

COASTAL CONSERVANCY
Staff Recommendation

May 05, 2020

**PIPELINE REPLACEMENT PLANNING
CARMEL RIVER LAGOON**

Project No. 20-005-01
Project Manager: Tom Gandesbery

RECOMMENDED ACTION: Authorization to disburse up to \$750,000 to the Carmel Area Wastewater District to develop plans, engineering designs, permit applications and environmental review documents for relocation of a wastewater pipeline in the Carmel River Lagoon, which will help facilitate the Carmel River Floodplain Restoration and Environmental Enhancement project, in Monterey County.

LOCATION: Lower Carmel Valley, Monterey County

PROGRAM CATEGORY: Integrated Coastal and Marine Resources Protection

EXHIBITS

- Exhibit 1: [Project Location Map](#)
Exhibit 2: [Project Maps and Photos](#)
Exhibit 3: [Project Letters](#)
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RESOLUTION AND FINDINGS:

Staff recommends that the State Coastal Conservancy adopt the following resolution pursuant to Section 31220 of the Public Resources Code:

"The State Coastal Conservancy hereby authorizes the disbursement of an amount not to exceed seven hundred fifty thousand dollars (\$750,000) to the Carmel Area Wastewater District ("the grantee") to prepare plans, designs, permit applications and environmental review documents for the replacement of a wastewater pipeline in the Carmel River Lagoon"

Prior to commencement of the project, the grantee shall submit for the review and written approval of the Executive Officer of the Conservancy (Executive Officer) the following:

1. A detailed work program, schedule, and budget.
2. Names and qualifications of all contractors to be retained in carrying out 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 authorization is consistent with Chapter 5.5 of Division 21 of the Public Resources Code, regarding integrated marine and coastal resources.
 2. The proposed project is consistent with the current Conservancy Project Selection Criteria and Guidelines.”
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PROJECT SUMMARY:

Staff recommends that the Conservancy authorize disbursement of up to \$750,000 to the Carmel Area Wastewater District (District) to develop plans, engineering designs, permit applications and environmental review documents for relocation of a wastewater pipeline that crosses over the south arm of Carmel River Lagoon (Exhibit 1). Relocating the pipeline would protect coastal water quality and the sensitive habitat of the Carmel River Lagoon, and would also help facilitate the Carmel River Floodplain Restoration and Environmental Enhancement Project (CRFREE), which cannot be fully implemented until after the pipeline is relocated out of the path of the CRFREE project flood diversion.

The pipeline consists of two pipes: a 24-inch pipe conveying treated wastewater to the District’s ocean outfall and a 6-inch pipe conveying raw sewage to the wastewater treatment facility from communities south of the lagoon (Exhibit 2). Both pipes are under pressure (“force-main”). The pipeline is vulnerable to damage from high river flow events that may occur in conjunction with extreme weather conditions, for example from driftwood impacting the structures. Damage to the pipeline could release raw sewage into the lagoon with potentially disastrous consequences for fish and wildlife. In addition, the lagoon mouth at Carmel River State Beach is a popular destination for water-contact recreation and so a break in the raw sewage pipe would pose a threat to public health. Several years ago, the District identified undergrounding the pipelines as the preferred approach both in the context of facilitating CRFREE as well as when the pipeline reached replacement age.

Based on work by its hydrologist, the District notified the CRFREE design team in 2015 that the CRFREE project would likely have a significant impact on the pipeline infrastructure. In 2017, during the environmental analysis for the Carmel River Floodplain and Environmental Enhancement Project (CRFREE), hydrology consultants also found that the CRFREE may increase the chance that flood waters would damage the pipeline. The CRFREE is located immediately upstream of the lagoon and Highway 1 and could result in more flow into the southern portion of the lagoon in certain high flow conditions (Exhibit 2). The lead agency for implementing CRFREE is the County of Monterey, and the project will take place on land owned by the Big Sur Land Trust. During EIR development for CRFREE it was determined that the pipelines should be relocated underground to facilitate CRFREE. Because the District does not have an immediate need to underground the pipeline, absent this work the CRFREE project would be delayed indefinitely. However, to help make CRFREE a reality, the District is willing to complete the

project in the near term, provided outside funding is secured. Hence, the CRFREE Environmental Impact Report (<https://www.co.monterey.ca.us/government/departments-i-z/resource-management-agency-rma-/planning/current-major-projects/carmel-river-free>) includes mitigation measures HF-3, HF-4 and HF-5 (pages 384 and 385 of FEIR) that require the County to 1) phase construction of CRFREE to avoid impacts to the pipeline until it is undergrounded (HF-3); 2) work with CAWD to obtain funding to complete the pipeline undergrounding project (HF-4); and 3) coordinate the two projects once sufficient funding has been secured for the District's pipeline project and the District is ready to implement the project (HF-5).

In 2018, the District completed preliminary plans and a Mitigated Negative Declaration for the undergrounding project as a good faith effort for the CRFREE project. Subsequently, due to foreseeable constructability issues with the preliminary plans, the District determined that the new pipeline should be installed under the lagoon using directional drilling techniques rather than by excavation in the lagoon. In addition, FEMA has indicated that it will provide grant funds for both the CRFREE project and the pipeline undergrounding. As a result, the proposed project will update the design plans to address the preferred construction technique, prepare a new environmental review document that satisfies both the California Environmental Quality Act (CEQA) and the National Environmental Policy Act (NEPA), and prepare all necessary permit applications. Environmental review pursuant to NEPA is required because of the federal funding (FEMA) that the project will receive.

The CRFREE has been a priority for the Conservancy and other resource agencies and nonprofit conservation groups for over a decade. The Conservancy previously granted funds to the Big Sur Land Trust for project planning and design (see "Project History" below). When constructed, CRFREE will reduce flood levels in the surrounding community, including at the District's treatment plant (Exhibit 2) and will have significant habitat benefits for aquatic and riparian species. In an effort to facilitate the CRFREE project, Conservancy staff provided technical assistance to help the County and the District reach agreement on how to address the potential impacts to the pipeline; Conservancy staff have also advocated with the California Office of Emergency Services and the Federal Emergency Management Agency for funding for both the CRFREE project and the District's undergrounding project under the flood hazard mitigation program.

Site Description: The Carmel River lagoon and wetlands lie along the bottom-lands of the lower Carmel River and immediately east of the sand bar that frequently exists at Carmel River State Beach. The lagoon and wetlands are designated as a preserve within the State Beach. The wetlands are dominated by California tules in the fresh to brackish water, and pickleweed, fleshy jaumea, and salt grass near and in the salt marsh. The marsh and lagoon attract many birds including ducks, mergansers, grebes, plovers, and sandpipers. Both brown and white pelicans frequent the lagoon, as well as Canada geese, herons, and rails. The ease with which birds can be observed on the lagoon and the surrounding sandy and marsh areas, and the relative frequency of their occurrence, make this a favorite site for birders.

The Carmel River provides important spawning and rearing habitat for SCCC steelhead. In the 2013 **South-Central California Coast Steelhead Recovery Plan** (SCCCS Recovery Plan) prepared

by the National Marine Fisheries Service, the Carmel River steelhead run is identified as a Core 1 population, which is the highest priority for recovery in the plan. The main impacts to the Carmel River steelhead come from excess water diversions, fish passage barriers and decreased lagoon habitat. The Carmel River Lagoon serves a vital role for the Carmel River steelhead in all life form stages. Numerous studies have shown that a lagoon is crucial habitat for juvenile steelhead, allowing them to grow to a size that supports higher marine survival. While the District owns and operates a wastewater treatment plant located within the historic floodplain of the lagoon, the pipeline is contained within a District-owned easement through the Carmel River State Park (Exhibit 2).

The area around the lagoon is largely bordered by residential development to the north and south. Immediately to the west is the popular sandy stretch of the Carmel River State Beach and the Pacific Ocean; to the east is Highway 1. The District's treatment plant is close to the highway situated on relatively high ground between the two "arms" of the lagoon (Exhibit 2). The plant serves the entire City of Carmel-by-the-Sea, Pebble Beach, portions of Carmel Valley, as well as communities south of the lagoon such as Point Lobos State Park, and as far south as Carmel Highlands.

Grantee Qualifications: The District is well qualified to undertake this project because it routinely undertakes plans and studies of its infrastructure within its service territory. Recently the District successfully completed a set of upgrades to its treatment plant totaling more than \$15 million dollars in construction costs. The District is fiscally sound, and its board of directors is supportive of both the pipeline undergrounding and CRFREE projects.

Project History: As mentioned above, the Conservancy's involvement with this project began with a \$250,000 grant in 2008 to the Big Sur Land Trust to undertake planning and design for what was then referred to as the Lower Carmel River Floodplain Restoration of the Odello East property. The Conservancy was subsequently awarded a \$925,000 grant from the U.S Fish and Wildlife Service to support planning and design of the project which culminated in conceptual level designs and a CEQA/NEPA analysis. However, during the planning process, the Land Trust determined that the scope of the project would need to expand to include flood water connectivity under Highway 1. Additionally, and because the project would involve construction under the Highway 1, it was determined that lead agency responsibility for CRFREE should shift from the Land Trust to the County of Monterey. The Land Trust and County then undertook a re-analysis of project impacts related to a change in hydrology which, in turn, indicated an increase risk to the District's pipeline.

PROJECT FINANCING

Coastal Conservancy	\$750,000
Project Total	\$750,000

The anticipated source for the Conservancy funds is an appropriation from the Safe Drinking Water, Water Quality and Supply, Flood Control, River and Coastal Protection Bond Act of 2006,

Public Resources Code Section 75001 et seq. (Proposition 84). Proposition 84 authorizes the Conservancy's use of these funds for protection of beaches, bays and coastal waters and watersheds, including projects to prevent contamination and degradation of coastal waters and watersheds (PRC Section 75060). Projects funded with Proposition 84 funds must be consistent with the Conservancy's enabling legislation (Division 21 of the Public Resources Code).

Public Resources Code Section 75060(e) specifically allocates funds to the Conservancy for the protection of Monterey Bay and its watersheds. "Protection," as defined in Public Resources Code Section 75005(m), includes "those actions necessary to prevent harm or damage to persons, property or natural resources." Consistent with these provisions, the proposed project will protect the Carmel River Lagoon, which is within the Monterey Bay watershed, by planning for relocation of the sanitary wastewater pipeline to underground, which will decrease the chance of an accidental discharge of sewage and treated wastewater into the lagoon. The proposed project will also facilitate enhancement of the lagoon function and resources by planning the pipeline relocation that needs to occur before CRFREE can be fully implemented. The proposed project is consistent with Division 21 of the Public Resources Code, as described in the "Consistency with Conservancy's enabling legislation" section below. Accordingly, the proposed project is consistent with the funding requirements of Proposition 84 funds.

CONSISTENCY WITH CONSERVANCY'S ENABLING LEGISLATION:

The proposed project would be undertaken pursuant to Chapter 5.5 (Section 31220) of the Conservancy's enabling legislation, Division 21 of the Public Resources Code, regarding Integrated Coastal and Marine Resources Protection. Section 31220(a) authorizes the Conservancy to award grants for projects that protect coastal and marine habitat water quality.

Grants awarded pursuant to Section 31220(a) must meet one or more of the objectives of the subsections of Section 31220(b). The proposed project would meet the following objectives: (b)(1) reduce contamination of waters within the coastal zone or marine waters; (b)(2) protect and restore fish and wildlife habitat within a coastal watershed; (b)(3) reduces threats to coastal and marine fish and wildlife. The proposed project will protect the habitats and water quality of Carmel River Lagoon by reducing the threat of a sewage spill into the lagoon, a threat potentially exacerbated by CRFREE's effect on flow in the pipeline area.

Consistent with Section 31220(a), staff has consulted with the State Water Resources Control Board in the development of the project to ensure consistency with the Clean Beaches Program, Chapter 3 (commencing with Section 30915) of Division 20.4 of the Public Resources Code. Consistent with Section 31220(c), the project is consistent with local watershed management plans. (See "Consistency with Local Watershed Management Plan/State Water Quality Control Plan," section below). Consistent with Section 31220(c), the proposed plans and designs will include a monitoring and evaluation component.

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

Consistent with **Goal 6, Objective F** of the Conservancy's 2018-2022 Strategic Plan, the proposed project will complete plans to improve water quality to benefit the coastal resources in Carmel River Lagoon.

Consistent with **Goal 15, Objective C** of the Conservancy's 2018-2022 Strategic Plan, the proposed project is the result of Conservancy staff's work with partner organizations to achieve a conservation objective through project facilitation and technical assistance.

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:** The project is consistent with
 - Safeguarding California Plan: 2018 Update. Principle 7 of the Safeguarding California plan addresses the vulnerability of critical infrastructure to impacts of climate change. It specifically calls for retrofitting infrastructure to ensure critical services continue even during climate extremes. Undergrounding the sewer pipeline will ensure that it continues to function even during increased flooding or ocean storm surges anticipated with climate change.
 - 2005 California Wildlife Action Plan sets forth goals for the Central Coast region that include protecting sensitive species and important wildlife habitat and restoring anadromous fish populations. Protecting Carmel Lagoon from a potential sewage spill helps protect steelhead.
4. **Support of the public:** The proposed project is supported by the County of Monterey, Big Sur Land Trust, State Parks, Trout Unlimited, the Carmel River Watershed Conservancy, and others (Exhibit 3: Project Letters).
5. **Location:** The proposed project is located within the coastal zone of the County of Monterey, just south of the City of Carmel-by-the-Sea.
6. **Need:** The District is a small, special district agency with limited financial capacity. While the District recognizes that the pipeline is vulnerable to damage, the District has determined that pipeline replacement is not a high enough priority to be replaced within the timeframe of CRFREE. The District needs financial assistance in order to underground the pipeline now

as needed for the CRFREE project to advance. Without the Conservancy's support, neither project is likely to occur.

7. **Greater-than-local interest:** SCCC steelhead is a federally threatened species and the Carmel River population has been identified as one of the highest priorities for recovery. The proposed project will protect spawning and rearing habitat for SCCC steelhead. The Lagoon also supports a variety of migratory waterfowl and fish species.
8. **Sea level rise vulnerability:** The project is in a coastal lagoon that will be significantly impacted by rising sea levels; therefore, the project will be planned and designed to address that risk.

Additional Criteria

9. **Urgency:** SCCC steelhead populations are at historically low numbers in the Carmel River and several years of drought have exacerbated the adverse conditions caused by over-pumping of the river's water. Compounding the problem is the lack of floodplain habitat in the lower river system. Implementing this project will help facilitate the CRFREE project which will restore valuable floodplain habitat to the lower Carmel River system.
10. **Resolution of more than one issue:** The project will address a major impediment to implementation of the Carmel River FREE project and will replace a portion of the District's infrastructure that is vulnerable to failure in an extreme weather scenario.
11. **Conflict resolution:** Potential impacts to the District's pipeline became a significant obstacle to advancing the CRFREE project. After several discussions, the District, the County and BSLT arrived at an agreement to work cooperatively to facilitate the pipeline undergrounding project.
12. **Innovation:** The District will utilize directional drilling to place the pipeline under the lagoon and thereby greatly reducing the environmental impact to the lagoon.
13. **Readiness:** The District is ready to manage this project and will sign a memorandum of agreement with the County of Monterey and Big Sur Land Trust to help implement the CRFREE project by remediating the pipeline.
14. **Realization of prior Conservancy goals:** This project is part of a larger goal to restore habitat in the Carmel River Lagoon and its watershed to benefit steelhead and other aquatic species. In 2004, the Conservancy provided a \$4 million grant to State Parks for restoration of the south arm of the lagoon. Undergrounding the District's pipeline will remove an ongoing threat to those restored habitats. See also "Project History" above.
15. **Cooperation:** The District, the County and BSLT are working together to advance the pipeline undergrounding and CRFREE projects. By working together on the two projects, the three organizations are able to ensure the best outcomes for all of the potentially impacted resources and the most effective use of public funds.

CONSISTENCY WITH LOCAL WATERSHED MANAGEMENT PLAN/STATE WATER QUALITY CONTROL PLAN:

Under PRC Section 31220(c), projects undertaken pursuant to PRC Section 31220(b) must be consistent with the following, if available and relevant to the project: Integrated Watershed Resource Management Programs (IWRMP); local watershed management plans; and water quality control plans, adopted by the state and regional water boards.

The proposed project is consistent with the Monterey Peninsula, Carmel Bay, and South Monterey Bay Integrated Regional Water Management Plan, 2019 Update (Monterey IRWMP), the scope of which includes the Carmel River. In particular, the proposed project is consistent with the following objectives: 1) Environment Protection and Enhancement Goal EV-1: “protect and enhance sensitive species and their habitats in the regional watersheds;” 2) Flood Protection Goal FP-3: “develop regional projects and plans necessary to protect critical infrastructure and sensitive habitats from flood damage and sea level rise, in particular, along the Carmel Bay and South Monterey Bay shoreline”; and 3) Regional Communication and Cooperation Goal RC-1: “Identify cooperative, integrated strategies for protecting both infrastructure and environmental resources, including from climate change impacts”.

The **Water Quality Control Plan for the Central Coastal Basin, March 2016** (*Water Quality Plan*), adopted by the Regional Water Quality Control Board, designates several beneficial use objectives for the Carmel River Estuary, including groundwater recharge, cold fresh water habitat, habitat for rare, threatened or endangered species, spawning and rearing habitat, and habitat for migrating species like steelhead. The proposed project will reduce the risk of a sewage spill which would degrade water quality and is thus consistent with the **Water Quality Plan’s** identified beneficial uses.

CEQA COMPLIANCE:

The proposed project is statutorily and categorically exempt from the California Environmental Quality Act. Title 14 California Code of Regulations (CCR) Section 15262 restates a statutory exemption from the requirement to prepare an environmental impact report or negative declaration for the preparation of feasibility and planning documents for future actions that have not yet been approved or funded, if environmental factors are considered. 14 CCR Section 15306 categorically exempts basic data collection and resource evaluation activities that do not result in serious or major disturbance to an environmental resource. The proposed project entails preparation of feasibility and planning documents as well as data collection and resource evaluation activities for future relocation of a pipeline. These activities will inform potential future actions that have not yet been approved or funded. The proposed project will not have an impact on environmental resources, and environmental factors will be considered during implementation of the proposed project. Accordingly, the proposed project is exempt from CEQA.

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