COASTAL CONSERVANCY

Staff Recommendation
April 18, 2024

SOUTH SAN FRANCISCO BAY SHORELINE PROJECT

Project No. 02-070-06
Project Managers: Shalini Kannan & Evyan Borgnis Sloane

RECOMMENDED ACTION: Authorization to support implementation of the South San Francisco Bay Shoreline Project in the community of Alviso, City of San José, Santa Clara County by: 1) disbursing up to $2,571,700 to San Francisco Bay Bird Observatory for revegetation and three years of maintenance on 17 acres of the Reaches 1-3 levee; and 2) disbursing up to $7,428,300 to Santa Clara Valley Water District for Reaches 4-5 levee construction.

LOCATION: Community of Alviso and adjacent ponds and waterways, between Alviso Slough and Coyote Creek, northern San José, Santa Clara County (Exhibits 1 and 2).

EXHIBITS

Exhibit 1: Project Location

Exhibit 2: Project Maps & Designs

Exhibit 3: May 5, 2022 Staff Recommendation

Exhibit 4: September 22, 2022 Staff Recommendation

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 two million five hundred seventy-one thousand seven hundred dollars ($2,571,700) to San Francisco Bay Bird Observatory ("SFBBO" or "grantee") for revegetation and three years of maintenance on 17 acres of the Reaches 1-3 levee to support implementation of the South San Francisco Bay Shoreline Project in the community of Alviso, City of San José, Santa Clara County.

The Conservancy further authorizes a grant of an amount not to exceed seven million four hundred twenty-eight thousand three hundred dollars ($7,428,300) to Santa Clara Valley Water District ("Valley Water" or "grantee") for Reaches 4-5 levee construction to support

implementation of the South San Francisco Bay Shoreline Project in the community of Alviso, City of San José, Santa Clara County.

Prior to commencement of the project, each 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 as the source of that funding.
4. Evidence that all permits and approvals required to implement the project have been obtained.

Prior to commencement of the project, SFBBO shall submit for the review and written approval of the Executive Officer evidence that it has entered into agreements sufficient to enable it to implement, operate, and maintain the project.

5. Prior to commencing the project, SFBBO shall enter into and record an agreement pursuant to Public Resources Code 31116(d) sufficient to protect the public interest in the improvements.

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 4.5 of Division 21 of the Public Resources Code, regarding the Conservancy's mandate to address the resources and recreational goals of San Francisco Bay Area.
2. The proposed project is consistent with the current Conservancy Project Selection Criteria.
3. The San Francisco Bay Bird Observatory is a nonprofit organization organized under section 501(c)(3) of the U.S. Internal Revenue Code.

STAFF RECOMMENDATION

PROJECT SUMMARY:

Staff recommends the Conservancy authorize disbursement of up to $10,000,000 to San Francisco Bay Bird Observatory (SFBBO) and Santa Clara Valley Water District (Valley Water) to support implementation of the South San Francisco Bay Shoreline Project, which will provide coastal flood protection, restore 2,900 acres of former salt evaporation ponds, and enhance public access in the Alviso area of South San Francisco Bay (Exhibits 1 & 2). The U.S. Army Corps of Engineers (Corps) is constructing the Shoreline Project pursuant to a cost-sharing agreement with Valley Water and the State Coastal Conservancy, which are the non-federal sponsors for the project. This authorization will grant $2,571,700 to SFBBO for revegetation and three years of maintenance of the Reaches 1-3 levee. It will also contribute $7,428,300 to Valley Water towards constructing the Reaches 4-5 flood risk management levee.

The Conservancy has made five previous authorizations for planning and implementing this significant project since 2018. Three of the authorizations were for the Shoreline Project's design phases. On May 27, 2021 the Conservancy authorized a Project Partnership Agreement amendment with the Corps and Valley Water for construction of the Shoreline Project. On May 5, 2022, the Conservancy authorized a grant towards constructing the Reaches 1-3 flood risk management levee, which began in Spring 2022, and is expected to be complete between late 2024 and mid-2025. On September 22, 2022, the Conservancy authorized a grant to SFBBO to rehabilitate a U.S. Fish and Wildlife nursery and to grow and prepare the native plants and seeds necessary for revegetation of the Reaches 1-3 flood risk management levee – which will be planted in the implementation phase under this proposed authorization. Further project history and background, as well as information on the cost-share agreement, are described in the attached May 2022 staff recommendation (Exhibit 3).

Building directly on work authorized by the Conservancy in September 2022 (Exhibit 4), this authorization grants funds to SFBBO to revegetate 17 acres of the Reaches 1-3 levee, which include the landward side of Reach 1, and both the bayward and landward sides of Reaches 2-3. As part of the current construction contract, the Reaches 1-3 levee, as shown in Exhibit 2, will be constructed and seeded with native plant material by a commercial contractor. However, beyond this initial seeding, further enhancement to turn this higher ground into viable, restored salt marsh and upland habitat is needed. The Conservancy and its consultant, H.T. Harvey & Associates, prepared a Conceptual Revegetation Plan to establish salt marsh and upland grassland vegetation communities on the Shoreline levee that would add habitat value, require minimal maintenance, and enhance trail user experience, all while facilitating levee safety (see Exhibit 2)

This work will include non-native plant control, restoration planting, and irrigation in Year 0, followed by three years of maintenance and monitoring activities. In Years 1-3, SFBBO will inspect the site and collect data on plant establishment, then will re-plant, re-seed, and irrigate as needed to fill areas where plants did not establish successfully. SFBBO will also annually mow the levee for two purposes: 1) to create wildlife corridors for shorebird chicks to safely travel to other ponds and reduce cover that could encourage predators, and 2) to enable the Corps to monitor the flood risk management levee. SFBBO will enlist support from the San Jose Conservation Corps for revegetation activities, and will organize and mobilize volunteers where possible, engaging local community members in significant bay restoration. Given the limited access to the site and likelihood of adjacent construction activities for Reaches 4-5 levee, volunteers may only be able to help in later years of the project. SFBBO's work will begin in the fall of 2024 or 2025, upon completion of Reaches 1-3 levee construction.

The other portion of this authorization grants funds to Valley Water as part of the Conservancy's contribution to construction of Reaches 4-5, which span from Artesian Slough to Coyote Creek. The Corps has received federal funds to construct the Shoreline Project, including an amount equal to the non-federal sponsors' share, through the Bipartisan Budget Act of 2018. However, the non-federal sponsors are obliged to reimburse the Corps for the non-federal sponsor share over time as the Corps incurs project costs. More information on the project cost sharing agreement and fundraising can be found in Exhibit 3.

Reaches 4-5 levee construction will include a water control structure and pedestrian bridge across Artesian Slough, and a flood risk management levee creating a line of defense against the tides when sea levels rise and when outboard ponds are eventually breached to restore tidal marsh. Ultimately, the project will restore 2,900 acres of managed open water ponds to tidal marsh. However, before the existing pond berms can be breached for restoration, flood risk management for the inland community and infrastructure must be constructed. This authorization will contribute to the next phase of infrastructure construction, primarily the Reaches 4-5 levee. The original Reaches 4-5 levee alignment and adjacent ecotone can be seen in Exhibit 2. In February 2024, the Corps and non-federal sponsors conducted a Value Engineering study to consider alternative alignments and features that could reduce construction costs. Pending these results, the levee alignment may vary, but will still meet project goals and permit requirements. The Reaches 4-5 levee will meet FEMA standards for flood protection, and that effectively removes the neighboring low-lying community of Alviso from the floodplain.

The community of Alviso, including the Alviso Water Task Force, supports the Project and was involved in determining the levee alignment. The recreational enhancements will improve the community's access to the regional trail network, wildlife viewing, and education opportunities. The Shoreline Project is also strongly supported by multiple local, state, and federal elected officials and government agencies; restoration and habitat-focused non-governmental organizations; chambers of commerce groups for all Silicon Valley cities; recreation groups; and community groups (support letters were provided with the May 2022 staff recommendation, Exhibit 3)

Site Description: The Shoreline Project includes Ponds A9-A15 that were part of the 2003 South Bay Salt Pond Restoration Project acquisition. These ponds are now owned and managed by the U.S. Fish and Wildlife Service (USFWS) as managed pond habitat for shorebirds and waterfowl as part of the Don Edwards San Francisco Bay National Wildlife Refuge (Refuge). The Refuge and its Environmental Education Center receive approximately 733,000 visitors each year, and the Refuge's adjacent New Chicago Marsh Trail receives an estimated 8,200 visits each year. At the present time there are two Refuge trail systems in Alviso: an approximately nine-mile loop trail around Ponds A9-A15 and a three-mile loop-and-spur trail around A16 and A17. An active railroad line separates these two trail networks and there is no direct connection to the Bay Trail. In addition, the project includes the adjacent Pond A18, currently owned by the City of San José, but will be acquired by Valley Water prior to construction. Pond A18 is an 850-acre managed pond connected to the Bay through two water control structures. There is currently no public access to Pond A18. Pond A18 is adjacent to the City of San José's Regional Wastewater Facility, which provides wastewater treatment for over one million people in the South Bay.

Grant Applicant Qualifications: SFBBO is a 40-year-old nonprofit organization dedicated to conservation of birds and their habitats in the San Francisco Bay Area through science and outreach. SFBBO studies birds and their habitats, restores and creates habitats, and provides opportunities for the public to participate in research and restoration. As a long-term non-profit partner to USFWS since the early years of the Refuge, SFBBO is uniquely qualified to conduct this work that involves collaboration with multiple partners, long-term care, and restoration of

part of the Refuge, consideration and scientific monitoring of the local biodiversity, and involvement of volunteers from the local community. SFBBO has worked with USFWS on scientific surveys and restoration efforts since the 1970s, including work at Bair Island, ponds A16, A17, and A6, and LaRiviere Marsh. SFBBO has also managed nursery operations at USFWS's Environmental Education Center in San José for about 10 years. Additionally, SFBBO has a long history of managing large grants and contracts from multiple organizations and implements sound financial practices.

Valley Water has been a non-federal sponsor to the project since 2006. Since 2006, Valley Water has successfully managed all the non-federal sponsors' reimbursement requests from the Corps including Reaches 1-3 construction reimbursements which began in 2019.

CONSISTENCY WITH CONSERVANCY'S PROJECT SELECTION CRITERIA:

The proposed 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 Shoreline Project will benefit the region's economy by reducing the potential for economic damages caused by a 1-percent coastal flood event and projected sea level rise. Any flood event that occurred today as a result from failure of the existing pond dikes would likely result in more than $100 million dollars in structure and content damages to the Alviso community and a 1-percent flood event that occurred today would cause more than $200 million in residential and commercial structure and content damages. These estimates are projected to increase over the next fifty years as seas rise. Located in the Shoreline Project area, the San José-Santa Clara Regional Wastewater Facility (RWF) is a critical $3 billion facility that treats wastewater for 1.4 million people in Santa Clara County along with high-tech Silicon Valley businesses. If the RWF was flooded and inoperable, it would cause extreme health, safety, and environmental impacts throughout the county. Under current conditions, it is estimated that a flood causing inundation of the RWF's underground equipment would cause more than $200 million in direct damage (in addition to the damage estimated above). In addition to avoided economic damages, the Project will benefit the region's economy by creating job opportunities during construction, and after with post-construction maintenance and monitoring. Based on October 2015 price levels, the Corps' regional economic impact model estimates that the Shoreline Project would generate 2,731 direct and indirect jobs with an associated labor income of $124,334,355.

In addition to the numerous economic benefits, the Shoreline Project will provide a multitude of flood protection, habitat, recreation, and climate change resilience benefits (see Selection Criteria 4 & 5). The revegetation portion of the project in this authorization adds additional

habitat value through creation of subtidal and upland habitats that will complement the larger Shoreline Project's tidal marsh restoration. This authorization supports implementation of plans developed through a long-term collaborative partnership with the Conservancy, USFWS, the Corps, Valley Water, and SFBBO. SFBBO utilizes the best available local science and their experience with shoreline habitat restoration to inform their revegetation strategy.

The partnership supported in this authorization will leverage non-state resources, including volunteer efforts and federal dollars.

Additionally, the project and the greater Shoreline Project will promote and implement several state plans, including the *California Water Action Plan* (2014), and *CA Wildlife Action Plan* (2005).

3. Project includes a serious effort to engage tribes. Examples of tribal engagement include good faith, documented efforts to work with tribes traditionally and culturally affiliated to the project area.

On July 15 and 16, 2016 the U.S. Army Corps of Engineers notified local tribes, primarily the Indian Canyon Mutsun Band of Costanoan, Ohlone Indian Tribe, Amah Mutsun Tribal Band of Mission San Juan Bautista, Muwekma Ohlone Indian Tribe, and Ohlone/Costanoan Indian Tribe, of the project details and the required cultural analyses done for USFWS Section 106 and CEQA/NEPA. Outreach to local tribes in 2023 resulted in a commitment to hire Tamien Nation cultural monitors for on-site monitoring and/or cultural resources training for future construction phases, including Reaches 4-5.

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

The Shoreline Project addresses the area's flood risk management needs for the next fifty-plus years using a natural flood risk management approach, allowing long-term restoration of the bay and recreational opportunities during that time and beyond. To address the long-term impacts of sea level rise, Valley Water is funding construction of approximately three additional feet of levee height to ensure that the levee meets the 1%-event throughout the entire fifty-year planning life span of the project. (Although planned with a fifty-year time horizon, the improvements are expected to last considerably longer, closer to one hundred years with the current sea level rise projections. Also, the levee will be constructed to allow for height increases if necessary.) The flood risk management improvements are foundational for restoring the bay and will have co-benefits for the bay's health, safety, environment, and economy, while the wetland restoration and ecotone will add resiliency to the levee by buffering the engineered levee from coastal storm actions. Lessons from the implementation of the Shoreline Project at Alviso will be applied to expand activities to the rest of the south bay shoreline.

Revegetation of the Shoreline Project levee with upland-transitional vegetation will also improve the climate change adaptability of the forthcoming adjacent tidal marshes, providing accommodation space for marshes to migrate upslope in the face of rapid sea level rise. The species chosen for the native plant community include many weedy, locally-adapted species that will compete well with invasive species, reducing long term vegetation management costs.

Additionally, this plant diversity will improve climate adaptability of the new habitat that will be created, as a wider array of species with different tolerances and life history strategies will have a greater chance of persisting under increasingly extreme weather events, and sea level rise.

SFBBO will work with USFWS for long-term maintenance of the site and will conduct routine surveys and monitoring to evaluate whether the project is meeting habitat goals and to inform maintenance recommendations. Through surveying vegetative cover, SFBBO will determine what reseeding or replanting is needed, or whether invasive plant control is needed.

5. Project delivers multiple benefits and significant positive impact.

The Shoreline Project will accomplish the instrumental first step of providing coastal flood risk management to the Alviso area, thus allowing the restoration of 2,900 acres of former salt-evaporation ponds to wetlands and the enhancement of recreational opportunities that provide beneficial use to all Bay Area residents. The proposed restoration is at a sufficient scale that some of the ecological structure, function, and connectivity that has been lost in San Francisco Bay will be regained. The restored habitat will benefit the recovery of protected wetland species and help restore ecological functions as well as decrease water turbidity, improve water quality, and improve the physical health of the overall bay. The plant community that will be established will also help stabilize the Shoreline Project levee with strong, rhizomatous root networks, reducing the risk of erosion and need for levee repairs. Providing integrated flood risk management results in critical health, safety, and environmental benefits to residents and businesses, which are served by regional infrastructure, such as the Regional Wastewater Facility, in the Alviso area and throughout the county. Furthermore, the Shoreline Project will connect the existing regional trail networks to provide Bay Area residents, students and visitors improved connections between the Refuge's Environmental Education Center, the County's Marina Park, and the Coyote Creek/Bay Trail.

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

This project would help implement the goals of the South Bay Salt Pond Restoration Project which is supported by Save The Bay, The Bay Institute, National Audubon Society, Citizen's Committee to Complete the Refuge, the California Natural Resources Agency, California Department of Fish and Wildlife, USFWS, Valley Water, the San Francisco Bay Joint Venture, Cargill, the Richard and Rhoda Goldman Fund, the William and Flora Hewlett Foundation, the Gordon E. and Betty I. Moore Foundation, the David and Lucile Packard Foundation, Resources Legacy Fund, and many other agencies, organizations, and individuals.

The Shoreline Project will provide enhanced opportunities for public access, environmental education, and recreation associated with the restored habitat and is in an area of vital educational and recreational open space with its proximity to the County Marina Park, Refuge trails and the Environmental Education Center (EEC). The Shoreline Project will improve access to the EEC, which receives approximately 733,000 visitors each year, and the adjacent New Chicago Marsh Trail receives an estimated 8,200 visits each year. The Shoreline Project's recreation features are estimated to increase the annual number of visitors to the Refuge and EEC by 20 percent. Preliminary results from the 2014 trail user survey indicate that the primary user groups for this trail are organized educational groups ranging from elementary through

college age (approximately 66 percent). The Project's educational signs and viewing platforms will provide youth and young adults with information regarding the tidal marsh ecosystem, environmental stewardship, and conservation. The Project will also provide connections to the Alviso Marina County Park, which offers educational public boat rides through the Alviso Slough and educational signage depicting the area's history to share how the South San Francisco Bay shoreline has changed over time.

For Reaches 1-3 revegetation, SFBBO will work with San Jose Conservation Corps and a limited number of volunteers, teaching community members about the vital role the San Francisco Bay plays in local ecology and introducing community members to recreational opportunities at the Refuge and along the San Francisco Bay Trail. SFBBO is experienced in managing extensive volunteer projects for restoration growing and planting. In the past, they have partnered with local organizations like Keep Coyote Creek Beautiful and Sea Scouts to successfully involve local community members in volunteer events at restoration sites. SFBBO plans to use these partnerships and develop new ones.

PROJECT FINANCING

Coastal Conservancy	**$10,000,000**
Association of Bay Area Governments	$3,161,921
Wildlife Conservation Board	$5,077,694
San Francisco Bay Restoration Authority	$61,466,079
Valley Water	$79,778,000
Department of Water Resources	$8,000,000
Department of Water Resources (*grant pending*)	$41,000,000
U.S. Army Corps of Engineers	$232,561,589
To be raised	$71,494,364
Project Total	**$512,539,647**

The above table shows the total cost to design, plan, and implement the Shoreline Project. The funds identified as provided by the Association of Bay Area Governments (ABAG) were granted to the Conservancy by ABAG and authorized for disbursement by the Conservancy on May 22, 2022.

The anticipated source of Conservancy funds for this authorization is a FY23/24 appropriation of General Funds to the Conservancy for "urgent sea-level level rise adaptation and coastal resilience needs using nature-based solutions or other strategies." (Budget Act of 2023 (SB 101).) The proposed project qualifies for use of these funds because it will address sea level rise adaptation needs by implementing a flood risk management levee to protect adjacent

communities and revegetation for shoreline habitat resilience and migration space. The project will also make way for the eventual restoration of 2,900 acres of tidal marsh.

Funds from the Association of Bay Area Governments come from the California Department of Water Resources' Integrated Regional Water Management Program, which were passed through the Conservancy to Valley Water in the May 5, 2022 Conservancy authorization (Exhibit 3). Funds from the Wildlife Conservation Board were also passed through the Conservancy to Valley Water using Executive Officer Delegated Authority under the May 5, 2022 Conservancy authorization. The San Francisco Bay Restoration Authority authorized $4,439,406 in 2018 and $57,026,673 in 2019 (to be disbursed over a five-year period) to Valley Water for the Shoreline Project.

Valley Water is contributing $79,778,000 from various sources, including their Safe, Clean Water and Natural Flood Protection Program. California Department of Water Resources also provided Valley Water with an $8,000,000 grant for this project, and their additional contribution of $41,000,000 in 2024 is pending.

The budget shortfall for the non-federal sponsors after this authorization is approximately $71,494,364. Valley Water and the Conservancy are working to identify sources for the remaining shortfall and to identify ways to reduce construction costs via the aforementioned Value Engineering study underway.

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:

This project will be undertaken pursuant to Chapter 4.5 of the Conservancy's enabling legislation, Public Resources Code Sections 31160-31165, to address resource goals in the San Francisco Bay Area.

The Shoreline Project is within the nine-county Bay Area as required under Section 31162 of the Public Resources Code.

Under Section 31162(a), the Conservancy may undertake projects to improve public access to and around the Bay, without having a significant adverse impact on environmentally sensitive areas and wildlife, such as wetlands, through completion of regional trails, local trails connecting to population centers and public facilities and which are part of a regional trail system, and through the provision of related facilities. The Shoreline Project includes construction of 1.8 miles of Bay Trail segments and connecting trails as well as related public facilities, while enhancing wildlife habitat.

Under Section 31162(b), the Conservancy may act to protect, restore, and enhance natural habitats and connecting corridors, watersheds, scenic areas, and other open-space resources of regional significance. This authorization would specifically provide for the revegetation of 17

acres of tidal marsh and upland-transitional habitat, as well as more broadly, the completion of the Shoreline Project levee, which will allow for outboard ponds to be restored to tidal marsh. Eventually, the project will restore 2,900 acres of tidal wetlands and approximately 90 acres of upland transition zone (ecotone). These activities help implement the overarching goals of the South Bay Salt Pond Restoration Project, a wetland restoration project of national significance.

The project is consistent with Sections 31163(a) and (b), directing the Conservancy to participate in and support interagency actions and public/private partnerships in the San Francisco Bay Area to implement long-term resources and outdoor recreational goals.

Consistent with Section 31163(c), the project meets the following criteria: it (1) is supported by adopted regional plans (San Francisco Bay Plan, Baylands Ecosystem Habitat Goals Report (1999) pp. 97, 126-139, *Baylands Goals Update (2015)* pp. 198-203, and the *San Francisco Basin (Region 2) W*ater Quality Control Plan (June 29, 2013) pp. 2-2 and 4-92), (2) is multijurisdictional (involves multiple agencies) and serves a regional constituency (the restoration component will facilitate nationally and regionally significant wetland restoration efforts and will complete regional trail connections), (3) can be implemented in a timely way, (4) provides opportunities for habitat, flood protection, and public access benefits that could be lost if the project is not quickly implemented, and (5) includes matching funds from other sources of funding as described above in the "Project Financing" section.

CONSISTENCY WITH CONSERVANCY'S 2023-2027 STRATEGIC PLAN:

Consistent with **Goal 2.4 Build Trails**, the proposed project will build connections to the San Francisco Bay Trail. The Shoreline Project includes construction of 1.8 miles of Bay Trail segments and connecting trails as well as related public facilities, including a pedestrian bridge or crossing across Artesian Slough.

Consistent with **Goal 3.2 Restore or Enhance Habitats**, the proposed project will assist with implementing a project that will restore up to 2,900 acres of tidal wetlands.

Consistent with **Goal 4.3 Multi-benefit Nature-Based Climate Adaptation**, the proposed project will implement a nature-based climate adaptation project that increases resilience for the community of Alviso, restores shoreline habitats, sequesters carbon, and enhances public access.

CEQA COMPLIANCE:

On March 22, 2018 the Conservancy adopted California Environmental Quality Act findings for the Shoreline Project and Conservancy staff filed a Notice of Determination on March 23, 2018. The Shoreline Project has not been substantially revised and there is no new information or changed circumstances that would warrant additional CEQA documentation. Accordingly, no new findings are required.