Project 2013 Work Plan.

## PROJECT FINANCING

Coastal Conservancy	\$300,000
Marisla Foundation	20,000
Laguna Ocean Foundation	10,000
<b>Project Total (excluding in-kind services)</b>	<b>\$330,000</b>

The anticipated source of Conservancy funds for the project is the fiscal year 2010-11 appropriation from the “California Clean Water, Clean Air, Safe Neighborhood Parks, and Coastal Protection Act of 2002” (Proposition 40), re-appropriated in 2013. Proposition 40 funds are available “in accordance with the particular provisions of the statute creating each conservancy for the...restoration and protection of land and water resources.” (Pub. Res. Code § 5096.650(b)). As discussed above, these planning activities are necessary for restoration and protection of the Aliso Creek estuary. This project is consistent with Chapter 6 of Division 21 as

discussed in the “Consistency with Conservancy’s Enabling Legislation” section below. Proposition 40 also directs the Conservancy to give priority to projects with matching funds; these funds may be in the form of money, property, or services. (Pub. Res. Code § 5096.651). In addition to its \$10,000 cash donation, the Laguna Ocean Foundation will secure in-kind services with an estimated value of \$20,000.

**CONSISTENCY WITH CONSERVANCY’S ENABLING LEGISLATION:**

The Conservancy is authorized under Section 31111 of the Public Resources Code to fund and undertake plans and feasibility studies in order to implement Division 21. Section 31251 of Chapter 6 of Division 21 authorizes the Conservancy to award grants to non-profit organizations for the purpose of enhancement of coastal resources that, because of natural or human-induced events, or incompatible land uses, have suffered loss of natural and scenic values. The planning area has suffered the loss of significant natural resources as a result of the surrounding urbanization and this project is the first step in carrying out measures to restore the degraded Aliso Creek estuary.

The project is also consistent with Section 31252 of Chapter 6, as the project area targeted for restoration is identified in the certified City of Laguna Beach Local Coastal Program (LCP) as requiring action to resolve resource protection problems. The proposed project is consistent with the City of Laguna Beach Local Coastal Program as described in the “Consistency with Local Coastal Program Policies” section below.

The project is consistent with Section 31253, which authorizes the Conservancy to provide up to the total cost of any coastal project. In determining the amount of Conservancy funding for this project, the factors identified in § 31253 have been considered and applied, as described in the “Consistency with Conservancy’s Project Selection Criteria & Guidelines.”

**CONSISTENCY WITH CONSERVANCY’S 2013 STRATEGIC PLAN GOAL(S) & OBJECTIVE(S):**

Consistent with **Goal 5, Objective 5A** of the Conservancy’s 2013-2018 Strategic Plan the proposed project will enable stakeholders to develop plans for the restoration and enhancement of coastal habitats, including coastal wetlands, intertidal areas and a riparian corridor.

Through the project’s extensive outreach program to educate the public and stakeholders about the project, it is also consistent with **Goal 9, Objective 9A**, to provide support of programs and events that improve public understanding of coastal resources.

**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 November 10, 2011, 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. **Support of the public:** See the discussion of project supports at the end of the Project Summary section and “Project Letters”, Exhibit 6.
4. **Location:** The site of the proposed project is entirely within the coastal zone of the City of Laguna Beach in Orange County.
5. **Need:** Without Conservancy assistance, viable restoration strategies for the Aliso Creek Estuary would remain undefined, impeding development of any consensus on restoration objectives, methods or implementation. The existing degraded lagoon would continue to diminish in ecological, recreational, educational and economic value as a resource.
6. **Greater-than-local interest:** A restored estuary at Aliso Creek would link two regionally significant ecosystem reserves: the Laguna Coast Marine Reserve and the approximately 15,000-acre greenbelt of the San Joaquin Hills included in the Central Orange County Natural Communities Conservation Plan (NCCP). The greenbelt includes county-owned wilderness parks as well as numerous regional parks and city-owned open spaces, with trail networks providing access to and along the shoreline. The area serves several communities totaling approximately 600,000 residents plus a large year-round tourist population. At the regional scale, the Aliso Creek estuary restoration project provides an important early opportunity to couple local objectives with the emerging regional wetland restoration goals. The conceptual design charette will help ensure that design for Aliso Creek estuary is consistent with the larger regional goals being developed through the WRP Science Panel effort. It will support development of a conceptual approach that reflects not only the functions inherent in small coastal lagoons, but also considers the contribution of such systems to overall regional wetland function. This process will also serve as case-study to demonstrate how local-regional coordination can be accomplished.
7. **Sea level rise vulnerability:** The project will include a site-specific analysis of potential effects of sea level rise on estuarine hydrology and habitat, and of related effects on land use, the beach, and sand transport. A major objective of this project is to identify restoration goals based on natural process expected to occur in a system with the structural characteristics inherent at this site – a small river mouth estuary at the bottom of an urbanized watershed. In doing so, the conceptual plan that emerges from the project will address the need for resilience and the restored system’s ability to adapt to future environmental changes such as sea level rise. System resilience and adaptive design and management measures that anticipate sea level rise are among key considerations that will be addressed.

#### **Additional Criteria**

8. **Urgency:** Continued degradation of the Aliso Creek watershed due to urbanization continues to accelerate, thereby increasing the need and urgency to initiate the planning process for restoration and coordination in the regional planning effort.
9. **Resolution of more than one issue:** The project’s initial steps will include identification of existing land uses immediately adjacent to or within the estuary that might conflict with restoration objectives, followed by identification of feasible solutions to potential conflicts.

These steps apply a facilitated consensus process that active involves immediate landowners and stakeholders.

11. **Conflict resolution:** A conceptual restoration plan will resolve important fundamental issues such as how the restored site can provide critical habitat for the Tidewater Goby, and viable habitat for other key species, while serving as the point of drainage to the ocean for a major, urbanized watershed.
13. **Readiness:** Laguna Ocean Foundation is prepared to initiate the project immediately upon funding.
14. **Realization of prior Conservancy goals:** Historically, California’s South Coast was characterized by large tidal wetland complexes. To address ongoing loss of these resources, the Conservancy helped launch and is a member of the WRP Board of Governors approved the proposed project for inclusion in WRP’s 2013 Work Program. The Conservancy also has been active in the area for more than a dozen years, providing grants of bond funds to the City of Laguna Beach and Orange County for shoreline improvements and parks and land acquisition to expand the Laguna Coast and Aliso and Wood Canyons Wilderness Parks trail networks to and along the coast.
16. **Cooperation:** The project’s consensus-driven process will ensure the cooperative involvement of multiple stakeholders, including landowners (County of Orange as well as private landowners), the public, nonprofit groups, and public agencies including the California Coastal Commission, State Lands Commission, California Department of Fish and Wildlife (CDFW), California Department of Transportation, U.S. Fish & Wildlife Service (USFWS), U. S. Army Corps of Engineers (ACOE), Southern Orange County Wastewater Authority (SOCWA), South County Water District (SCWD), the City of Laguna Beach and others.
17. **Vulnerability from climate change impacts other than sea level rise:** Development of the project’s restoration objectives will include consideration of potential climate change effects on the long-term viability of restored ecosystems. Design measures (and adaptive management measures) to address potential effects of climate change will be identified as part of the project.
18. **Minimization of greenhouse gas emissions:** Although the project addresses the conceptual planning stage, and thus greenhouse gas emissions will not be significant, preliminary design considerations will integrate measures to minimize greenhouse gas emissions for later stages of the restoration.

#### **CONSISTENCY WITH LOCAL COASTAL PROGRAM POLICIES:**

The proposed project to create a restoration plan for the Aliso Creek estuary is consistent with several policies in the City of Laguna Beach’s General Plan/Local Coastal Program, certified by the Coastal Commission in November 2011, as follows:

Topic 4, Policy 4I (Water Quality – Watershed Protection and Restoration) of the City’s Open Space and Conservation Element declares that the City will “promote the protection and restoration of offshore, coastal, lake, stream, or wetland waters and habitats and preserve them to

the maximum extent practicable in their natural state, oppose activities that may degrade the quality of these waters, and promote the rehabilitation of impaired waters and habitat.”

Topic 9 Watersheds and Watercourses identifies Aliso Creek as an environmentally sensitive watercourse. Policy 9A declares the City will promote the preservation and restoration of the City’s natural drainage channels, freshwater streams, lakes and marshes to protect wildlife habitat and to maintain watershed, groundwater and scenic open space. Policy 9F states that, where possible, the City shall require restoration of deteriorated significant natural drainage courses that have been disturbed by development, but which retain potential for natural function. Policy 9K declares the City will promote the preservation and enhancement of the natural drainage of the City. Policy 9T states that the City will restore and retain Aliso Creek in a natural state.

Goal 1 of the Land Use Element is to create a community that is sustainable, resilient, and regenerative. Policy 1/Action 1.1.1 calls for the city to protect natural resources and open space areas to maintain their role as carbon sinks.

**COMPLIANCE WITH THE CALIFORNIA ENVIRONMENTAL QUALITY ACT:**

The proposed project will not have either a direct or indirect effect on the environment, as it consists of data gathering and development of a restoration plan as a prelude to environmental review. Plan development will not involve any physical activities (e.g., test borings, excavations, or intrusive sampling of plan or wildlife species) that might affect the environment. As such, the proposed project is exempt from the California Environmental Quality Act (CEQA) pursuant to the following sections of 14 Cal. Code of Regulations: (1) Section 15262 in that it involves only feasibility or planning studies for possible future actions which the Conservancy has not approved, adopted, or funded; and (2) Section 15306 in that it involves basic data collection, research, and resource evaluation activities which will not result in any disturbance to an environmental resource, and which will be undertaken as part of a study leading to an action which the Conservancy has not yet approved, adopted, or funded. Staff will file a “Notice of Exemption” upon Conservancy approval of the project.