

SAN FRANCISCO BAY RESTORATION AUTHORITY

Staff Recommendation  
April 11, 2018

**SOUTH BAY SALT POND RESTORATION PROJECT, PHASE 2**

Project No.: RA-005  
Project Manager: Brenda Buxton

**RECOMMENDED ACTION:** Authorization to disburse up to \$6,221,730 to Ducks Unlimited, Inc. for planning and construction and \$1,200,000 to the California Wildlife Foundation for adaptive management monitoring and studies in order to implement Phase 2 projects of the South Bay Salt Pond Restoration Project.

**LOCATION:** Southern San Francisco Bay below San Mateo Bridge, Ravenswood and Alviso Pond Complexes (Exhibits 1 and 2); Measure AA Region: West Bay, South Bay and East Bay.

**MEASURE AA PROGRAM CATEGORY:** Vital Fish, Bird and Wildlife Habitat Program; Integrated Flood Protection Program; Shoreline Public Access Program.

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**EXHIBITS**

- Exhibit 1: [Project Location](#)
- Exhibit 2: [Phase 2 Project Locations](#)
- Exhibit 3: [South Bay Salt Pond Restoration Project, Final Environmental Impact Statement/Report, Phase 2, April 2016 \(Final Phase 2 EIS/R\)](#)
- Exhibit 4: [Ravenswood Ponds Project](#)
- Exhibit 5: [Island Ponds Project](#)
- Exhibit 6: [Project Letters](#)
- Exhibit 7: [South Bay Salt Pond Restoration Project Funding](#)

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**RESOLUTION AND FINDINGS:**

Staff recommends that the San Francisco Bay Restoration Authority adopt the following resolution pursuant to The San Francisco Bay Restoration Authority Act, Gov. Code § 66700-66706:

“The San Francisco Bay Restoration Authority hereby authorizes the disbursement of an amount not to exceed seven million four hundred twenty-one thousand seven hundred thirty dollars

(\$7,421,730) as follows: 1) up to six million two hundred twenty-one thousand seven hundred thirty (\$6,221,730) to Ducks Unlimited, Inc. for construction of Phase 2 projects of the South Bay Salt Pond Restoration Project in the Alviso and Ravenswood Ponds, and 2) up to one million two hundred thousand (\$1,200,000) to the California Wildlife Foundation to implement the South Bay Salt Pond Restoration Project's adaptive management science program including studies and monitoring activities associated with Phase 2 implementation.

1. Prior to commencement of the project, each grantee shall submit for the review and written approval of the Executive Officer of the Authority the following:
  - a. A detailed work program, schedule, and budget.
  - b. Names and qualifications of any contractors to be employed in carrying out the project or studies.
  - c. A plan for acknowledgement of Authority funding.
  - d. Evidence that the grantee has entered into agreements sufficient to enable the grantee, as applicable, to implement the project or access property for scientific monitoring or data collection.
2. Prior to commencing the project, Ducks Unlimited, Inc., shall provide evidence that it has entered into a project labor agreement consistent with San Francisco Bay Restoration Authority Resolution 22.
3. In carrying out the project, Ducks Unlimited, Inc. shall comply with all applicable mitigation and monitoring measures that are identified in the Final Environmental Impact Statement/Report, South Bay Salt Pond Restoration Project – Phase 2 and in the 2007 South Bay Salt Pond Restoration Project Final Environmental Impact Statement/Environmental Impact Report or that are required by any permit or approval.”

Staff further recommends that the Authority adopt the following findings:

“Based on the accompanying staff report and attached exhibits, the San Francisco Bay Restoration Authority hereby finds that:

1. The proposed authorization is consistent with The San Francisco Bay Restoration Authority Act, Gov. Code § 66700-66706.
2. The proposed authorization is consistent with The San Francisco Bay Clean Water, Pollution Prevention and Habitat Restoration Measure (Measure AA).
3. The San Francisco Bay Restoration Authority has independently reviewed and considered the information contained in the *South Bay Salt Pond Restoration Project, Final Environmental Impact Statement/Report, Phase 2, April 2016* (Final Phase 2 EIS/R) (Exhibit 3) that was certified with findings by the State Coastal Conservancy on May 26, 2016 in order to comply with the California Environmental Quality Act (“CEQA”).
4. The Final Phase 2 EIS/R identifies a “potentially significant” effect from the implementation of the Preferred Alternative with respect to Traffic. With regard to this impact, as modified by incorporation of the mitigation measure identified in the Final Phase 2 EIS/R, the project has been changed to avoid, reduce or mitigate the possible significant environmental effect of the project on Traffic. The Final Phase 2 EIS/R identifies a “potentially significant” effect

and a “significant and unavoidable” effect in the area of Recreational Resources. Specific environmental and other benefits of the project described in this staff recommendation and detailed in the Final Phase 2 EIS/R outweigh and render acceptable these unavoidable adverse environmental effects, as well as the unavoidable adverse effects identified in the 2007 EIS/R, because the Preferred Alternative will result in long-term environmental benefits including restoring native habitat for threatened and endangered salt marsh species as well as other plant and animal species that otherwise would be threatened by loss of critical habitat. In addition, the Preferred Alternative will improve the existing level flood protection which will benefit adjacent residences and businesses. Finally, although there are impacts to recreational resources, the Preferred Alternative will also construct new trails, overlooks, interpretive signs and other public amenities which will result in increased wildlife-oriented recreation and public access opportunities.”

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### **PROJECT SUMMARY:**

San Francisco Bay Restoration Authority approval of this recommendation will provide the final funding necessary to complete Phase 2 of the South Bay Salt Pond Restoration Project (Phase 2) in the Ravenswood and Alviso Ponds and launch the next phase of the adaptive management science program. One of the largest wetland restoration projects in the United States, the South Bay Salt Pond (SBSP) Restoration Project is a multiagency effort to restore 15,100 acres of former salt evaporation ponds in South San Francisco Bay in phases over a 50-year period.

After five years of planning, Phase 2 will further the goals of the SBSP Restoration Project by implementing the next set of habitat, flood protection, and recreation improvements at five locations: Mountain View Ponds (Pond A1 and A2W in the Alviso Pond Complex), Pond A8 (in the Alviso Pond Complex), Island Ponds (Pond A19 in the Alviso Pond Complex), Ravenswood Ponds (Ponds R5, S5, R4, and R3 in the Ravenswood Complex) and southern portion of the Eden Landing Ponds (Ponds E1, E2, E4, E7, E5, E6, E1C, E2C, E4C, and E6C in the Eden Landing Pond Complex). While the Alviso and Ravenswood Ponds Complexes are owned and managed by the U.S. Fish and Wildlife Service (USFWS) and the Eden Landing Pond Complex is owned and managed by the California Department of Fish and Wildlife (CDFW), the SBSP Restoration Project is a cooperative effort involving the State Coastal Conservancy (Conservancy), Santa Clara Valley Water District (SCVWD), and many other local cities, counties, nonprofit organizations, and stakeholders from the region.

### **Planning and Implementation**

This authorization would provide Ducks Unlimited, Inc. (DU) with up to \$6,221,730 for construction activities as described below:

**Ravenswood Ponds (Ponds R3, R4, R5, and S5 in the Ravenswood Pond Complex) (Exhibit 4).** DU will construct Phase 2 actions in the Ravenswood Ponds in order to create a 355-acre mosaic of tidal wetlands, upland transition zone, and managed pond habitats. In the 295-acre Pond R4, DU will breach levees, install ditch blocks, dredge pilot channels, and construct 15 acres of gently sloping upland transition zone along the edge of an existing landfill. This will create habitat for the Ridgway’s rail, salt marsh harvest mouse, and steelhead trout. The levee between R3 and R4 will be raised and widened to reduce flooding risks. In addition, DU will install water control structures to improve circulation in a remnant

channel in R3 in order to enhance snowy plover habitat. Water control structures also will be installed to create managed pond habitat in Ponds R5 and S5 for migratory shorebirds and waterfowl. A half mile of trail, a spur off of the Bay Trail, will be constructed with interpretive platforms and signage.

**Island Ponds Enhancement (Pond A19 in the Alviso Pond Complex) (Exhibit 5).** DU will breach and lower the A19 berm in additional locations in order to improve tidal circulation in the 265-acre A19. Initially A19 was breached in 2006 along with the adjacent Ponds A20 and A21. However, since A19 is further upstream from the other ponds and is connected to tidal waters through a single breach, tidal marsh habitat has developed more slowly. By improving the connection to Bay's waters and sediment, tidal vegetation in A19 is expected to substantially expand, providing additional habitat to the endangered and threatened species that have re-occupied A20 and A21.

There are two additional implementation projects that are part of Phase 2, the Mountain View Ponds and Pond A8 Ecotone, but they are proposed as match for the contributions of the San Francisco Bay Restoration Authority. Those two projects are expected to total \$18,386,753 and are funded by federal, state, and local sources.

DU's grant application to the San Francisco Bay Restoration Authority also included \$600,000 in funding for planning, design, and permitting of the Phase 2 actions in the southern portion of the Eden Landing Ponds between Old Alameda Creek and the Alameda Creek Flood Control Channel (Ponds E1, E2, E4, E7, E5, E6, E1C, E2C, E4C, and E6C). Due to the complexity of the flood management issues, Phase 2 planning and environmental review for Eden Landing has been on a separate schedule from the improvements in the Ravenswood and Alviso Ponds. Unfortunately, an Environmental Impact Report/Study for Phase 2 at Eden Landing has been delayed and will not be completed until later this year. For this reason, staff recommends that consideration of planning, design, and permitting funding for Phase 2 Eden Landing be postponed until after the completion of the NEPA/CEQA review process when staff can propose appropriate findings regarding environmental impacts of the alternatives.

A nonprofit organization with extensive experience restoring habitat for waterfowl and other species, DU also has a successful track record of fundraising and has directly secured \$5.68 million in federal grants for Phase 2. Past successfully completed wetland, flood protection, and public recreation projects include: three SBSP Restoration Project Phase I projects, the Inner, Middle and Outer Bair Island Restoration projects, as well as numerous other Bay Area wetland restoration projects, such as Cullinan Ranch and Sears Point. DU's award of \$6,221,730 includes an estimated \$640,157 for grant management and administrative costs associated with implementing the project.

### **Adaptive Management and Science**

This authorization includes \$1,200,000 million for the California Wildlife Foundation (CWF) to oversee the applied studies and monitoring identified in the SBSP Restoration Project's Adaptive Management Plan (AMP). The AMP outlines how the SBSP Restoration Project will implement the project in phases and learn from the results in order to better understand the significant scientific uncertainties associated with a project of this scale and to avoid undesirable environmental impacts. The AMP relies on data generated by carefully planned applied studies and monitoring. The studies and other activities covered with this funding are expected to last

one to three years depending on the topic. During this period, the SBSP Restoration Project's Project Management Team will work with the project scientists and a Technical Advisory Committee to integrate the science results into project management and planning decisions. Phase 2 of the science program is aimed at improving integration with regional efforts related to science and monitoring. By doing so, project-specific needs will be addressed while also expanding the program's role on Bay-wide issues such as sea level rise and shoreline resilience. San Francisco Bay Restoration Authority funding would support three main elements of the Phase 2 science program:

**Regional Integration workshops** to determine how to share data with other large-scale restoration projects in the Bay so that a more complete understanding of ecosystem linkages can be developed. The workshops will focus on developing a system for regional integration of data collection and analysis, determining what parameters to monitor in an integrated way within the Bay, and assessing gaps in our current knowledge of the Bay. This information is critical for land managers to make decisions about planning restoration projects and to wisely manage the Bay's resources in a changing environment.

**Climate change assessment** to identify the impacts of climate change as they relate specifically to achieving the SBSP Restoration Project's objectives. The report will synthesize the most up to date research of larger-scale issues such as sea level rise, sedimentation patterns, as well as locally specific issues such as adjacent land use and unique site opportunities and constraints.

**Applied studies and monitoring** focused on continued data collection necessary to keep future restoration phases on track. This element of the Phase 2 science program focuses on monitoring essential aspects of the system, and is expected to include tracking changes in habitat area and quality using GIS and remote-sensing data, targeted data collection on mercury, sediment availability, mobilization and accretion, and monitoring of species responses including fish, as well as migratory, resident, and nesting birds.

A nonprofit organization, CWF was created in 1990 to support open space and wildlife conservation in California. CWF will administer these studies and organize workshops in cooperation with the South Bay Salt Pond Restoration Project Management Team and other project partners. CWF will provide \$75,000 of its own funding to cover its administrative costs to match this authorization. CWF played a key role in the restoration of Inner Bair Island by managing the dirt broker that brought in clean fill to raise the deeply subsided pond to marsh plain elevation. CWF has been a partner on the Conservancy's Invasive *Spartina* Project and has led *Spartina* eradication activities as well as completed revegetation and enhancement projects. Due to this extensive experience in carrying out complex planning, acquisition, and construction projects, CWF is an appropriate entity to manage the proposed science activities.

The SBSP Restoration Project enjoys extensive support from elected officials, local agencies, and environmental organizations. The acquisition effort was led by U.S. Senator Dianne Feinstein who continues to support the project. In addition, the SBSP Restoration Project has an extensive outreach program which includes a Stakeholder Forum made up of representatives of local governments, businesses, nonprofit organizations, homeowner groups, and individuals which meet annually. Furthermore, the project maintains a website with extensive information about the project made available to the public.

Letters supporting DU’s application to the San Francisco Bay Authority from the California Department of Fish and Wildlife, U.S. Fish and Wildlife Service, Santa Clara Valley Water District, the San Francisco Bay Joint Venture, Save the Bay, The Bay Institute, Citizen’s Committee to Complete the Refuge, California Native Plant Society – Santa Clara County Chapter, Committee for Green Foothills, Friends of Bedwell Bayfront Park, Keep Coyote Creek Beautiful, San Francisco Baykeeper, Santa Clara Valley Audubon Society, and Sequoia Audubon Society are attached in Exhibit 6.

Since the 2003 acquisition of the salt ponds, the SBSPP Restoration Project has successfully restored 1,600 acres to tidal marsh, created 1,440 acres of muted tidal habitat, and enhanced 710 acres of managed pond habitat for wildlife, for a total of 3,750 acres of habitat restoration. The project has also created approximately seven miles of new trails, including sections of the Bay Trail, and other public recreation features including overlooks and a new kayak launch that is part of the Bay Area Water Trail.

This successful track record has helped the SBSPP Restoration Project team identify the potential barriers and obstacles to implementation of Phase 2. Phase 2 challenges specifically relate to construction: protecting existing infrastructure, traffic management, timing and quantity of material import, site access, and coordination with numerous partners. Throughout the project planning stage, the SBSPP Restoration Project team has sought to address these challenges through design of the project (e.g. incorporating protection of the PG&E’s infrastructure into the project) or through coordination with project partners (e.g. working with local cities to manage traffic impacts and coordinate site access). In addition, DU’s experience with construction and importing fill will help manage risk and minimize project delays.

The biggest long-term risk to the project is sea level rise. However, this also provides the impetus to act quickly. The SBSPP Restoration Project proposes to complete as much tidal restoration as is feasible as soon as possible in order to allow natural sedimentation to bring ponds up to marsh elevations before sea level rises dramatically, as recommended in the Baylands Ecosystem Habitat Goals Project 2015 Science Update.

**Site Description:** In the late nineteenth and early twentieth centuries many of the tidal marshes that surrounded San Francisco Bay south of the San Mateo Bridge were converted to salt evaporation ponds, contributing to the total estimated 85 percent loss of the historic tidal marshes in the San Francisco Bay-Delta Estuary. Although dramatically different from 150 years ago, the South Bay’s wetland habitats, including the salt ponds, tidal marshes, sloughs, mudflats, and open bay, are used by large populations of waterfowl and shorebirds, harbor seals, numerous fish species, and by a number of threatened and endangered species, including the Ridgway’s rail, California black rail, California brown pelican, California least tern, western snowy plover, salt marsh harvest mouse, and steelhead trout. The 2003 acquisition of 15,100 acres of salt evaporation ponds created the South Bay Salt Pond Restoration Project and allows for the opportunity to restore tidal marsh and enhance the remaining pond habitats for the benefit of these species.

**PROJECT FINANCING**

<b>San Francisco Bay Restoration Authority</b>	<b>\$7,421,730</b>
Federal funds	\$7,670,000

State funds	\$12,970,133
Local funds	\$5,000,000
<b>Project Total</b>	<b>\$33,061,863</b>

The federal, state, and local contributions listed above are for committed funds for Phase 2 construction and include: \$2.67 million from the US Environmental Protection Agency, \$3 million from NOAA’s Coastal Resiliency Grant Program, \$1 million from USFWS (North American Wetlands Conservation Act), \$2.705 million from the Conservancy, \$1 million from the USFWS (National Coastal Wetlands Conservation), \$4.9 million from California Department of Fish and Wildlife, \$4.68 million from California Department of Water Resources, and an estimated \$2.5 million each from the City of Mountain View and Santa Clara Valley Water District. A table detailing costs to date for the SBSP Restoration Project from acquisition through funds awarded to date for Phase 2 construction is presented in Exhibit 7.

In addition to the costs listed above, for Phase 2 engineering, conceptual design, CEQA/NEPA analysis, and permitting, the Conservancy has contributed over \$3.76 million, the Wildlife Conservation Board \$475,000, and the US EPA \$796,000.

To implement the SBSP Restoration Project’s Adaptive Management monitoring and science program, over \$9 million has been spent to date from a variety of sources including federal (USGS, USEPA, NOAA, USFWS), state (SCC), local (SCVWD) and foundation (Resources Legacy Fund) sources.

**CONSISTENCY WITH AUTHORITY’S ENABLING LEGISLATION, THE SAN FRANCISCO BAY RESTORATION AUTHORITY ACT:**

Consistent with Section 66704.5, DU and CWF are private nonprofit organizations working on shoreline parcels in the San Francisco Bay area, on a project that will 1) restore, protect, or enhance tidal wetlands, managed ponds, and natural habitats on the shoreline in the San Francisco Bay area; (2) build or enhance shoreline levees or other flood management features that are part of a project to restore, enhance, or protect tidal wetlands, managed ponds, or natural habitats; and (3) provide or improve public access or recreational amenities that are part of a project to restore, enhance, or protect tidal wetlands, managed ponds, or natural habitats.

Consistent with Section 66704.5(e) this award would be used to support construction and monitoring for an eligible project.

**CONSISTENCY WITH MEASURE AA PROGRAMS AND ACTIVITIES:**

This authorization is consistent with Measure AA’s *Vital Fish, Bird and Wildlife Habitat Program* since it will significantly improve or restore over 620 acres of wetland habitat that will support and increase vital populations of fish, birds, and other wildlife in and around the Bay, including the San Francisco Bay National Wildlife Refuge, and will provide funding for monitoring and scientific studies as part of the SBSP Restoration Project’s Adaptive Management Plan to ensure ongoing benefits to wildlife and people.

Consistent with Measure AA's *Integrated Flood Protection Program*, this authorization will use natural habitats to protect communities along the Bay's shoreline from the risks of severe coastal flooding caused by storms and high water levels by constructing fifteen acres of transitional upland habitat (ecotone) along the Bay's edge while also improving existing berms and levees to protect existing shoreline communities and infrastructure.

Furthermore, this authorization is consistent with Measure AA's *Shoreline Public Access Program* since it will enhance the quality of life of Bay Area residents, including those with disabilities, by constructing a half mile trail that will connect the Bay Trail with Bedwell Bayfront Park, and providing signs, interpretive information, and related facilities.

**CONSISTENCY WITH MEASURE AA PRIORITIZATION CRITERIA:**

1. **Greatest positive impact.** This authorization will provide the capstone funding needed to implement Phase 2 of the SBSP Restoration Project, the largest tidal wetland restoration and enhancement effort in the western United States. The construction actions at the Ravenswood Ponds will create a 355-acre mosaic of tidal wetlands, upland transition zone, and managed pond habitats while those at the Island Ponds will greatly enhance 265 acres of tidal wetland habitat for endangered and threatened species. The planning funding will significantly advance the planning and environmental compliance efforts required to restore or enhance approximately 2,000 acres of former salt ponds in the southern portion of Eden Landing. Science funding will enable important targeted studies to affirm restoration trajectories and provide input to future planning efforts. The actions proposed in this authorization will provide additional benefits such as improved flood protection for communities in South Bay, public access and recreations amenities, and beneficial reuse of dredged material (planned for Eden Landing).
2. **Greatest long-term impact.** Increasing the amount and quality of wetland habitats has several long-term benefits to San Francisco Bay including helping to recover threatened and endangered species populations. Furthermore, wetland restoration will improve water quality by absorbing nutrients and contaminants and increasing tidal circulation. Since the SBSP Restoration Project is in a highly depositional area of the Bay, the proposed Phase 2 projects are likely to keep up with an accelerated pace of sea-level rise. Furthermore, the proposed projects have incorporated features that will improve long-term resiliency such as gently sloping upland transition zones and engineered levees, which will protect infrastructure and communities from being flooded out during higher tides and storm surges. The upland transition zones will also provide upland transgression areas for the marsh to retreat to over time. The activities will help implement the goals and objectives of the *Tidal Marsh Species Recovery Plan* as well as the *San Francisco Baylands Habitat Goals Report* and its 2015 *Baylands Goals Update*.
3. **Leveraging resources and partnerships.** Over \$39 million has been leveraged for science and Phase 2 planning and construction to date. San Francisco Bay Restoration Authority funds are critical to provide the missing funding for Phase 2. The diverse funder and partner network comprised of federal, state, and local agencies, non-profit organizations, foundations, and industry demonstrates broad support for the project. Support letters from

many of these agencies and organizations are attached (Exhibit 6). See Project Financing section above for further discussion.

4. **Economically disadvantaged communities.** Phase 2 implementation actions will benefit several economically disadvantaged communities in the urbanized South Bay. Eden Landing is within 2 miles of a disadvantaged community block group in Union City, and Ravenswood is within 0.25 mile of a disadvantaged community block group in East Palo Alto. The Island Ponds are adjacent to the community of Alviso, and the actions proposed will continue deepen and widen the boating channels in the far South Bay. Phase 2 project implementation will provide much-needed outdoor recreational access opportunities to members of these communities as well as improvements to bay water quality and resilience to sea level rise.
5. **Benefits to economy.** Phase 2 will create local jobs, improve fisheries, and improve recreation opportunities. A Project Labor Agreement will ensure living wages and instructional opportunities for workers and apprentices constructing these projects. Planning and construction activities will result in both direct employment of dozens of workers, and will have ancillary benefits through increased visitation and associated spending. The project includes a half mile of new public access trail linking to a community park (Bedwell Bayfront Park) and a section of the San Francisco Bay Trail, a segment anticipated to have tremendous use. This trail will provide the public with excellent views of the evolving tidal marsh and include several interpretive elements to engage the local community in the natural resources of the San Francisco Bay Estuary, as well as construction of a viewing platform. In addition, this funding will allow the completion of planning of a significant stretch of the Bay Trail at Eden Landing, taking the trail off city streets and putting the trail on the edge of the Bay where it was intended.

Newly improved levees with gentle transition slopes will provide improved flood protection, reducing the potential for flooding impacts relative to the unengineered earthen berms currently serving that function. With sea-level rise, flood risk would increase, resulting in economic loss to the surrounding communities. The SBSP Restoration Project will not only reduce this risk, but the levee improvements will also reduce maintenance costs for adjacent landowners, including multiple landfills located at the edge of the bay that will be better protected from rising seas.

6. **Engage youth and young adults.** One of the SBSP Restoration Project partners, Save the Bay, will restore approximately 15 acres of transition zone habitat at the Ravenswood project site with youth and adult volunteers. Save the Bay's team of staff scientists will design the plantings and oversee volunteer labor. An estimated 75 workdays will generate an estimated 5,000 hours of volunteers removing trash, clearing weeds, and transplanting native seedlings at Save the Bay nursery facilities and at the restoration site. Save the Bay's restoration sites provide a vital platform to engage residents and improve awareness of Bay ecology, sensitive species ecology, human impact, and climate change. Volunteer activities also provide exceptional opportunities for local residents to explore habitats that are within miles of their homes, but are often unseen and little understood. This enrichment is particularly valuable to low-income students who participate in their education programs.

7. **Monitoring, maintenance, and stewardship.** The U.S. Fish and Wildlife Service manages the Alviso and Ravenswood Ponds and the California Department of Fish and Wildlife manages the Eden Landing Ponds. The SBSP Restoration Project seeks to support the management actions of these agencies with an extensive science and adaptive management program designed to understand the outcomes of the restoration actions, address key scientific uncertainties, and provide insights for future phases of the project. Data are made available publicly to researchers and contractors as noted on the SBSP Restoration Project website ([www.southbayrestoration.org/monitoring](http://www.southbayrestoration.org/monitoring)).

The Phase 2 Science Program includes monitoring and targeted studies of project elements, a climate change assessment to inform adaptive management, and regional integration workshops to develop the most efficient and effective ways to collect data. The regional integration workshops will be coordinated with San Francisco Estuary Institute's Regional Wetland Monitoring Program in order to leverage existing monitoring efforts. One of the primary ways the Project is tracking habitat changes is through large-scale mapping via satellite imagery. Vegetation is monitored to assess potential erosion to adjacent tidal flats and channel development. Baseline conditions were captured in 2009, 2010 and 2011. Additional surveys will be conducted every 5–7 years to track south bay habitats as they shift over time in response to natural and anthropogenic changes.

8. **Coastal Conservancy's San Francisco Bay Area Conservancy Program.** The actions proposed in this authorization are consistent with the Bay Area Conservancy Program because they: (1) are 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) Water Quality Control Plan (June 29, 2013)* pp. 2-2 and 4-92), (2) are 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) provide opportunities for habitat, flood protection, and public access benefits that could be lost if the project is not quickly implemented, and (5) include matching funds from other sources of funding as described above in the "Project Financing" section.
9. **San Francisco Bay Conservation and Development Commission's Coastal Management Program.** The activities and actions proposed are consistent with the Bay Conservation and Development Commission's (BCDC) Coastal Management Program policies. Phase 2 actions were recently presented to the BCDC Design Review Board in April 2017, and have been developed in close coordination with BCDC staff. A permit application is currently being reviewed by BCDC and a Commission hearing is expected in May 2018 for the implementation actions of Phase 2.
10. **San Francisco Bay Joint Venture's Implementation Strategy.** This authorization is consistent with the SFBJV Implementation Strategy, and meets many of its objectives. Phase 2 actions at the Island Ponds, Ravenswood, and Eden Landing are all current priorities on the SFBJV list and the SFBJV is a key partner in the development of the project. In addition to

meeting the overall objectives of improving the management of bay habitats, and including monitoring as part of habitat restoration and enhancement projects, the project also helps meet the Implementation Plan's acreage objectives for the South Bay subregion. The SBSP Restoration Project's Adaptive Management Plan's monitoring and study results are informing monitoring efforts baywide and data are shared among researchers and the regulatory community.

#### **COMPLIANCE WITH CEQA:**

In order to comply with the California Environmental Quality Act (CEQA) and the National Environmental Policy Act (NEPA), USFWS and the Conservancy prepared the *South Bay Salt Pond Restoration Project, Final Environmental Impact Statement/Report, Phase 2, April 2016* (Final Phase 2 EIS/R) to evaluate the potential environmental impacts of Phase 2. The Final Phase 2 EIS/R was certified by the Conservancy on May 26, 2016 and included a statement of overriding consideration for those impacts that could not be reduced to a less-than-significant level.

The Final Phase 2 EIS/R is a project-level environmental impact assessment addressing the specific components and implementation of Phase 2 but tiers off of the *2007 South Bay Salt Pond (SBSP) Restoration Project Programmatic Environmental Impact Statement/Environmental Impact Report* (2007 EIS/R). The 2007 EIS/R established the SBSP Restoration Project's goal of restoring up to 90 percent of the former salt ponds to tidal marsh, (with at least 10 percent remaining as enhanced managed ponds). However, the 2007 EIS/R states that the adaptive management will be a critical means by which the project will detect problems early and take action to avoid impacts before they reach a threshold of significance.

Phase 2, as the second project component of this long-term restoration project, would incrementally advance the SBSP Restoration Project toward these end goals. While there are a total of four Phase 2 actions analyzed in the Final Phase 2 EIR/S, this discussion focuses on those Phase 2 actions funded by this authorization: Island Ponds and Ravenswood Ponds.

For the Island Ponds actions, because the construction work does not require major earth movement or affect public access or infrastructure or increase flood risk, no potentially significant impacts were identified in the Final Phase 2 EIR/S.

For the Ravenswood Ponds, potentially significant effects were identified in the areas of traffic and public access.

#### **Significant Effects Reduced to Less Than Significant Levels by Mitigation**

Due to the large amount of upland material that will need to be imported by truck to construct habitat transition zones at the Ravenswood Ponds, the project could have a significant impact on traffic. Finding sources with sufficient upland fill material is difficult. The material must be available when the project site is ready to accept it because stockpiling the material and moving it again is cost prohibitive and would increase environmental impacts. In addition, the material must pass a rigorous screening to prove that is free of contamination and suitable for use at a restoration site. Furthermore, the source of this material needs to be close enough that there are fewer environmental impacts and lower costs than taking the material elsewhere. These constraints already limit the number of available sources for Phase 2. Further constraining the

sources of fill by limiting the hours of material delivery to the nonpeak commute hours, a typical way of managing traffic impacts, would raise project costs by an estimated 30% at a minimum.

The Final Phase 2 EIS/R analyzed truck trips and impacts associated with them in *Traffic Impact Study for South Bay Salt Ponds Restoration - Phase 2 Project* (URS 2014). This analysis concluded that Ravenswood Ponds work would result in an increase in delay greater than 0.8 seconds at the intersection of U.S. 101 SB off-ramp/Marsh Road (SR 84), which is a highly congested intersection; therefore, project construction-related impacts would be potentially significant. To reduce impacts to less than significant the Final Phase 2 EIS/R identifies **S BSP Phase 2 Mitigation Measure 3.11-1** which requires the USFWS to coordinate with Caltrans and/or the City of Menlo Park to modify the intersection signal timing in the morning to reduce project-related delay to a level that the City does not deem significant. The Final Phase 2 EIS/R found that intersection delay increase does not result in an impact under the mitigated project condition; therefore, identified impacts are reduced to a less-than-significant level.

### **Significant Impacts**

The Final Phase 2 EIS/R found only two impacts that cannot be reduced to less-than-significant for the Ravenswood Ponds. **Phase 2 Impact 3.6-1 Provision of new public access and recreation facilities, including the opening of new areas for recreational purposes and the completion of the Bay Trail spine** was found to be “potentially significant.” The thresholds of significance for this impact used the standard of providing “maximum feasible public access, consistent with the proposed project.” While the Phase 2 actions would add a several new public access and recreation features, not *all* the proposed trails in the Preferred Alternative are constructed to the maximum extent possible. This is due to concerns over recreation-based impact on sensitive wildlife species. It is possible, however, that additional trails and public recreation features could have been implemented without disturbing wildlife, in which case the decision not to add them would have failed to achieve maximum feasible access. It is also possible that the decision to construct fewer trails was correct, and that constructing a greater amount of public access features (e.g. longer trails, more overlooks) would not have been consistent with the project goals of “wildlife-oriented recreation.” Therefore, the Final Phase 2 EIS/R takes the conservative approach and identifies this as a potentially significant effect for which there is no feasible mitigation. See Statement of Overriding Considerations, below.

**Phase 2 Impact 3.6-5 Result in the temporary construction-related closure of adjacent public parks or other recreational facilities, making such facilities unavailable for public use** was found to be “significant and unavoidable” for the work proposed at Ravenswood Ponds (and other sites). Public safety and the need to maneuver construction materials and equipment through adjacent areas make temporary closure of some parking areas, park entryways, and trails unavoidable. Although this is an impact of the project, such closures will be temporary and are necessary for Phase 2 to achieve its long-term benefits. See Statement of Overriding Considerations, below.

### **Cumulative Impacts**

The Final Phase 2 EIS/R also evaluates the potential environmental impacts of Phase 2 when considered together with other projects but found no new cumulative impacts; therefore, all cumulative impacts are determined to be less than significant.

### **Project Benefits**

The Ravenswood Ponds and Island Ponds as part of Phase 2 of the South Bay Salt Pond Restoration Project include the following benefits:

- Construction and/or raising of levees and habitat transition zones to ensure flood protection and reduce the potential effects on people and property from flooding.
- Providing habitat for threatened and endangered salt marsh species such as California Ridgway's rail, salt marsh harvest mouse, and steelhead trout.
- Providing increased cover and escape from storm-run up and sea-level rise for marsh-dependent species by creating and planting habitat transition zones.
- Creating suitable habitat for special-status plant species in habitat transition zones.
- Providing habitat for resident and migrating shorebirds and waterfowl by providing more extensive shallow water habitats and nesting islands than would occur in marshes that develop in ponds that breach unintentionally.
- Increasing the water quality and tidal circulation of San Francisco Bay.
- Increasing the amount and quality of public access and recreation.
- Increasing opportunities for wildlife viewing and environmental interpretation.

### **Statement of Overriding Considerations**

In the event a project has unavoidable significant effects, the CEQA Guidelines require the decision-making agency to balance, as applicable, the economic, legal, social, technological, or other benefits of a proposed project against its unavoidable environmental risks when determining whether to approve the project (14 Cal. Code of Regulations, Section 15093). If the specific project benefits outweigh the unavoidable adverse environmental effects of the project, a Statement of Overriding Considerations may be adopted and the project approved, despite its adverse environmental effects.

The overall environmental benefits of the proposed projects as detailed above and in the Final Phase 2 EIS/R recommend that the San Francisco Bay Restoration Authority approve the project even though not all of the potentially significant environmental effects of the project are mitigated. As discussed above, the potentially significant impact to recreational resources is that the project may not be providing the maximum feasible public access as part of Phase 2. In order to protect wildlife and sensitive marsh habitat, not all of the newly-constructed trails will provide access along an entire length of levee (the maximum extent physically possible). While the Final Phase 2 EIS/R could have selected alternatives with longer public access trails (e.g. trails that extend the entire length of a levee), such alternatives would generate a finding of "potentially significant" in terms of impacts to wildlife resources. This would not be compatible with the project's wildlife habitat goals. Future adaptive management monitoring and applied studies may find that this more conservative approach to public access was too cautious. On the other hand, future studies may find the recommended actions were appropriately protective of the environmental resources. This impact is analyzed as "potentially significant" due to this uncertainty.

The "significant and unavoidable" impact is due to temporary closures to public access facilities (i.e. parking lots, trailheads) during construction. The inconvenience of closed facilities is of

short-term duration but the benefits of habitat restoration, improve flood protection, and new recreational facilities will be long-term.

For these reasons, the staff recommend that the San Francisco Bay Restoration Authority find that the specific environmental, resource, flood protection and public access enhancement benefits of the Ravenswood Ponds and Island Ponds actions proposed in the Final Phase 2 EIS/R, as described in the Project Benefits section above, outweighed the unmitigated or unavoidable environmental effects of the project.

Upon San Francisco Bay Restoration Authority approval of the proposed project, staff will file a Notice of Determination.