

COASTAL CONSERVANCY

Staff Recommendation  
December 6, 2018

**CHORRO CREEK FLOODPLAIN RESTORATION**

Project No. 18-30-01  
Project Manager: Timothy Duff

**RECOMMENDED ACTION:** Authorization to disburse up to \$400,000 to the Bay Foundation of Morro Bay for restoration of a floodplain along a one-half mile reach of lower Chorro Creek in San Luis Obispo County and adoption of CEQA findings.

**LOCATION:** Chorro Creek Ecological Reserve, Lower Morro Bay Watershed, San Luis Obispo County.

**PROGRAM CATEGORY:** Resource Enhancement

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**EXHIBITS**

- Exhibit 1: [Location & Site Maps](#)
- Exhibit 2: [Floodplain Restoration Plans](#)
- Exhibit 3: [Mitigated Negative Declaration for the 2017 Fisheries Habitat Restoration Project and Mitigation Measures, Monitoring and Reporting Program](#)
- Exhibit 4: [Project Letters](#)
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**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 four hundred thousand dollars (\$400,000) to the Bay Foundation of Morro Bay (“Bay Foundation”) to restore floodplain habitat along Chorro Creek, as shown on Exhibits 1 and 2 to the accompanying staff recommendation. This authorization is subject to the following conditions:

1. Prior to commencement of construction and disbursement of any Conservancy funds, the Bay Foundation shall submit for the review and approval of the Executive Officer of the Conservancy the following items:
    - a. 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.
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- b. Evidence that the Bay Foundation can provide all remaining funds needed to complete construction.
  - c. Evidence that all applicable permits and approvals for the project have been obtained.
  - d. Evidence that the grantee has entered into an agreement with the project site owner sufficient to enable the grantee to implement, operate, and maintain the project.
  - e. A plan for acknowledgement of Conservancy funding.
2. In implementing the project, the Bay Foundation shall comply with all mitigation measures and monitoring and reporting requirements for the project that are identified in the *2017 Fisheries Habitat Restoration Project Environmental Assessment and Initial Study/Mitigated Negative Declaration*, and the Mitigation Monitoring and Reporting Program (MMRP), adopted by the California Department of Fish and Wildlife on February 28, 2018 pursuant to the California Environmental Quality Act (“CEQA”) and in any permits, approvals or additional environmental documentation required for the project.”

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.
3. The Conservancy has independently reviewed and considered the the *2017 Fisheries Habitat Restoration Project Environmental Assessment and Initial Study/Mitigated Negative Declaration (IS/MND)* and the Mitigation Monitoring and Reporting Program (MMRP) adopted by the California Department of Fish and Wildlife on February 28, 2018 pursuant to the California Environmental Quality Act (“CEQA”) and attached to the accompanying staff recommendation as Exhibit 4. The Conservancy finds that the proposed project as designed and mitigated avoids, reduces, or mitigates the potentially significant environmental effects to a less-than-significant level, and that there is no substantial evidence based on the record as a whole that the Project may have a significant effect on the environment, as defined in 14 Cal. Code Regulations Section 15382.
4. The Bay 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.”

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### PROJECT SUMMARY:

Staff recommends disbursement of up to \$400,000 to the Bay Foundation of Morro Bay (Bay Foundation) for restoration of floodplain along a one-half mile stretch of Chorro Creek in San

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Luis Obispo County. This project is of critical importance to the Conservancy's long-term protection efforts in the Morro Bay National Estuary that began over 30 years ago with the initiation of the Conservancy's Morro Bay Watershed Enhancement Program.

The proposed 2.5-acre restoration project site is located within the 580-acre Chorro Creek Ecological Reserve (CCER) that is owned and managed by the California Department of Fish and Wildlife (CDFW). The CCER includes approximately 1.5 miles of Chorro Creek, and the project site extends over an approximate one-half mile reach of the creek (Exhibit 2).

A combination of channel levee construction, channel straightening and incision, and recountouring of the floodplain to facilitate past agricultural practices have adversely impacted the creek and floodplain. In this altered condition lateral connectivity to the floodplain has been reduced, and deeper water depths have led to channel incision, further limiting the creek's ability to access the floodplain, especially along downstream reaches.

For the past several years the Bay Foundation has been working with CDFW to plan, design and permit this restoration project with funding provided by CDFW. The Bay Foundation has also been awarded CDFW funds to construct the project and will coordinate with CDFW to complete and monitor it.

The goal of the proposed project is to restore and enhance floodplain connectivity and riparian vegetation on Chorro Creek for steelhead and other wildlife/aquatic species, while reducing sediment loading to the Morro Bay estuary. Specifically, the project will improve floodplain conditions at the site by: 1) expanding a levee breach to route flow to secondary channels, 2) grading a lower floodplain adjacent to the two secondary channels, 3) planting and seeding riparian vegetation, and 4) creating a gentler slope at a creek road crossing. The first two actions will enhance floodplain connectivity, increase groundwater, and provide moisture for vegetation colonization. Grading of the secondary channel floodplains will also help to reduce future erosion. Riparian plantings will aid in vegetation establishment on the floodplain. Finally, the channel banks at the road crossing will be re-sloped to allow for a more gradual approach across the creek, reducing erosion into the stream and improving access across the creek (Exhibit 3).

The project includes placement of approximately 36 large wood structures in the creek that will provide a structural component to the creek system by wracking debris and inducing bar and pool formation as well as providing important cover and foraging areas for fish. These features will also help to create local scour holes for riffle and pool enhancement, flow deflection, and cover and edge complexity. The project will make use of trees salvaged from elsewhere in the project site to create the structures. A total of 10 pools will be created and riparian vegetation will be (re) established along both banks.

The project includes a monitoring component to measure, and in part address, performance of the restoration project. The Bay Foundation will implement the monitoring component including post-project monitoring for a minimum of three years to ensure project objectives are met. The California Conservation Corps will be contracted to maintain plants and plant replacements as needed. Baseline surveys of the post-project channel topography will also be performed and regular channel surveys will be repeated to assess channel and bed stability, lateral and longitudinal channel migration, and to ensure establishment of dynamically stable channels. The project site will also be monitored during higher flows to capture the extent and duration of floodplain inundation at the site. Water quality is already monitored extensively in the watershed by the Bay Foundation and this will continue.

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**Site Description:** The proposed 2.5-acre project site is located within the 580-acre Chorro Creek Ecological Reserve (CCER) that is owned and managed by the CDFW. The CCER contains two contiguous parcels (Parcels A and B) bisected by Highway One and spans approximately 1.5 miles of Chorro Creek. (Exhibits 1 and 2). The project site is located within Parcel B approximately four miles upstream from the creek mouth that drains into Morro Bay estuary. Two primary tributaries, Walters Creek and San Luisito Creek, enter Chorro Creek above and below the site. Several small drainages originating on the flanks of Hollister Peak flow across the floodplain and are diverted into small drainage ditches on the project site.

The creek corridor and floodplain contain healthy stands of willow trees, coyote brush, and California coffeeberry. The creek provides high quality habitat for the federally threatened south-central California coast steelhead trout, California red-legged frog, and southwestern pond turtle. The floodplain adjacent to Chorro Creek site consists of mostly non-native herbaceous vegetation and non-native annual grasslands with some native willows and shrubs. Native grassland species have been largely replaced by non-native, weedy species as a result of past agricultural practices, and since cattle grazing operations were removed in 2005 thistle densities have also increased. Irrigated agricultural operations ceased when the grantee acquired the Reserve property in 2002. No existing structures are within the project area and no active management of the property is currently taking place.

The land uses in the Chorro Creek subwatershed include agriculture, rural residential, recreation, multi-use public lands, and urban lands. Livestock grazing is the primary land use, but irrigated crops are present as well. Over half of the land in the watershed is classified as rangeland. Typical rangeland operations consist of highly productive grasslands supporting cow-calf enterprises. Other watershed landholdings include the California Men's Colony (CMC), California National Guard Camp San Luis Obispo (Camp SLO), United States Forest Service (USFS), California Polytechnic State University at San Luis Obispo, California State and County Parks, including a golf course, botanical garden, and open space. Brushlands are also prominent in the headwaters of the Chorro Creek watershed.

**Grantee Qualifications:** The Bay Foundation of Morro Bay has a long history of working with the Conservancy on land acquisition and restoration projects in the Morro Bay Watershed and along Chorro Creek. For the past 15 years the Bay Foundation has been the Conservancy's local partner developing the proposed restoration plans for the CCER together with the CDFW, and will serve as the grantee for both state agencies on this project. For the past several years the Bay Foundation has coordinated with CDFW to plan, design and permit this restoration project with funding provided by CDFW. The Bay Foundation has also been awarded CDFW funds to construct the project and will coordinate with CDFW to complete and monitor it.

Bay Foundation staff have implemented numerous restoration projects in the Chorro Creek watershed including the Walters Creek Restoration Project and Dairy Creek Upslope Erosion Control Project. In addition, they have managed riparian fencing projects protecting 12 miles of stream length. Since 2004 the Bay Foundation has owned and monitored annually a conservation easement, acquired with Conservancy funds, over a 1,700 acre ranch in the upper Morro Bay Watershed.

**Project History:** In 2002 the Conservancy provided funding to the Bay Foundation for acquisition of what is today named the Chorro Creek Ecological Reserve, and also provided funds to the Bay Foundation for initial restoration planning. In 2003 the property was transferred

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to CDFW. For the past 15 years the Bay Foundation has been working with staff of the Conservancy and CDFW to develop the subject restoration project. Over the past several years CDFW has provided funds to the Bay Foundation to complete designs, secure the necessary permits, and construct the project. In 2016 Bay Foundation and Conservancy staff met to discuss funding to construct the project, and in 2017 Conservancy staff identified an appropriate fund source and agreed to request Conservancy approval in 2018.

### PROJECT FINANCING

<b>Coastal Conservancy</b>	<b>\$400,000</b>
State Department of Fish and Wildlife	\$1,069,000
Bay Foundation	<u>\$24,000</u>
<b>Project Total</b>	<b>\$1,493,000</b>

The anticipated source of Conservancy funds for this project is an appropriation from the Habitat Conservation Fund (HCF), which was created by the California Wildlife Protection Act of 1990, Fish and Game Code Sections 2780-2799.6 (Proposition 117). Pursuant to Fish and Game Code Section 2786, HCF funds may be used for the acquisition, restoration, or enhancement of aquatic habitat for spawning and rearing of anadromous salmonids (subsection e) or riparian habitat (subsection f). Restoration of the subject property will serve to protect sensitive aquatic habitat for the federally threatened south-central California coast steelhead trout (an anadromous salmonid), California red-legged frog and southwestern pond turtle. Riparian habitat that supports the federally endangered southwest willow flycatcher will also be restored.

Matching funds are being provided by the State Department of Fish and Wildlife Fisheries Restoration Grant Program and the Bay Foundation. The California Conservation Corps is providing \$98,000 in in-kind services to plant and maintain restored riparian areas over three years.

### 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), regarding enhancement of coastal resources, as described below.

Pursuant to Section 31251, the Conservancy may award grants to nonprofit organizations 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 adversely impacted by human activities.

Consistent with Section 31252, the Chorro Creek watershed is identified in the County of San Luis Obispo Local Coastal Plan as requiring public action to resolve existing or potential resource protection problems. See "Consistency with Local Coastal Program Policies" section, below.

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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 25 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 2.5 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 E**, restoration of the property will improve instream fish habitat.

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 Chorro 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. This project will advance two of the Goals for California's Future: 2) preserve and steward the state's lands and natural resources, and 3) build sustainable regions that support healthy, livable communities.

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- *California Water Action Plan* (2014). California Natural Resources Agency, the California Environmental Protection Agency, and the California Department of Food and Agriculture developed this Water Action Plan to meet three broad objectives: more reliable water supplies, the restoration of species and habitat, and a more resilient, sustainably managed water resources system. By restoring a one-half mile stretch of Chorro Creek, this project will advance the following goal: Goal #4, which identifies restoration of coastal watersheds as a priority action in order to protect and restore important ecosystems, including the South-Central California Coast Steelhead.
  - *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 has broad public support as shown in the letters attached as Exhibit 5.
  5. **Location:** The proposed project is located within the coastal zone of San Luis Obispo County.
  6. **Need:** Conservancy funds are needed to match other funds obtained to complete the project.
  7. **Greater-than-local interest:** The proposed project will protect several federally listed species including federally threatened south-central California coast steelhead trout, California red-legged frog, southwestern pond turtle, and federally endangered southwest willow flycatcher.
  8. **Sea level rise vulnerability:** This project is located at an approximate elevation that ranges from 50 feet to 75 feet. Thus, it is above the anticipated sea level rise of 55-inches by 2100, and will not be directly impacted by sea level rise.
  9. **Leverage:** See the “Project Financing” section above.
  10. **Readiness:** The grantee intends to initiate the project in 2019.
  11. **Realization of prior Conservancy goals:** See “Project History” above.

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

The San Luis Obispo Estero District Local Coastal Plan certified by the Coastal Commission on February 25, 1988 (and revised January 7, 2009 and certified by the Coastal Commission), Chapter 6, Section V. *Morro Bay Estuary and its Watershed*, Policy A.1. calls for slowing the process of bay sedimentation and keeping Chorro Creek “free of excessive sediment and other pollutants to maintain fresh water flow into the estuary, nurture steelhead and support other plant and animal species.” The proposed restoration project is consistent with this policy.

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### **CEQA COMPLIANCE:**

Staff has independently evaluated the *2017 Fisheries Habitat Restoration Project Environmental Assessment and Initial Study/Mitigated Negative Declaration (IS/MND)* and the Mitigation Monitoring and Reporting Program (MMRP) adopted by the California Department of Fish and Wildlife (CDFW) on February 28, 2018, which includes a project-level analysis of the potential impacts of the Chorro Creek Floodplain Restoration Project as well as general mitigation measures and mitigation measures specific to the Chorro Creek project. Staff concurs that there is no substantial evidence that the proposed project will have a significant effect on the environment as mitigated. Staff therefore recommends that the Conservancy find that the project as mitigated avoids, reduces or mitigates the possible significant environmental effects to a level of less-than-significant and that there is no substantial evidence that the project will have a significant effect on the environment as that term is defined by 14 Cal. Code Regs. §15382.

The IS/MND identified that the project could have potentially significant impacts to biological resources, cultural resources, geology and soils, hazards and hazardous materials, hydrology and water quality, and noise. The IS/MND identifies standard mitigation measures to ensure that potential impacts of all the covered projects are reduced to a less than significant level. The IS/MND also identified project-specific mitigation measures. The mitigation measures for the potentially significant effects are summarized below.

### **Standard Mitigation Measures**

#### *Biological Resources*

Mitigation measures for biological impacts include restrictions on timing of construction activities to avoid sensitive periods for fish spawning and migrating and bird nesting; guidelines for dewatering waterways; site best management practices (BMPs) to avoid contamination of habitat areas; minimization and containment of staging areas; BMPs for construction activities within the stream channel area; BMPs for avoiding and minimizing impacts to wildlife on the site, including pre-construction surveys; BMPs to avoid the transport of aquatic invasive species (AIS).

#### *Cultural Resources*

Measures to mitigate potential cultural resource impacts include completion of cultural resource surveys by an archaeologist at any sites with the potential to be impacted prior to any ground disturbing activities; if cultural resources are identified, before work can proceed protective measures such as fencing, monitoring, or redesign of proposed work will be implemented; if significant resources, including human remain, are discovered work shall stop not resume until an archaeologist and/or coroner evaluates the materials and offers recommendations for further action.

#### *Geology and Soils*

To avoid and reduce impacts from erosion, mitigation measures require installation and maintenance of erosion control and prevention best management practices (BMPSs) during and after construction, and winterizing areas by smoothing and compacting unfinished surfaces, and installing culverts, silt fences, and other erosion control devices as needed.

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### *Hazards and Hazardous Materials*

Standard BMPs will be implemented to avoid contamination of the site with hazardous materials, including: no equipment maintenance will be performed within or near the stream channel where pollutants (such as petroleum products) from the equipment may enter the channel via rainfall or runoff; appropriate spill containment devices (e.g., oil absorbent pads, tarpaulins) will be used when refueling equipment; and any and all equipment will be removed from the streambed and flood plain areas at the end of each workday.

### *Hydrology and Water Quality*

Mitigation measures for hydrology and water quality impacts include BMPs for avoiding and minimizing impacts to water quality and fish; instream work shall be conducted during the period of lowest flow.

### *Noise*

Mitigation measures for noise impacts include personnel wearing hearing protection while operating or working near noisy equipment.

### **Project Specific Mitigation Measures**

- The Bay Foundation will not proceed with on the ground implementation until all necessary permits and consultations are secured. Work in flowing streams is restricted per the Army Corp of Engineers Regional General Permit. Actual project start and end dates, within this timeframe, are at the discretion of the California Department of Fish and Wildlife.
- During project activities, all trash that may attract predators will be properly contained, removed from the work site, and disposed of regularly. Following construction, all trash and construction debris will be removed from work areas.
- Final structure design and placement will be determined by field consultation between CDFW and Bay Foundation staff. All habitat improvements will follow techniques described in the *California Salmonid Stream Habitat Restoration Manual*.
- The Bay Foundation shall notify the CDFW Project Manager a minimum of five working days before the project site is de-watered and the stream flow diverted. The notification will provide a reasonable time for Grantor personnel to oversee the implementation of the water diversion plan and the safe removal and relocation of salmonids and other fish life from the project area. If the project requires dewatering of the site, and the relocation of salmonids, the Grantee will implement the following measures to minimize harm and mortality to listed salmonids:
  - Fish dewatering and relocation activities shall only occur between June 15 and October 31 of each year.
  - Additional measures to minimize injury and mortality of salmonids during fish relocation and dewatering activities shall be implemented as described in Part IX, pages 52 and 53 of the *California Salmonid Stream Habitat Restoration Manual*.
  - The Grantee shall minimize the amount of wetted stream channel dewatered at each individual project site to the fullest extent possible as approved by the

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CDFW Grant Manager and pursuant to conditions in the USACE Regional General Permit and NMFS Biological Opinion.

- All electrofishing shall be performed by a qualified fisheries biologist and conducted according to the National Marine Fisheries Service, Guidelines for Electrofishing Waters Containing Salmonids Listed under the Endangered Species Act, June 200
- USFWS Approved fisheries biologists will provide fish relocation data via the Grantee to the CDFW Grant Manager on a form provided by CDFW.

Upon approval of the project, Conservancy staff will file a Notice of Determination.