

COASTAL CONSERVANCY

Staff Recommendation
February 15, 2024

SANTA CRUZ WHARF RESILIENCE IMPROVEMENTS

Project No. 23-074-01
Project Manager: Erin Gravley

RECOMMENDED ACTION: Authorization to disburse up to \$6,893,700 to the City of Santa Cruz to construct improvements in the East Parking Lot and wave crash zone areas of the Santa Cruz Municipal Wharf and to further the planning for future improvements for increased resiliency to the effects of climate change and adoption of findings under the California Environmental Quality Act.

LOCATION: Santa Cruz Municipal Wharf, City of Santa Cruz, Santa Cruz County

EXHIBITS

- Exhibit 1: [Project Location Maps](#)
 - Exhibit 2: [Concept-Level Site Plan](#)
 - Exhibit 3: [Context Images, Diagrams & Definitions](#)
 - Exhibit 4: [Project Letters](#)
 - Exhibit 5: [Santa Cruz Wharf Master Plan Final Environmental Impact Report Volume 2 and Mitigation Monitoring and Reporting Program](#)
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RESOLUTION AND FINDINGS

Staff recommends that the State Coastal Conservancy adopt the following resolution and findings.

Resolution:

The State Coastal Conservancy hereby authorizes a grant of an amount not to exceed six million eight hundred ninety-three thousand seven hundred dollars (\$6,893,700) to the City of Santa Cruz (“the grantee”) to construct improvements in the East Parking Lot and wave crash zone areas of the Santa Cruz Municipal Wharf and to further the planning for future improvements for increased resiliency to the effects of climate change (the “project”).

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 any contractors to be retained in carrying out the project.
3. A plan for acknowledgement of Conservancy funding.
4. Evidence that all permits and approvals required to implement the project have been obtained.

Findings:

Based on the accompanying staff recommendation and attached exhibits, the State Coastal Conservancy hereby finds that:

1. The proposed authorization is consistent with Chapter 3 (Section 31113) of Division 21 of the Public Resources Code, regarding the Climate Ready Program.
2. The proposed project is consistent with the current Conservancy Project Selection Criteria.
3. The Conservancy has independently reviewed and considered the “Santa Cruz Wharf Master Plan Final Environmental Impact Report Volume 2” (Final EIR) certified by the City of Santa Cruz on January 9, 2024 pursuant to the California Environmental Quality Act (“CEQA”) and attached to the accompanying staff recommendation as Exhibit 5. The Conservancy has also reviewed the Mitigation Monitoring and Reporting Program adopted by the City of Santa Cruz on January 9, 2024 and attached to the accompanying recommendation as Exhibit 5. The Conservancy finds, as described further in the accompanying staff recommendation, that:
 - a. The Santa Cruz Wharf Master Plan will have potentially significant environmental effects in the areas of biological resources, hydrology-water quality, and recreation. The Conservancy finds that the mitigation measures identified in the EIR will avoid, reduce, or mitigate these possible significant environmental effects to less-than-significant levels and that these mitigation measures have been required or incorporated into the project.

The Conservancy adopts the Findings regarding Significant Effects set forth in the accompanying staff recommendation.

STAFF RECOMMENDATION

PROJECT SUMMARY:

Staff recommends the Conservancy authorize a \$6,893,700 grant to the City of Santa Cruz to construct improvements in the East Parking Lot and wave crash zone areas of the Santa Cruz Municipal Wharf (Exhibit 1) and to further the planning for future improvements for increased resiliency to the effects of climate change (the “project”). The project will also provide co-benefits of improving public access features, such as walkways, pier fishing access, and boating access, and will also improve emergency access for increased safety.

The Santa Cruz Municipal Wharf (“Wharf”) is a publicly accessible commercial and recreational pier built in 1914, which serves two million visitors annually. The Wharf is vulnerable to damage from wave action and storms due to several factors, including the Wharf’s: exposed location, long length (0.5 miles), and aging infrastructure. Winter storms in 2022 and 2023 severely impaired two other public piers in Santa Cruz County and damaged several pilings of the Wharf, highlighting the need for immediate infrastructure improvements. Without action, the Wharf is vulnerable to damage or closure from rising sea levels and intensified storms due to climate change.

The project will construct resilience repairs, retrofits, and upgrades to address vulnerabilities at two critical points on the Wharf: 1) the East Parking Lot and 2) the “wave crash zone” (see Exhibit 2). The various infrastructure members of the Wharf (deck, stringers, bents, caps, and ledgers) work together to brace the Wharf against shear movement (the back-and-forth motion resulting from the action of wind and waves), and they provide lateral resilience for the Wharf (see Exhibit 3). When any member is weakened, the entire structure is at increased risk. Immediate-term implementation of resilience upgrades to the East Parking Lot and Wave Crash Zone will ensure safe public access and address weakness and accelerating decline at those two crucial parts of the Wharf.

- East Parking Lot: The East Parking Lot was constructed over 60 years ago and has deteriorated structural conditions and weakened lateral strength. The Wharf is designed so that stringers work together with decking to cross brace the Wharf’s pilings in a latticework that provides resilience against waves. The project will replace failing stringers on the outer thirty feet of the East Parking Lot deck; install new ledgers on the leading edge of the parking lot to accommodate the increased weight of modern cars and reinforce it against waves; and repave the lot.
- Wave Crash Zone: The “wave crash zone” is one of the most vulnerable locations on the Wharf due to its proximity to shore. There is greater uplift force on the Wharf deck from waves in this area, and wave deflection against landmass can also form unpredictable waves that intensify closer to shore. The project will replace approximately 12 pilings within this area that were identified as needing replacement in the 2014 Santa Cruz Wharf Engineering Report and will repave this area. The project will also conduct planning to widen this section of Wharf to improve its resistance to shear forces, similar to the angular waves that contributed to the recent catastrophic damage suffered by the Capitola Wharf in its wave crash zone.

The project will also advance planning of the following improvements envisioned in the Santa Cruz Wharf Master Plan (SCWMP), which will enhance resilience of the Wharf as well as expand public access and provide reliable emergency access from land and sea.

- East Promenade, Small Boat Landing, and South Landing: The East Promenade refers to the eastern edge of the Wharf and will feature a new promenade for public pedestrian, bicycle, pier fishing, and emergency access. A new Small Boat Landing will support public and rental access for small watercraft including kayaks, paddleboards, and dinghies. A new South Landing will support public and commercial boating access for larger vessels up to 200 tons displacement (~120 foot length) for a variety of potential

uses including day cruises, charter fishing, whale watches, and commercial fish landings. The proposed modifications will enhance the Wharf's lateral strength and structural stability, further increasing the Wharf's resiliency to shear force to withstand the greater storm surges and rising sea levels expected to come with climate change.

The project will complete design, engineering, permit applications, and planning necessary for these improvements as envisioned in the SCWMP, which will include a public engagement process for the community to provide input on site design and other operational considerations like fishing and access areas. Finally, the project will develop a Wharf Interpretive Resources Plan for interpretive resources on the Wharf such as signs, exhibits, info kiosks, and other interactive materials.

Site Description: The Santa Cruz Municipal Wharf is a publicly accessible commercial and recreational pier in the City of Santa Cruz. It is constructed of around 4,500 pilings, has about 7.5-acres of decks and roughly 60,000 square feet of commercial uses, and stretches over half a mile into the Monterey Bay National Marine Sanctuary. The Wharf is home to over 20 locally-owned businesses, including restaurants, shops, and kayak and fishing boat rentals, all of which lease commercial space on the Wharf from the City of Santa Cruz. Although the Wharf is supported by commercial activity, it also provides important urban park-like services with waterfront access for surrounding disadvantaged communities as well as tourists from afar. Its coastal location enjoys cooler temperatures than inland areas, and a strong onshore ocean breeze supplies fresh air, making the Wharf a refuge from heat and poor air quality events such as the 2020 CZU Lightning Complex Fires.

It is estimated that over two million people visit the Wharf each year. The most popular attractions for those visiting the Wharf include fishing, sight-seeing, wildlife viewing, shopping, dining, and boating or kayaking. The Wharf is the longest pier on the West Coast of the United States and is a historic landmark. Additionally, it is one of the only piers in California that allows visitors to drive and park on it, providing coastal access for those with limited mobility.

Grant Applicant Qualifications: The City of Santa Cruz is a municipal agency with broad experience in the delivery of capital projects including construction, planning, engineering, and permitting. The City of Santa Cruz originally constructed the Wharf in 1913-1914 and has actively maintained it ever since. Maintenance costs for the Wharf are covered through revenues generated by commercial activity on the Wharf, parking fees, nine City funds, and grants. Addressing major infrastructure through this project is expected to free up the Wharf maintenance crew to focus on proactive maintenance. The City of Santa Cruz has received numerous grants from the Conservancy over the years, including a previous grant for improvements to the Wharf restrooms and roadway in 1986.

CONSISTENCY WITH CONSERVANCY'S PROJECT SELECTION CRITERIA:

The project is consistent with the Conservancy's Project Selection Criteria, last updated on September 23, 2021, in the following respects:

Selection Criteria

1. Extent to which the project helps the Conservancy accomplish the objectives in the Strategic Plan.

See the “Consistency with Conservancy’s Strategic Plan” section below.

2. Project is a good investment of state resources.

The project will ensure the Wharf remains structurally viable, allowing it to remain a landmark spot for tourism, recreation, fishing, and coastal access, even as the effects of climate change intensify. The improvements proposed for this project were informed by the 2014 Santa Cruz Wharf Engineering Report.

The project also aligns with the State Agency Sea-Level Rise Action Plan for California, Principle 4 (“Support Local Leadership and Address Local Conditions”) and Key Action 4.7 to “Partner with tribal and local jurisdictions to prioritize adaptation actions, emphasizing a preference for those that protect and increase the resiliency of public assets, infrastructure, and larger projects with multi-benefits.”

3. Project benefits will be sustainable or resilient over the project lifespan.

Engineering assessments of the Wharf have determined that it can withstand over 5 feet (up to 68 inches) of sea level rise, which is consistent with current sea-level rise projections for the year 2100. The improvements proposed in this project will further increase the Wharf’s resiliency to shear force and the greater storm surges expected to come with climate change. Additionally, improvements planned and constructed as part of this project will improve the Wharf’s resiliency to higher-weight modern vehicles.

4. Project delivers multiple benefits and significant positive impact.

The project will help to make the Wharf more resilient to sea-level rise and storm surge and provide additional multiple benefits, such as: ongoing recreational opportunities for visitors including visitors with mobility issues who can access the Wharf via vehicles; increased viability for the local economy of the Wharf, which generates an estimated \$30 million in revenues per year; and ongoing access to the Wharf as a refuge from inland areas with greater heat or poor air quality. Additionally, in planning improvements to the boat landing areas, the project will provide greater amenities for fishing, as well as improve emergency access from land and sea.

5. Project planned with meaningful community engagement and broad community support.

This project’s components come from the SCWMP. The SCWMP was developed through extensive community engagement spanning more than ten years. Development of the SCWMP involved engagement with eight distinct stakeholder groups as well as dozens of private, citizen, non-profit, and educational/scientific organizations, including representatives of the hospitality industry, disadvantaged communities, conservationist groups, the University of California Santa Cruz, Save the Waves, the Audubon Society, state and federal agencies, and more. Additionally, the planning portion of the project will involve community engagement to finalize designs.

PROJECT FINANCING

Coastal Conservancy	\$6,893,700
City of Santa Cruz	\$1,633,900
Project Total	\$8,527,600

Conservancy funding for the project is anticipated to come from a Fiscal Year 2022/23 appropriation from the Greenhouse Gas Reduction Fund (GGRF) to the Conservancy for “urgent sea-level rise adaptation and coastal resilience needs” (Budget Act of 2022, SB 154 as amended by AB 178, Chapter 45 and AB 179, Chapter 249, Statutes of 2022, and by the Budget Act of 2023, SB 101). The Greenhouse Gas Reduction Fund Investment Plan and Communities Revitalization Act (Health and Safety Code (HSC) Sections 39710 – 39723) requires that GGRF funds be used to (1) facilitate the achievement of reductions of GHG emissions consistent with the Global Warming Solutions Act of 2006 (HSC Sections 38500 et seq), and (2) to the extent feasible, achieve other co-benefits, such as maximizing economic, environmental and public health benefits and directing investment to disadvantaged communities (HSC Section 39712(b)). The Global Warming Solutions Act of 2006 sets forth certain GGRF funding priorities (HSC Section 38590.1).

The California Air Resources Board (“CARB”) has adopted guidelines that establish program goals that agencies must achieve with their GGRF funds. Consistent with the CARB 2018 Funding Guidelines, the project will help the Conservancy meet its GGRF program goals because the project will:

- Benefit Priority Populations (disadvantaged communities, low-income communities, or low-income households); and
- Maximize economic, environmental, and public health co-benefits to the State.

The project will meet these objectives by planning and implementing structural improvements to the Wharf to increase its resiliency to sea level rise and other effects of climate change. The project provides important co-benefits: economic benefit, by ensuring the ongoing viability of the Wharf as a center of commerce and driver of revenue; and public health, by providing the public with a refuge for visitors on days of extreme heat and/or poor air quality. The project will benefit priority populations including disadvantaged communities by acting as an urban park for surrounding low-income neighborhoods and providing free fishing to disadvantaged communities, as a fishing license is not required when recreationally fishing from a public pier in the ocean.

The City of Santa Cruz will contribute \$1,633,900 to the project cost.

Unless specifically identified as “Required Match,” the other sources of funding and in-kind contributions described above are estimates. The Conservancy does not typically require matching funds or in-kind services, nor does it require documentation of expenditures from other funders or of in-kind services. Typical grant conditions require grantees to provide any funds needed to complete a project.

CONSISTENCY WITH CONSERVANCY'S ENABLING LEGISLATION:

The proposed authorization is pursuant to Section 31113 of Chapter 3 of Division 21 of the Public Resources Code, which authorizes the Conservancy to address the impacts and potential impacts of climate change on resources within the Conservancy's jurisdiction (Section 31113(a)). This project is within the Conservancy's jurisdiction because it is located within the Coastal Zone pursuant to Section 31006. Section 31113(b) and (c) authorizes the Conservancy to award grants to nonprofit organizations and public agencies to undertake projects that address extreme weather events, sea level rise, storm surge, and other coastal hazards that threaten coastal communities, infrastructure, and natural resources. The Conservancy must, to the extent allowed, prioritize projects that maximize public benefits and accomplish one of several purposes, including reducing hazards to harbors and ports and providing recreational activities. The project will facilitate structural improvement of the Wharf to reduce the threat of sea level rise while also enhancing recreational opportunities.

Section 31113(d)(1)(B) requires the Conservancy to prioritize projects that provide multiple public benefits, including, but not limited to, protection of communities, natural resources, and recreational opportunities. The project will address the vulnerability of the Santa Cruz Municipal Wharf to extreme weather events, sea level rise, and storm surge, improving its resiliency and preserving the recreational opportunities provided by the Wharf into the future.

CONSISTENCY WITH CONSERVANCY'S [2023-2027 STRATEGIC PLAN](#):

Consistent with **Goal 1.1 Commit Funding to Benefit Systemically Excluded Communities**, this project is located in a disadvantaged community and will improve the resilience of the Wharf, which acts as an urban park and provides coastal access for residents of nearby neighborhoods.

Consistent with **Goal 2.6 Piers and Waterfronts**, this project will plan and build improvements to waterfront facilities to adapt to sea level rise, including enhancements to fishing areas on the Santa Cruz Wharf.

Consistent with **Goal 4.1 Sea Level Adaptation Projects**, this project will plan and implement improvements to the Santa Cruz Wharf to increase its resiliency to sea level rise and intensified winter storms.

CEQA COMPLIANCE:

On January 9, 2024, the City of Santa Cruz certified the "Santa Cruz Wharf Master Plan Final Environmental Impact Report Volume 2" (Final EIR) (Exhibit 5), approved the SCWMP, and adopted a Mitigation Monitoring and Reporting Program (SCWMP MMRP). The Final EIR assessed the environmental effects of activities identified in the SCWMP, including to expand the Wharf and build new facilities; remodel existing Wharf facilities; install structural improvements to the Wharf; and to increase and improve parking and circulation on the Wharf. The project will construct some elements of the SCWMP and further the planning and design of some other elements of the SCWMP. Thus, the project is within the scope of the Final EIR.

The Final EIR indicated that the SCWMP may have potentially significant environmental effects, however changes or alterations have been required in, or incorporated into, the SCWMP that mitigate these potential impacts to a less than significant level for each of the following resource areas:

- Biological Resources
- Hydrology-Water Quality
- Recreation

Findings Regarding Significant Effects

Potential impacts and mitigation measures are summarized below.

Biological Resources

Potentially significant impacts on biological resources include indirect harms from construction activities and underwater sound levels to fish and marine mammals, including special status and protected species; and disturbance to nesting birds. The SCWMP MMRP identifies a number of biological mitigation measures to reduce these impacts:

- Mitigation Bio 1a-1 will implement measures to avoid exposure of marine mammals to high sound levels that could result in harassment. Measures include: establishing an underwater “exclusion zone” where sound will be at levels harmful to certain marine species; pre-construction monitoring by a biologist for animals’ presence and movements near the project site and monitoring for marine mammals in the exclusion zone prior to pile-driving; only permitting pile-driving activities to commence when no marine mammals have been sighted in the exclusion zone for 15 minutes; monitoring for underwater noise levels during pile-driving; in-water biological monitoring for target mammal species and halting construction activities that could result in injury or mortality to those species; and training construction crews on resources of concern and avoidance measures.
- Mitigation Bio 1a-2 will use a soft-start procedure for impact pile-driving at the beginning of each day’s in-water pile driving or any time pile-driving has ceased for more than one hour. If a bubble curtain or impact hammer will be used, further mitigation measures will be taken to flush fish from the zones where sound pressure or energy levels are highest.
- Mitigation Bio 1a-3 calls for use of a cushion block between the pile cap and impact hammer to dampen the sound of the hammer striking the wood as well as to dissipate friction.
- Mitigation Bio-4 calls for measures to mitigate disturbances to nesting birds that may be present at the time of construction. Measures include pre-construction surveys to inspect for indications of nesting; and cessation of construction activities likely to disturb nesting species until after the young have fledged and there is no evidence of a second attempt at nesting.

With these mitigation measures incorporated, potential impacts to biological resources will be reduced to a less than significant level.

Hydrology-Water Quality

Potentially significant impacts on hydrology-water quality include the inadvertent discharge of construction debris into marine waters. The SCWMP MMRP identifies mitigation measures to avoid or reduce these impacts:

- Mitigation Hyd-2a calls for the following measures during construction of the Wharf substructure (piles, beams, and decking): using floating booms or divers to capture or retrieve any fallen debris or spills; using vegetable oil in the crane's hydraulic system so that in the event of a hose failure, no petroleum-based substance will contact the water; re-fueling equipment over a containment area using plastic sheeting and pads to contain any spills; and monitoring for visual evidence of contamination so that construction can be halted and the contamination can be reported, contained, and/or removed.

With these mitigation efforts incorporated, potential impacts to hydrology-water quality will be reduced to a less than significant level.

Recreation

The SCWMP supports new and expanded facilities that would enhance recreational uses on the Wharf and which could result in adverse physical effects on the environment. The SCWMP MMRP identifies that these potential indirect impacts would be reduced to a less than significant level with implementation of the mitigation measures for biological resources and hydrology-water quality, described above.

Staff recommends that the Conservancy find that the SCWMP as mitigated avoids, reduces or mitigates the potentially significant environmental effects to a level of less-than-significant and that there is no substantial evidence that the SCWMP will have a significant effect on the environment.

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