

COASTAL CONSERVANCY

Staff Recommendation
May 5, 2020

Cardiff State Beach Living Shoreline Project

Project No. 15-003-03
Project Manager: Eryan Sloane

RECOMMENDED ACTION: Authorization to disburse up to \$177,000 to the University of California Los Angeles to conduct dune restoration performance monitoring for the Cardiff State Beach Living Shoreline Project, County of San Diego; this authorization will augment the Conservancy’s previously authorized funding for Project implementation, which totaled \$2,899,332 and included \$83,289 specifically for dune restoration performance monitoring.

LOCATION: San Elijo Lagoon, City of Encinitas, County of San Diego (Exhibit 1).

PROGRAM CATEGORY: Climate Adaptation, Resource Enhancement

EXHIBITS

Exhibit 1: [June 15, 2017 Conservancy authorization](#)

Exhibit 2: [Project Location Map](#)

Exhibit 3: [September 26, 2016 Conservancy authorization](#)

Exhibit 4: [Addendum to Final Mitigated Negative Declaration](#)

RESOLUTION AND FINDINGS:

Staff recommends that the State Coastal Conservancy adopt the following resolution pursuant to Sections 31113 and 31251-31270 of the Public Resources Code:

“The State Coastal Conservancy hereby authorizes the disbursement of up to one hundred seventy seven thousand dollars (\$177,000) to the University of California Los Angeles (“grantee”) to conduct dune restoration performance monitoring for the Cardiff State Beach Living Shoreline Project (“Project”), San Diego County; this authorization augments funding previously authorized by the Conservancy for Project implementation totaling \$2,899,332 of which \$83,289 was designated for performance monitoring.

Prior to the disbursement of funds, the grantee shall submit for the review and written approval of the Conservancy’s Executive Officer a work program, including budget and

schedule, and the names and qualifications of any contractors to be employed for these work program tasks.”

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 3 of Division 21 of the Public Resources Code (Section 31113), regarding addressing the impacts of climate change and Chapter 6 of Division 21 of the Public Resources Code (Sections 31251-31270) regarding resource enhancement.
2. The project is consistent with the current Conservancy Project Selection Criteria and Guidelines.”

PROJECT SUMMARY:

Staff recommends the Conservancy authorize disbursement of \$177,000 to the University of California Los Angeles (“UCLA”) to augment the Conservancy’s June 15, 2017 authorization (Exhibit 1) of \$83,289 for UCLA to conduct dune restoration performance monitoring for the Cardiff State Beach Living Shoreline Project (“project” or “Cardiff LSP”) (Exhibit 2). The Cardiff LSP is being carried out primarily by the City of Encinitas (“City”) on property owned by the California Department of Parks and Recreation (“State Parks”). UCLA’s physical performance monitoring will include unmanned aerial vehicle surveys of beach morphology to inform the City and State Park’s adaptive management decisions of re-building and/or re-designing dune features following storm events. The performance monitoring will also include surveys of plant health to bolster the existing biological monitoring program carried out by the Nature Collective (formerly the San Elijo Lagoon Conservancy). Pursuant to Conservancy’s authorizations on June 15, 2017 and March 22, 2018, and subsequent Executive Officer augmentations, the Conservancy has granted a total of \$2,899,332 for project implementation. The June 15, 2017 authorization specifically identified \$83,289 for UCLA to conduct the performance monitoring component of the project. Additional funding is needed to fill a budget deficit for dune performance monitoring because the initial budget was generated before the extensive permit monitoring requirements were known.

The project was constructed in June 2019 and has been hailed across the State as an innovative climate resilience project. The goal of the project is to provide natural sea-level rise protection to Cardiff State Beach and Highway 101 by utilizing a “living shoreline” approach that creates four acres of beach dunes. Dune restoration is a useful sea-level rise adaptation strategy because dunes can reduce coastal storm damage by buffering the shoreline from waves and tides. Coastal dunes have been heavily impacted by development and very little of this habitat type remains in Southern California. This project is both restoring a heavily impacted habitat and providing natural sea-level rise adaptation at Cardiff State Beach. The project has constructed approximately four acres of beach dunes and a footpath along the dunes and

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requires monitoring and adaptive management to ensure the project's objectives are achieved. The performance monitoring is an essential part of the project to determine if any alterations are needed as winter storms shift beach and dune sands at the site.

As detailed in the June 17, 2017 staff recommendation (Exhibit 1), the Conservancy grant for project implementation, which was augmented following authorization on March 22, 2018, builds on two earlier phases funded by the Conservancy. Phase 1, authorized for funding by the Conservancy on March 26, 2015, investigated the appropriate design and approach for restoring historic dunes along Coast Highway at Cardiff State Beach and identified a preferred restoration alternative. Phase 2, authorized in September 2016 (Exhibit 3), finalized the planning and design of the project. The project will potentially reduce the vulnerability of Coast Highway, San Elijo Lagoon, and other coastal infrastructure and natural resources to sea level rise and restore a habitat that has been severely impacted in this area. It has also increased public access to Cardiff State Beach with the construction of a dune footpath.

With the augmented funds, UCLA will have sufficient funds to conduct the 5 years of dune performance monitoring required by the Coastal Development Permit. UCLA has worked with the Conservancy in the past and has proven records of accomplishment of competence and expertise for the project elements for which they are responsible.

Site Description: The Cardiff LSP area is located at Cardiff State Beach in the City of Encinitas (Exhibit 2, Figure 1). The Cardiff LSP area extends from the south end of Restaurant Row to the north end of the Seaside State Park parking lot (Exhibit 2, Figures 2 & 3). The Cardiff LSP area straddles the Swami's State Marine Conservation Area (SMCA) and the San Elijo Lagoon SMCA, both managed by the California Department of Fish and Wildlife. The Cardiff LSP area consists of the back-beach portion of Cardiff Beach owned and managed by State Parks. State Parks and the City of Encinitas have signed a Memorandum of Understanding allowing the City to perform general operations and maintenance of the project once constructed.

Project History: The Conservancy has been working with UCLA since 2015 on the Cardiff LSP. UCLA has been continuously monitoring morphologic changes to the beach and dunes before the project, during construction, and since construction in June 2019. The information produced by UCLA is invaluable to the Cardiff LSP as it is the key to understanding the effectiveness of using native dune habitat to protect coastal communities from the effects of storms and sea level rise.

Additionally, the Conservancy has been involved in an adjacent and connected restoration project, the San Elijo Lagoon Restoration Project ("SELRP"), for the past 8 years. The SELRP exported approximately three hundred thousand cubic yards of beach-compatible materials onto Cardiff Beach. The SELRP complements the Cardiff LSP by providing higher beach elevations and protection from storm surge and waves. The Cardiff LSP also complements the SELRP by investigating options for protecting the estuary, and the SELRP, from sea level rise.

This will be the fifth Conservancy authorization for the Cardiff Living Shoreline Project. On March 26, 2015, the Conservancy authorized a \$150,000 grant to the City to conduct a feasibility study and conceptual plan for the project. On September 29, 2016, the Conservancy

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authorized a \$322,000 grant to the City to complete the design and permitting for the project and, as a responsible agency under CEQA, adopted findings regarding the environmental effects of the project based upon State Parks' Mitigated Negative Declaration for the project (Exhibit 3). On June 15, 2017, the Conservancy authorized a \$2,242,540 grant to the City, SELC, and UCLA for project implementation (construction and monitoring) (Exhibit 1). On March 22, 2018, the Conservancy authorized an additional amount of \$594,435 to the City for project implementation, specifically to fill a budget deficit for construction. Subsequently, pursuant to delegated authority, the Executive Officer authorized additional augmentations to the sum of \$62,357, some of which was for construction and some for monitoring.

PROJECT FINANCING – Monitoring Component

Conservancy	\$177,000
Conservancy's June 15, 2017 authorization	\$83,289
Executive Officer July 1, 2019 augmentation	\$10,159
Project Monitoring Total	\$270,448

The expected source of Conservancy funds for this authorization is an appropriation to the Conservancy from the Safe Drinking Water, Water Quality and Supply, Flood Control, River and Coastal Protection Bond Act of 2006 (Proposition 84, Public Resources Code sections 75001 et seq.). This funding source is available to the Conservancy for projects that are consistent with Division 21 of the Public Resources Code and that protect coastal waters and watersheds, protect and restore the natural habitat values of coastal waters and lands, and/or promote access to an enjoyment of coastal resources. (Section 75060(b).) Proposition 84 authorizes funding specifically for projects that protect San Diego Bay and adjacent watersheds (Section 75060(f).) For purposes of Proposition 84, "San Diego Bay and adjacent watersheds" includes the coastal and bay watersheds within San Diego County. (Section 75072.6.) The project is an appropriate use of Proposition 84 funds because it will restore natural habitat values of coastal lands and protect a coastal watershed in San Diego County through restoration of dune habitat at Cardiff State Beach in San Diego County.

Section 75071 provides for giving priority to restoration projects that meet one or more of a list of factors. The project is a priority because it demonstrates "watershed protection" by restoring native dune habitat and constructing the dunes to then dissipate wave energy and protect the shoreline from the erosional effects of storms and sea-level rise. (Section 75071(b).) This project is also a priority because it supports a relatively large area of an under-protected major habitat type, i.e. coastal dunes. (Section 75071(c).) Coastal dunes have experienced severe impacts largely as a result to the construction and maintenance of transportation infrastructure such as railroads and highways.

CONSISTENCY WITH CONSERVANCY'S ENABLING LEGISLATION:

The project remains consistent with the Conservancy's enabling legislation, as detailed in the June 15, 2017 staff recommendation (see Exhibit 1).

CONSISTENCY WITH CONSERVANCY'S ACCESS PROGRAM STANDARDS:

The footpath construction aspect of the project remains consistent with the Conservancy's access program standards, as detailed in the June 15, 2017 staff recommendation (see Exhibit 1).

**CONSISTENCY WITH CONSERVANCY'S [2018-2022 STRATEGIC PLAN](#)
GOAL(S) & OBJECTIVE(S):**

On November 30, 2017, the Conservancy adopted an updated Strategic Plan. The project is consistent with the Conservancy's updated 2018-2022 Strategic Plan, as follows:

Consistent with **Goal 6, Objective B** of the Conservancy's 2018-2022 Strategic Plan, the project will restore approximately 4 acres of coastal dunes.

Consistent with **Goal 8, Objective C**, the project will implement an adaptation strategy to address threats to coastal communities and public infrastructure in a way that protects natural resources and provides maximum public benefits.

**CONSISTENCY WITH CONSERVANCY'S
PROJECT SELECTION CRITERIA & GUIDELINES:**

The project remains consistent with the Conservancy's Project Selection Criteria and Guidelines, as detailed in the June 15, 2017 staff recommendation (see Exhibit 1).

CONSISTENCY WITH LOCAL COASTAL PROGRAM POLICIES:

The project remains consistent with the Local Coastal Program policies, as detailed in the June 15, 2017 staff recommendation (see Exhibit 1).

COMPLIANCE WITH CEQA:

On September 29, 2016, when it authorized funding for project design, the Conservancy adopted findings for the project in accordance with the California Environmental Quality Act ("CEQA"). The findings were based upon the Conservancy's consideration of the Mitigated Negative Declaration for the project adopted by State Parks.

On June 15, 2017, when it authorized funding for project implementation, the Conservancy described several minor project changes and effects for which State Parks had determined that

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no additional CEQA documentation was required aside from a May 10, 2017 addendum describing the changes.

The project remains substantially unchanged from its description in the MND and the May 10, 2017 State Parks addendum, and there are no new significant environmental effects or substantial increases in the severity of previously identified significant effects, or changes in circumstances, that require a re-evaluation of the potential environmental effects of the project. Therefore, no new CEQA documentation is needed. (Cal Code. Regs. Title 14, Section 15162(b)).