

COASTAL CONSERVANCY

Staff Recommendation

May 24, 2018

ARROYO BURRO OPEN SPACE RESTORATION

Project No. 15-009-02

Project Manager: Rachel Couch

RECOMMENDED ACTION: Authorization to disburse up to \$550,000 to the City of Santa Barbara for restoration of lower Arroyo Burro Open Space in Santa Barbara County.

LOCATION: City of Santa Barbara (Exhibit 1)

PROGRAM CATEGORY: Resources Enhancement

EXHIBITS

Exhibit 1: [Project Location Map](#)

Exhibit 2: [Site Photos](#)

Exhibit 3: [Conceptual Design Plans](#)

Exhibit 4: [Restoration Plan](#)

Exhibit 5: [Project Letters](#)

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 the disbursement of up to five hundred fifty thousand dollars (\$550,000) to the City of Santa Barbara (“City”) to restore riparian habitat along lower Arroyo Burro Creek to improve water quality, as shown on Exhibit 1 to the accompanying staff recommendation. Prior to commencement of construction and to disbursement of any Conservancy funds, the City shall submit for the review and approval of the Executive Officer of the Conservancy the following items:

1. A work program, schedule and budget and the names and qualifications of any contractors or subcontractors that the City intends to employ to construct the project.
2. Evidence that the City can provide all remaining funds needed to complete construction.
3. Evidence that all applicable permits and approvals for the project have been obtained.”

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 current Project Selection Criteria and Guidelines.
2. The proposed authorization is consistent with the purposes and objectives of Chapter 6 of Division 21 of the Public Resources Code, regarding enhancement of coastal resources.

PROJECT SUMMARY:

Staff recommends that the Conservancy provide a grant of up to \$550,000 to the City of Santa Barbara (City) to restore approximately 1,400 linear feet of lower Arroyo Burro Creek within the Arroyo Burro Open Space, in order to improve watershed function and native habitat.

Arroyo Burro is a perennial coastal stream that includes valuable riparian, aquatic, and avian habitat. The 4.1-acre project site is currently in a degraded state with areas of deeply incised creek banks, significant erosion, numerous non-native species, and poor water quality (Exhibit 2). The channel incision through this reach has left the creek unable to access its floodplain, which historically would flood on a regular basis.

Channel incision has destabilized the toe of the creek banks and led to bank instability and more erosion. Several social trails that access the creek down steep banks are another source of erosion and bank instability. Active areas of erosion result in increased turbidity levels, which can result in poor water quality for fish and other aquatic organisms.

The proposed project will remove debris from the channel, stabilize eroding banks, re-establish portions of the creek’s floodplain, remove invasive species, and restore riparian habitat. These actions will improve habitat and restore historic stream processes. Creek water quality will be improved through increased shading, aeration, bio-filtration, and reduced sedimentation.

All revetment and large debris within the creek channel will be removed, including 60 tons of concrete and 320 linear feet of pipe and wire revetment. Biotechnical bank stabilization methods will be used to stabilize 500 feet of eroding creek bank. Inappropriate informal trails will be retired and restored and directional fencing will be installed to reduce impacts of future public access.

Floodplain benches will be created along the creek channel to re-establish hydrologic function and improve connectivity with the floodplain (Exhibit 3). This will create approximately one-acre of new floodplain. Improved floodplain access will reduce stream energy and flood elevations downstream, which will help to reduce future downstream channel incision and bank erosion. Overbank flood flows will capture sediment and nutrients from storm flows and increase groundwater infiltration after flooding. This will allow water to slowly percolate back into the creek, increasing base flows during the dry season. A wider floodplain will also provide greater habitat diversity and widen the riparian zone.

The project also involves removal of nonnative plants and re-vegetation with native riparian and upland plant species. Throughout the restoration, measures will be taken to protect and avoid existing natural resources, in particular several dusky-footed wood-rat colonies that are present on site

The overall project aims to improve public access and creek aesthetics while providing an opportunity for public outreach and education about watersheds, habitat restoration, and water quality. Interpretive signage will be installed in key locations to educate the public about the importance of watershed habitat protection and restoration efforts. Conservancy funds will not be used for the above interpretive elements. Sensitive wildlife areas like existing wood rat nests will be protected through adjustments to existing trails or installation of sections of split rail fencing. These methods will also be used to define access points to the creek so that existing social trails can be restored with native vegetation and prevent further creek bank erosion.

Site Description: The project site is one of several large open spaces in the Arroyo Burro watershed. The property is bounded on the north, west, and east by similar open space. A residential subdivision abuts the property to the south. Just south of this neighborhood is Cliff Drive, Arroyo Burro County Beach Park, and Arroyo Burro estuary, which empties into the Pacific Ocean. The property lies to the west of Las Positas Road. Very large expanses of coastal sage scrub-covered uplifted marine terraces, similar to those adjacent to the project site, are present on the east side of Las Positas Road at Elings Park.

The topography of the project site is relatively flat, with slopes along the western boundary ranging from one to 16%. The center of the site contains a network of informal trails. Habitat types found on the upland portions of the property include ruderal vegetation with scattered ornamental trees, and a large eucalyptus grove.

Arroyo Burro Creek is the second longest creek (7.5 miles) within the second largest and least urbanized watershed (5,630 acres) in the City of Santa Barbara. The creek traverses the east side of the property from north to south and is a perennial stream with year-round flow. The creek channel reach is 1,400 linear feet with deeply incised eroding banks that are up to 15 feet high in some places, and drops approximately 10 feet as it passes through the property. The creek corridor supports emergent wetland vegetation along with willow, coast live oak, and riparian woodland habitats, coastal sage scrub and chaparral habitats occur along its western boundary, and coyote brush scrub along its eastern boundary. The creek corridor also includes non-native weeds and ornamental plants including scattered palm trees. Riparian habitat along Arroyo Burro is well developed above and below the project site.

Arundo donax has colonized bank failure areas and contributes to bank instability. Other non-natives including English ivy, periwinkle, cape ivy, eucalyptus, fan palms, and pepper trees have also invaded the site. These non-native species are disrupting the natural ecology and food web in this system. Native plants have co-evolved with native wildlife, and provide better food sources, shelter, and breeding habitat than non-natives.

Despite its altered state the site still provides suitable habitat for a variety of native birds, fish, amphibians, reptiles and mammals including three-spined stickleback, Pacific tree frogs, southwestern pond turtles, and dusky footed wood rats. The federally endangered tidewater goby is located just downstream in the Arroyo Burro Estuary, and the creek channel is mapped as critical habitat for the endangered Southern California Steelhead trout.

Grantee Qualifications: The City of Santa Barbara Creeks Restoration and Water Quality Improvement Division (Creeks Division) was established in 2001. The purpose of the Creeks Division is to develop and implement creek and ocean water quality improvement, riparian habitat restoration, wetlands enhancement, and community education projects and programs.

Since its inception, the Creeks Division has undertaken a number of riparian habitat restoration and wetlands enhancement projects on Mission, Arroyo Burro, Mesa, Las Positas, and Sycamore Creeks in the City. Funded by a permanent voter-approved 2% transient occupancy tax on hotel visitors, the Creeks Division currently has two full-time restoration specialists on staff available to manage fish passage and creek restoration projects and has dedicated annual operating funds for maintaining all of its projects in perpetuity. The Creeks Division will fund all maintenance of the Arroyo Burro Open Space Restoration Project.

Project History: In 2015, the Conservancy contributed funds toward the acquisition of the open space by the Trust for Public Land (TPL). TPL then donated the property to the City. The purchase of this property furthers the goals of three previously-funded Conservancy projects: 1) Acquisition of the Douglas Family Preserve property for preservation as open space (with TPL). The property is within walking distance of the Douglas Family Preserve; 2) The daylighting and restoration of Mesa Creek, a tributary of Arroyo Burro, at the confluence near the estuary. The property is approximately one-half mile upstream from the Mesa Creek property; and 3) The renovation of the South Coast Watershed Resource Center (WRC), located at Arroyo Burro Beach, where the Arroyo Burro estuary meets the ocean. Arroyo Burro Beach is approximately 3/4 mile from the property. The WRC is used for environmental education programs for elementary school children focused on ecology, water quality, and watershed protection and restoration and will educate schoolchildren about the restoration project.

The project is one of several restoration and water quality improvement projects undertaken in the watershed by the City of Santa Barbara Creeks Division, including: the restoration of Mesa Creek and the Arroyo Burro Estuary; Restoration of Upper Las Positas Creek at the Municipal Golf Course; the recently completed Upper Arroyo Burro Restoration project; the ongoing watershed wide Arundo eradication effort; the planned, removal and restoration of a 0.3 mile-long concrete channel on Las Positas Creek; and community restoration effort on Arroyo Hondo, in Hidden Valley Park.

PROJECT FINANCING

Coastal Conservancy	\$550,000
City of Santa Barbara	\$820,000
Department of Fish and Wildlife	\$550,000
Project Total	\$1,920,000

The anticipated source of Conservancy funds an appropriation to the Conservancy from the Water Quality, Supply, and Infrastructure Improvement Act of 2014 (Proposition 1, Water Code § 79700 et seq.). Funds appropriated to the Conservancy derive from Chapter 6 (commencing with § 79730) and may be used “for multi-benefit water quality, water supply, and watershed protection and restoration projects for the watersheds of the state” (Section 79731). Section 79732 identifies specific purposes of Chapter 6. The proposed project will achieve several of these purposes, including the following: protect and restore coastal watersheds, including, but not limited to, bays, marine estuaries, and nearshore ecosystems; and 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. The proposed project will facilitate restoration of aquatic and riparian habitat, which will enhance natural stream functions. As required by Proposition 1, the proposed project provides multiple benefits. The project will: restore habitat; improve water quality through reducing erosion, and incision.

In accordance with Section 79707(b), which requires agencies to prioritize “projects that leverage private, federal, or local funding or produce the greatest public benefit”, this project leverages local funding. The City will provide \$820,000 in matching funds for the project and in-kind contributions of staff time, the value of which is expected to be approximately \$70,000.

The project was reviewed and subsequently recommended for funding through a competitive grant process under the Conservancy’s Proposition 1 Grant Program Guidelines adopted in June 2015 (Prop 1 Guidelines) (See § 79706(a)). The proposed project meets each of the evaluation criteria in the Prop 1 Guidelines as described in further detail in this “Project Financing” section, the “Project Summary” section and in the “Consistency with Conservancy’s Project Selection Criteria & Guidelines” section of this staff recommendation.

CONSISTENCY WITH CONSERVANCY’S ENABLING LEGISLATION:

The proposed project is undertaken pursuant to Sections 31251-270 of the Public Resources Code (Chapter 6 of Division 21), as described below.

Pursuant to Section 31251, the Conservancy may award grants to public agencies for the purpose of enhancement of coastal resources that, because of natural or human-induced events have suffered loss of natural and scenic values. Grants under this chapter are to be utilized for, among other purposes, corrective measures that will enhance the natural and scenic character of the areas. The proposed project will restore creek habitat and functions that have been impacted by human activities.

Consistent with Section 31252, the Arroyo Burro Creek watershed is identified in the City of Santa Barbara Local Coastal Plan as requiring public action to resolve existing or potential resource protection problems. See “Consistency with Local Coastal Program Policies” section, below.

Pursuant to Section 31253, the Conservancy may provide up to the total cost of any 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 the “Consistency With Conservancy’s Project Selection Criteria & Guidelines” section below. The Conservancy’s funds for the project constitute less than 30 percent of the overall project budget.

**CONSISTENCY WITH CONSERVANCY'S 2018 STRATEGIC PLAN
GOAL(S) & OBJECTIVE(S):**

Consistent with **Goal 6, Objective B**, the project will enhance 4.1 acres of habitat of a coastal stream.

Consistent with **Goal 6, Objective D**, restoration of the property will enhance a coastal watershed and floodplain area.

Consistent with **Goal 6, Objective G**, implementing the project will improve coastal water quality downstream of the project by reducing erosion and sedimentation.

**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:** Restoration of this reach of Arroyo Burro Creek would serve to promote and implement several state plans including:
 - 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.
 - California Water Action Plan (California Natural Resources Agency, 2014). Goal #4, "Protect and Restore Important Ecosystems", identifies protection of coastal watersheds as a priority action.
 - CA Wildlife Action Plan (California State Department of Fish and Game (now Fish and Wildlife), 2005). The project will further the following statewide recommended action: g) Federal, state, and local agencies and nongovernmental conservation organizations, working with private landowners and public land managers, should expand efforts to restore and conserve riparian communities. In addition, recommended actions for the marine region include: d) the state should increase efforts to restore coastal watersheds.

4. **Support of the public:** The project is supported by State Senator Hannah Beth Jackson, State Assemblymember Monique Limon, Santa Barbara Urban Creeks Council, and Explore Ecology. See Project Letters, Exhibit 5.
5. **Location:** The proposed project is located within the coastal zone of the City of Santa Barbara.
6. **Need:** The proposed project is ready to move to the construction phase this summer spring. Construction could not begin in a timely manner without Conservancy funds.
7. **Greater-than-local interest:** Once restored, the property, would provide enhanced fish and wildlife habitat in this urban watershed, and improved visitor experience to the open space, along with opportunities for environmental education. Currently, the property connects visitors and locals alike to a network of public parks and open space lands in the immediate vicinity totaling approximately 320 acres. The perennial stream at this location is an easily accessible educational resource that may be used by school groups and summer camps, including those visiting the watershed resource center. In addition, the creek provides critical habitat to the federally-endangered Southern California steelhead.
8. **Sea level rise vulnerability:** The project site is located between 33 and 50 feet above sea level and will not be directly affected by sea level rise in the next 100 years. The latest Our Coast, Our Future (OCOF) sea level rise scenario flood mapper does not show sea level rise affecting the project site over the next 500 years. Sea level rise scenarios were not considered as part of project design.

Additional Criteria

9. **Leverage:** See the “Project Financing” section above.
10. **Readiness:** The City is well organized and staffed, and has completed a number of previous riparian restoration projects in a timely manner.
11. **Realization of prior Conservancy goals:** “See “Project History” above.”
12. **Vulnerability from climate change impacts other than sea level rise:** Projections of future climate changes in California are still uncertain but suggest we will see wetter winters and drier summer conditions. Winter rains are expected to increase in overall intensity, but not in duration. Changes in precipitation patterns may impact steelhead migration opportunities in the region. Increased storm intensity is also likely to result in greater flood risks throughout the watershed. Less frequent, higher intensity storms may also reduce infiltration rates and lower ground water recharge. Increased summer temperatures, decreased duration of rainfall, and reduced ground water levels will increase the chances that currently perennial sections of streams, like the project site, may become intermittent in the future. The project designs will allow for increased flood plain connectivity, which will help to reduce peak flood flows and increase ground water recharge opportunities. The project will also address currently incised and eroded creek banks, which will be laid back and vegetated with deep-rooted plant species to allow them to better withstand flood flows in the future. The project will include planting of 500 native trees, which will sequester carbon once established.
13. **Minimization of greenhouse gas emissions:** Implementation of the project will involve the planting of nearly 5,000 native container plants including 475 native trees and additional willow stakes which will act as a carbon sink to offset the greenhouse gas emissions that will

result from construction related activities. The project will have a net benefit in reducing greenhouse gas emissions over the life of the project. The project will also balance cut and fill quantities to limit the need for trucking of materials to and from the site. Maintenance activities will be scheduled in an efficient manner to limit trips to the site and will primarily consist of hand tools and activities that do not result in greenhouse gas generation.

CONSISTENCY WITH LOCAL COASTAL PROGRAM POLICIES:

The City of Santa Barbara’s Local Coastal Plan (LCP), amended in 2004, addresses the protection of biotic, riparian, and marine resources, as well as water quality of the City’s coastal zone creeks. LCP Creek Guidelines Policy 6.1 states that the City shall “protect, preserve, and where feasible restore the biotic communities designated in the City’s Conservation Element of the General Plan...consistent with Public Resources Code Section 30240” and, LCP Policy 6.8 states that “the riparian resources, biological productivity, and water quality of the City’s coastal zone creeks shall be maintained, preserved, enhanced and, where feasible, restored.” The proposed restoration is consistent with these policies in that the biotic and water resources on the property will be protected and restored through this grant.

COMPLIANCE WITH CEQA:

Staff has reviewed the Habitat Preservation, Restoration, Maintenance and Monitoring Plan prepared for the project (Exhibit 4) and determined that the project is categorically exempt from the California Environmental Quality Act under 14 Cal. Code of Regulations Section 15333. Section 15333 addresses small habitat restoration projects and the proposed project is exempt because it is less than five acres in size and meets the following criteria pursuant to the section: a) avoidance and mitigation measures will be taken so that no significant adverse impact on endangered, rare or threatened species or their habitat will occur; b) no hazardous materials exist on the site; c) the project will not result in significant impacts when viewed in connection with effects of past, other current, or probable future projects. The project will revegetate a disturbed area with native plant species and revegetate and stabilize stream bank habitat to improve habitat for amphibians and native fish and reduce or eliminate erosion and sedimentation, as outlined in the Restoration Plan, Exhibit 4.

Upon approval, staff will file a Notice of Exemption for the project.