



Staff Recommendation

June 14, 2022

Regional Sea-Level Rise Adaptation Guidance for San Francisco Bay

Ella McDougall, Climate Change Program Manager

RECOMMENDED ACTION: Authorization to disburse up to \$2,084,437 to the San Francisco Bay Conservation and Development Commission (BCDC) to: develop a Regional Sea-Level Rise Adaptation Guidance for San Francisco Bay, which advances the Bay Adapt Joint Platform by developing a regional coastal resiliency strategy and guidance document with planning criteria and minimum standards to align Bay Area counties' sea-level rise (SLR) implementation plans; and up to \$95,406 to support efforts to advance beneficial use of sediment in and around San Francisco Bay for habitat restoration, for a total of \$2,179,843.

LOCATION: San Francisco Bay Area

STRATEGIC PLAN GOALS AND OBJECTIVES: Goal 1: Safeguard Coastal and Marine Ecosystems and Communities in the Face of Climate Change; Objective 1.1: Build Resiliency to Sea-Level Rise, Coastal Storms, Erosion, and Flooding

FINDINGS AND RESOLUTION:

Staff recommends that the Ocean Protection Council (OPC) adopt the following findings:

“Based on the accompanying staff report and attached exhibit(s), OPC hereby finds that:

1. The proposed projects are consistent with the purposes of Division 26.5 of the Public Resources Code, the California Ocean Protection Act;
2. The proposed projects are consistent with OPC's Environmental License Plate Funding Guidelines (Interim Standards and Protocols, August 2013);
3. The proposed projects are not 'legal projects' that trigger the California Environmental Quality Act (CEQA) pursuant to Public Resources Code section, section 15378.”

Staff further recommends that OPC adopt the following resolution pursuant to Sections 35500 *et seq.* of the Public Resources Code:

“OPC hereby approves the disbursement of up to \$2,084,437 to the San Francisco Bay Conservation and Development Commission to develop the Regional Sea-Level Rise Adaptation Guidance for San Francisco Bay, which advances the Bay Adapt Joint Platform by developing a regional coastal resiliency strategy and guidance document with planning criteria and minimum standards for the Bay Area counties’ SLR implementation plans; and up to \$95,406 support efforts to advance beneficial use of sediment in and around San Francisco Bay for habitat restoration, for a total of up to \$2,179,843.

This authorization is subject to the condition that prior to disbursement of funds, the Bay Conservation and Development Commission shall submit for the review and approval of the Executive Director of the OPC detailed work plans, schedules, staff requirements, budgets, and the names of any contractors intended to be used to complete the projects, as well as discrete deliverables that can be produced in intervals to ensure the projects are on target for successful completion. All projects will be developed under a shared understanding of process, management and delivery.”

EXECUTIVE SUMMARY:

SLR poses a significant threat to communities, infrastructure and habitats around San Francisco Bay. Coordinated and standardized adaptation planning and project implementation along the Bay shoreline is crucial to building resilience and protecting public health and safety, access, and the health of the Bay. Providing funding to BCDC to develop a Regional SLR Adaptation Guidance for San Francisco Bay (Guidance) will support the development of criteria and minimum standards for resilience planning and provide a framework for Bay Area jurisdictions to create SLR adaptation implementation plans. It will help implement the Bay Adapt Joint Platform to align community priorities to address shoreline resilience and support further community outreach, progress tracking, and capacity building.

Recommended funding will also fill a minor but critical budget gap in BCDC’s implementation of a recently awarded Environmental Protection Agency grant to support the advancement of beneficial use of sediment in and around the San Francisco Bay for habitat restoration projects. Prioritizing beneficial use of sediment will maximize efficiencies, resources and the successful design and implementation of restorations projects, which will provide multiple benefits for biodiversity and coastal resilience. OPC’s investment will allow BCDC to complete: a stakeholder-informed process to identify next steps and roles to increase beneficial use; a Financing Strategy that establishes a roadmap for funding beneficial use projects;

and an amendment to the San Francisco Bay Plan to establish policies that allow for, and potentially require, more beneficial use around San Francisco Bay.

PROJECT SUMMARY:

Background:

SLR adaptation: The San Francisco Bay (Bay) shoreline constitutes a third of California's coast and because of historical development, is particularly vulnerable to SLR. According to the [Bay Adapt Joint Platform](#), the Bay could incur two thirds of the economic repercussions caused by the impacts of rising sea levels, threatening communities, ecosystem health, and one of the largest regional economies in the world. The Bay Area represents a complicated and broad array of jurisdictions, regulatory agencies, community organizations, and special interests, many of which have begun independent, SLR adaptation planning efforts with varying levels of regional coordination. This results in a lack of consistency with unequal implications across the Bay, with consequences for the Bay's diverse communities, biodiversity, public access, and critical infrastructure.

To begin developing a roadmap for how the Bay Area will adapt to SLR, BCDC embarked on the creation of the Bay Adapt Joint Platform in 2020. Over the past decade, BCDC has earned the reputation of being a trusted partner in climate adaptation and a strategic convener and facilitator to catalyze local and regional action, primarily through its nationally recognized [Adapting to Rising Tides \(ART\)](#) program. Bay Adapt builds on the success of the ART program by focusing on the people, information, plans, and projects that will catalyze protection of communities, businesses, infrastructure, and natural habitats from the impacts of rising sea and bay levels. The Bay Adapt Joint Platform resulting actions are as follows:

1. Collaborate on a "One Bay" vision to adapt to rising sea levels.
2. Elevate communities to lead.
3. Broaden public understanding of climate change science and impacts.
4. Base plans and projects on the best science, data, and knowledge.
5. Align local and regional plans into a unified adaptation approach.
6. Figure out how to fund adaptation.
7. Refine and accelerate regulatory approvals processes.
8. Fund and facilitate faster adaptation projects.
9. Track and report progress to guide future actions.

While there is broad regional agreement on the path forward, strong leadership and consistent resources are needed to implement the Bay Adapt Joint Platform. Additionally, Bay Adapt provides a high-level regional vision, but does not provide specifics for adaptation implementation planning. Council funding for this project is critical to continuing the Bay Adapt progress.

In order to facilitate coordination, the Bay Adapt process is leveraging [EcoAtlas](#), a webtool designed to share information and monitor wetland habitats in relation to surrounding development such as land use and transportation. Within EcoAtlas, the Project Tracker tool shows individual projects related to habitat modification, stream and wetland restoration, and conservation. Information dashboards show data summaries that are easy to understand and use by regional managers, policy makers, and the general public.

Beneficial use of sediment: A recent report published by the San Francisco Estuary Institute entitled "[Sediment for Survival](#)" determined that there is a severe sediment shortage in San Francisco Bay that will affect wetland restoration efforts and the ability of tidal marshes around the Bay to keep pace with sea-level rise. The report determined that up to 650 million cubic yards of sediment are needed to restore and sustain wetland habitat in San Francisco Bay through 2100 and identified beneficial use of dredged sediment and other sources of soil as the best way to meet this demand. However, lack of an actionable road map, as well as policy and funding constraints (including the US Army Corps of Engineers' Federal Standard to dispose dredged material at the least costly dredged material disposal or placement alternative) have resulted in only 40% of dredged sediment being used for wetland restoration projects over the past 20 years. Increasing in-Bay placement of dredged material will accelerate critical wetland restoration projects that provide biodiversity and climate resilience benefits.

Project Summary:

Regional SLR Adaptation Guidance. The Regional SLR Adaptation Guidance for San Francisco Bay will address the need for coordination and consistency through development of a shared set of criteria, minimum standards, and a framework for SLR standardized adaptation planning and project implementation. This project directly supports OPC's Strategic Plan target to ensure the entire California coast is planning for and adapting to SLR (Target 1.1.1), and that a template and set of criteria/minimum standards are created and utilized for consistent SLR adaptation planning (Target 1.1.5). In addition to these Strategic Plan Targets, the [State Agency Sea-Level Rise Action Plan](#), released by OPC in February of 2022, also calls for the development and implementation of SLR adaptation plans across the entire coast of California by 2026, as well as the accelerated implementation of the Bay Adapt Joint Platform (Action 5.12). The Action Plan, a collaborative road map to achieve coastal resiliency along the coast of California, was created through significant collaboration within the SLR Leadership Team, of which BCDC is an active and dedicated member.

This project will accomplish the following objectives:

- Establish a Task Force of regional leaders including elected officials and representatives from local agencies and communities. This group will champion the regional SLR planning process and leverage political will.
- Develop the Regional SLR Adaptation Guidance for San Francisco Bay. This guidance document will build off the vision of Bay Adapt, which calls for collaboration to identify a unified 'One Bay' vision. It will show alignment with other regional planning efforts including Plan Bay Area 206 and the Bay Area Regional Collaborative Work Plan.
- Determine criteria and minimum standards for county and sub-regional SLR implementation plans. Nested within the Regional SLR Adaptation Guidance for San Francisco Bay, these criteria will give local jurisdictions the guidance needed to create their own consistent and uniform SLR implementation plans. Criteria should include specifications for cross-jurisdictional impacts and evaluation of local and regional tradeoffs, as well as new and redevelopment standards for SLR, habitat, transit, and prioritization of projects.
- Scope an incentive structure to encourage counties and subregions to develop SLR implementation plans consistent with the criteria and minimum standards in the final Guidance. This may be based on future funding or other mechanisms.
- Enable BCDC staff to offer technical support for development of SLR implementation plans. Staff, existing and new, will work with county and subregional staff to offer consultation and guidance for applying criteria to SLR implementation plans.
- Expand the preexisting online mapping application, EcoAtlas and the Project Tracker to include adaptation plans, projects, and relevant datasets to create a comprehensive picture of the shoreline's progress toward resiliency. EcoAtlas will also serve as a platform to facilitate communication and connect community organizations working on similar projects.

This project funding is a component of a larger effort to support BCDC's work to address SLR through the implementation of Bay Adapt. The State Coastal Conservancy is anticipated to provide approximately \$3,000,000 to BCDC to broaden work on outreach, projects and planning.

Beneficial Use of Sediment. OPC funds will also help support increased beneficial use of sediment for wetland restoration projects in San Francisco Bay. BCDC was recently awarded an Environmental Protection Agency Wetlands Program Development Grant to advance new sediment management policies for wetland restoration and climate resilience. OPC funding would fill a minor budget gap to ensure that BCDC can complete this work, with the goal of increasing use of dredged material for wetland restoration in the Bay. This project will produce stakeholder-informed reports that outline necessary steps and respective roles to increase beneficial use. Input will be provided by restoration, dredging, flood

protection, environmental justice, conservation, and construction interests, as well as relevant local/state/federal agencies. It will also include an amendment to the San Francisco Bay Plan to establish policies that allow for, and potentially require more beneficial use around San Francisco Bay. The project will also include the development of a financing strategy that identifies challenges, costs, financing approaches, and appropriate funding sources that will lead to an implementation roadmap for funding beneficial use projects, and creating a framework for increased wetland restoration (and associated biodiversity and climate resilience benefits) throughout San Francisco Bay.

About the Grantee:

Established in 1965, BCDC's mission is to protect and enhance San Francisco Bay and encourage the Bay's responsible and productive use for this and future generations. Over the past decade, BCDC has embraced climate adaptation work, earning the reputation of being a trusted partner and strategic facilitator to catalyze local and regional action. This has occurred primarily through its nationally recognized Adapting to Rising Tides (ART) program. BCDC and Bay Adapt's diverse community engagement and visioning has set the precedent that this agency is well-suited to receive funding for the implementation the Bay Adapt Joint Platform by developing the Guidance.

Project Timeline

The proposed project will begin in July 2022 and end in December 2026.

PROJECT FINANCING:

Staff recommends that the Ocean Protection Council (OPC) authorize encumbrance of up to \$2,179,843 to the Bay Conservation and Development Commission (BCDC) to develop the Regional Sea-Level Rise Adaptation Guidance for San Francisco Bay and support efforts to advance beneficial use of sediment for habitat restoration in and around San Francisco Bay. The State Coastal Conservancy will provide approximately \$3,000,000 to support Bay Adapt implementation. The US Environmental Protection Agency and BCDC are providing \$379,124 to support the beneficial use policy effort.

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| Ocean Protection Council | \$2,179,843 |
| State Coastal Conservancy (approximation) – Bay Adapt Implementation | \$3,000,000 |
| Environmental Protection Agency – Beneficial Use | \$284,718 |
| BCDC (in-kind) – Beneficial Use | \$94,406 |

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| TOTAL | \$5,555,967 |
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The anticipated source of funds will be from the Ocean Protection Council's Fiscal Year 2018/2019 appropriation of California Environmental License Plate Funds (ELPF). Using these funds to support this project is consistent with the California Ocean Protection Act, Section 35650(b), as well as OPC's Strategic Plan and Grant Program Funding Guidelines as discussed in more detail in the following section.

CONSISTENCY WITH CALIFORNIA OCEAN PROTECTION ACT:

The proposed project is consistent with the Ocean Protection Act, Division 26.5 of the Public Resources Code, because it is consistent with trust-fund allowable projects, defined in Public Resources Code Section 35650(b)(2) as projects which:

- Allow for increased public access to, and enjoyment of, ocean and coastal resources, consistent with sustainable, long-term protection and conservation of those resources.
- Improve management, conservation, and protection of coastal waters and ocean ecosystems.
- Provide funding for adaptive management, planning coordination, monitoring, research, and other necessary activities to minimize the adverse impacts of climate change on California's ocean ecosystem.

COMPLIANCE WITH THE CALIFORNIA ENVIRONMENTAL QUALITY ACT (CEQA):

This planning-only project does not trigger CEQA.