EXECUTIVE SUMMARY

S.1 Introduction

This Draft Environmental Impact Statement/Environmental Impact Report (EIS/R) was prepared by the United States Fish and Wildlife Service (USFWS) and the California Department of Fish and Wildlife (CDFW; formerly the California Department of Fish and Game, CDFG), partnering with the California State Coastal Conservancy (SCC), with technical assistance from the Alameda County Flood Control and Water Conservation District (ACFCWCD) and others to evaluate the potential environmental impacts of the proposed South Bay Salt Pond (SBSP) Restoration Project, Phase 2 at Eden Landing.

S.1.1 SBSP Restoration Phase 2 Project

The SBSP Restoration Project is a multi-agency effort to restore tidal marsh habitat, reconfigure managed pond habitat, maintain or improve flood risk management, and provide recreation opportunities and public access in 15,100 acres of former salt-evaporation ponds purchased from and donated by Cargill, Inc. (Cargill) in 2003. Immediately after the March 2003 acquisition, the landowners, CDFW and USWFS, implemented the Initial Stewardship Plan (USFWS and CDFG 2003) which was designed to maintain open and unvegetated pond habitats with enough water circulation to prevent salt production and provide some habitat values. The longer-term planning effort, a 50-year programmatic level plan for restoration, flood risk management, and public access that included a first phase of projects, is described in the 2007 SBSP Restoration Project Final EIR/S (2007 Final EIS/R), which addressed the SBSP Restoration Project at both the program level and at the Phase 1 level. This longer-term planning was facilitated by the SCC and was completed in January of 2009. It was through this planning process that the SBSP Restoration Project created the project goals and objectives. These goals and objectives continue to guide the project to the present day.

SBSP Restoration Project Objectives

1. Create, restore, or enhance habitats of sufficient size, function, and appropriate structure to:
   - Promote restoration of native special-status plants and animals that depend on South San Francisco Bay habitat for all or part of their life cycles.
   - Maintain current migratory bird species that utilize existing salt ponds and associated structures such as levees.
   - Support increased abundance and diversity of native species in various South San Francisco Bay aquatic and terrestrial ecosystem components, including plants, invertebrates, fish, mammals, birds, reptiles and amphibians.
2. Maintain or improve existing levels of flood risk management in the South Bay Area.
3. Provide public access and recreational opportunities compatible with wildlife and habitat goals.
4. Protect or improve existing levels of water and sediment quality in the South Bay, and take into account ecological risks caused by restoration.
5. Implement design and management measures to maintain or improve current levels of vector management, control predation on special status species, and manage the spread of nonnative invasive species.
6. Protect the services provided by existing infrastructure (e.g., power lines, railroads).

The SBSP Restoration Project's planning phase was completed in January 2009 with the publication of the 2007 Final EIS/R and subsequent regulatory permit issuance. Phase 1 implementation began immediately after completion of final designs. Restoration was completed in 2014, and final public access and recreation features were completed and opened to the public in May 2016. Phase 1 included the construction of 3,040 acres of tidal or muted tidal wetlands, 710 acres of enhanced managed pond, construction of habitat islands and improved levees, 7

miles of new public access and recreation trails, and other public access features. The planning and design for the Phase 2 projects started in 2010, continued for the Alviso and Ravenswood complexes (owned and managed by USFWS at the Don Edwards San Francisco Bay National Wildlife Refuge, or Refuge) with the 2015 Phase 2 Draft EIS/R and 2016 Phase 2 Final EIS/R for the Alviso and Ravenswood complexes, and continues for Eden Landing with this Draft EIS/R. The ponds that were not part of Phase 1, nor planned to be part of Phase 2, will continue to be actively managed according to the goals set forth in the Initial Stewardship Plan, the Adaptive Management Plan (AMP), the 2007 Final EIS/R, and current operations plans, until further implementation planning is completed and any necessary adaptive management studies are completed.

The Phase 2 actions described in this Draft EIS/R tier from the 2007 Final EIS/R for the SBSP Restoration Project and consist of project-level implementation of the SBSP Restoration Project for some areas of the Eden Landing Ecological Reserve (ELER, or Reserve). The 2007 Final EIS/R assessed the environmental consequences associated with two long-term restoration alternatives. In consideration of the environmental consequences discussed in the 2007 Final EIS/R, the USFWS Record of Decision and the CDFW Notice of Determination state that the USFWS and CDFW will implement Programmatic Alternative C, which would eventually convert up to 90 percent of the former salt ponds to tidal marsh, while at least 10 percent would remain as enhanced managed ponds. Phase 2 is the second project component of this long term restoration project, which would incrementally advance the project toward this end goal. Each of the Eden Landing Phase 2 Alternatives considered in this Draft EIS/R consist of various components that, if instituted, further advance the project toward achieving the 90/10 goal.

Construction, operations, and maintenance of Phase 2 activities at Eden Landing would be independent from activities at other Phase 2 ponds (i.e., those owned and managed by the USFWS as part of the Don Edwards San Francisco Bay National Wildlife Refuge). When considering and developing project alternatives for Phase 2, Eden Landing has been independently considered in meeting the targeted habitat designated in Program Alternative C (the 90/10 alternative), and separate sets of action alternatives were developed for the Eden Landing pond complex.

The Eden Landing Phase 2 project activities would occur in the southern half of the ELER within the Eden Landing pond complex. This pond complex is located in Alameda County, California (see Figure ES-1 and Figure ES-2). Four restoration alternatives are proposed for the Eden Landing pond complex, one of which is a No Action Alternative. This Draft EIS/R evaluates the following alternatives for each of the pond clusters.

Eden Landing Phase 2 Project Area

The Eden Landing Phase 2 project area is comprised of 11 ponds which are located within the southern portion of the ELER. Three sub-groups have been created to describe the southern half of the Eden Landing pond complex in more general terms, and are organized by their similarities and location within the Phase 2 project area. These sub-groups are organized as follows:

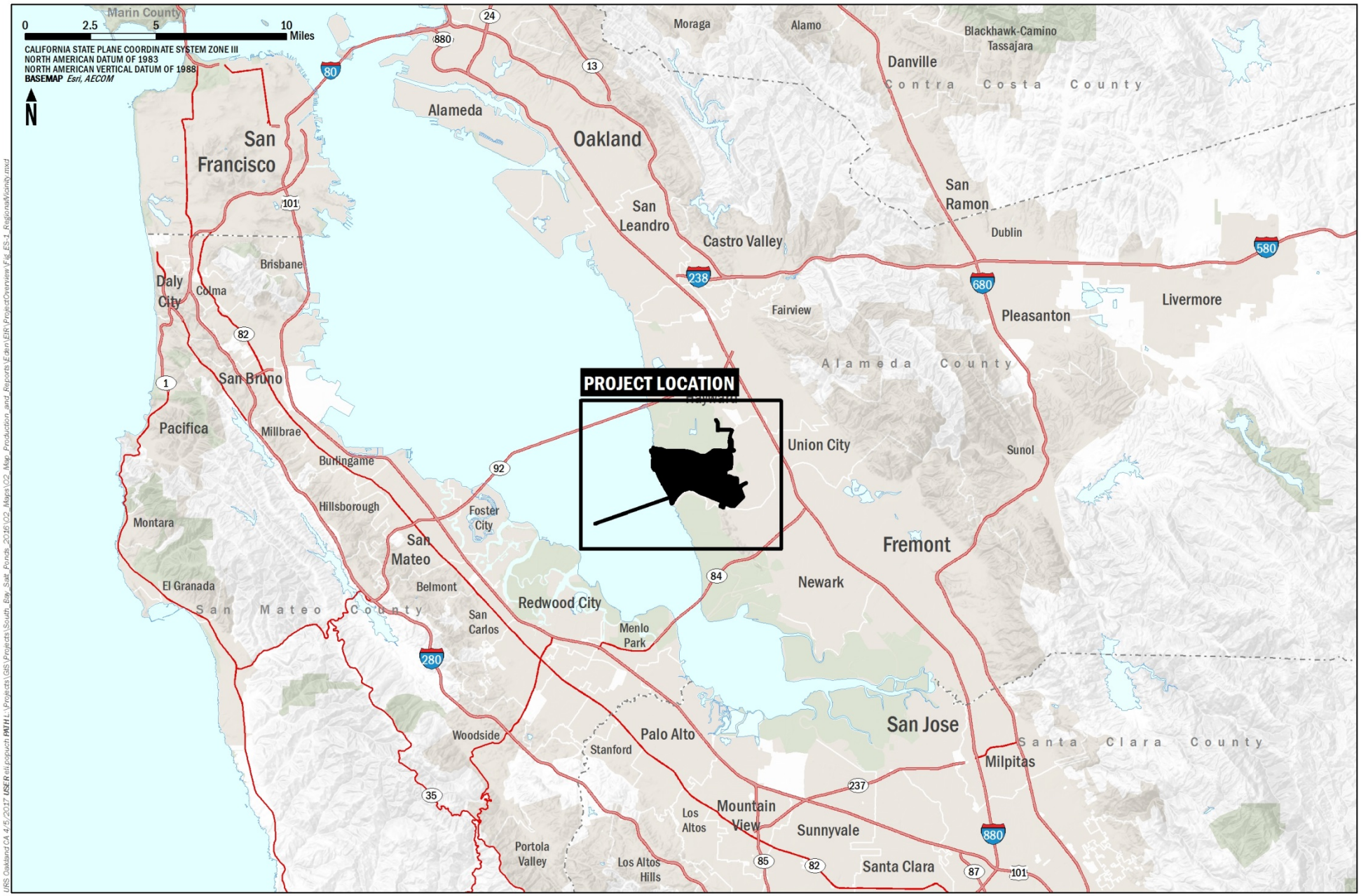
- The Bay Ponds: Ponds E1, E2, E4, and E7 are the four large ponds closest to San Francisco Bay. Phase 2 actions proposed at these ponds are intended to restore them to tidal marsh.
- The Inland Ponds: Ponds E5, E6, and E6C are somewhat smaller ponds in the northeast portion of the Phase 2 project area. These ponds could be restored to tidal marsh or to enhanced managed ponds, depending on which of the Phase 2 action alternatives is selected.

- The Southern Ponds: Also sometimes called the "C-Ponds" -- Ponds E1C, E2C, E4C, and E5C are in the southeastern portion of the complex. They are separated from the Inland Ponds and the Bay Ponds by an Alameda County-owned freshwater outflow channel and diked marsh areas known collectively as "the J-Ponds". The Southern Ponds surround a natural hill known as Turk Island and abut another small hill commonly called "Cal Hill" that are private inholdings, and are excluded from the Phase 2 project area. The Southern Ponds could be restored to tidal marsh or to enhanced managed ponds, depending on which of the Phase 2 Action Alternatives is selected.

The Eden Landing Phase 2 project area is generally bounded by San Francisco Bay on the west, Old Alameda Creek (OAC) on the north, the federal Alameda Creek Flood Control Channel (ACFCC) on the south, and – to the east – a mix of suburban/urban communities, the Union Sanitary District (USD) Treatment Plant, a county-owned landfill, a Cargill-owned salt pond no longer in production (CP3C) and their upland hill lands, an Alameda County property known as the "J-Ponds" which are diked areas with detention basins and drainage channels, and a strip of existing tidal marsh between the Bay Ponds and the ACFCC.

As stated above, this Draft EIS/R evaluates the potential environmental impacts related to four alternatives, the No Action Alternative (Alternative Eden A), and three Action Alternatives (Alternative Eden B, C, and D respectively). Under the No Action Alternative (Alternative Eden A), the CDFW would continue to maintain and operate the Eden Landing pond complex as part of ELER, but no new activities would occur in the project area. The Action Alternatives all aim to restore the existing ponds to either entirely tidal marsh or a mixture of tidal marsh and enhanced managed ponds. These Action Alternatives will restore and enhance a mix of wetland habitats, maintain or enhance flood risk management, and provide wildlife-oriented public access and recreational opportunities.

Under all of the Action Alternatives, common proposed actions include: levee breaches, levee lowering, levee raising, installation of water control structures for managed ponds and fish habitat connectivity, excavation of pilot channels, connectivity for anadromous fish habitat, construction of habitat islands, habitat transition zones, beneficial reuse of dredged material and/or upland fill material, and adding recreation components such as extension of the Bay Trail and viewing platforms. These components are included in various combinations and locations in each Action Alternative and are intended to improve habitat complexity and allow appropriate Reserve management. Each Eden Landing Phase 2 alternative is described in detail below and illustrated in Figures ES-3 through ES-6. Table ES-1 summarizes these various features for each of the Action Alternatives.



AECOM
South Bay Salt Pond Restoration Project

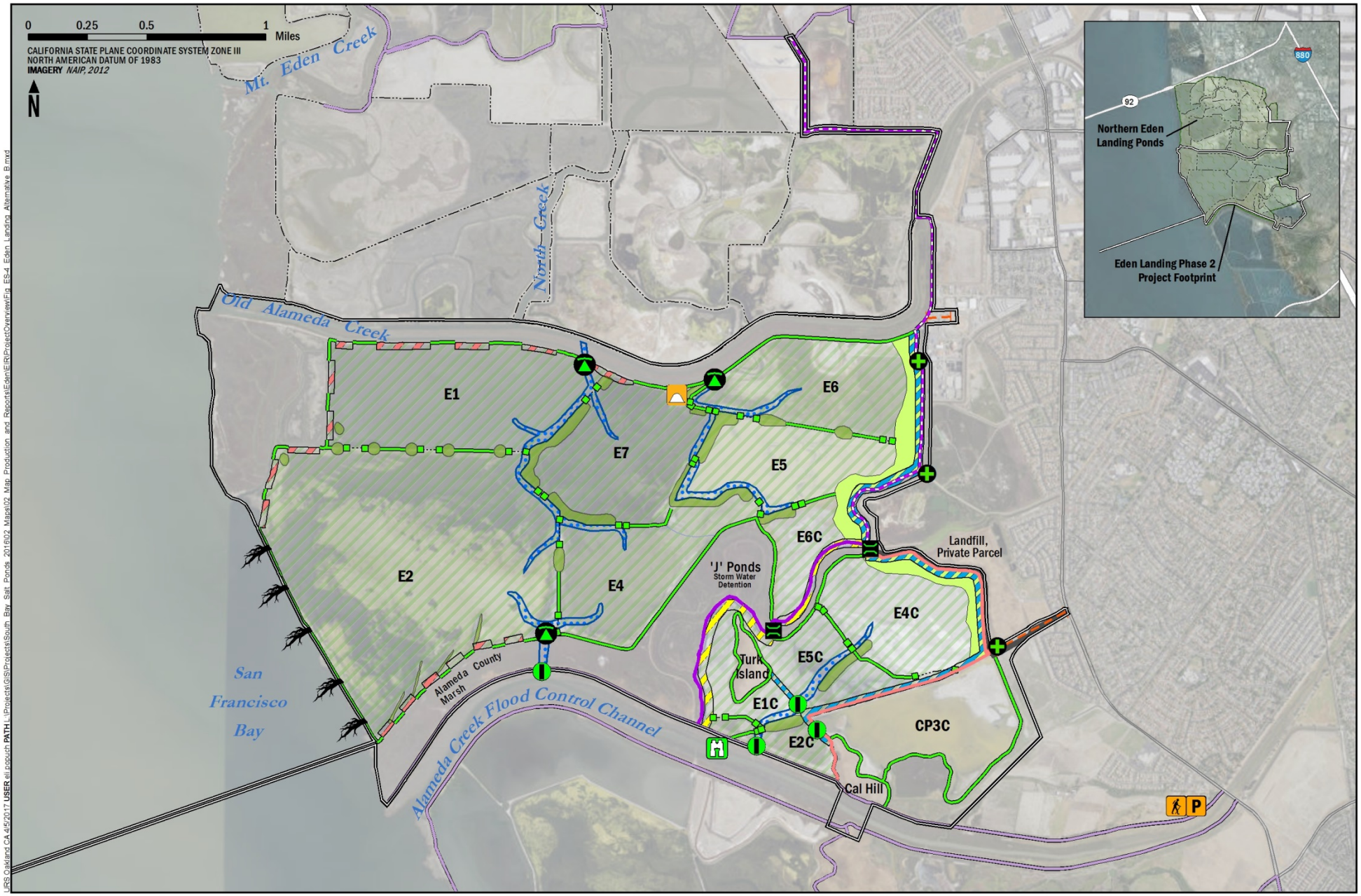
Figure ES-1
Eden Landing Phase 2 Regional Location

AECOM
South Bay Salt Pond Restoration Project

Figure ES-2
Eden Landing Phase 2 Project Sites

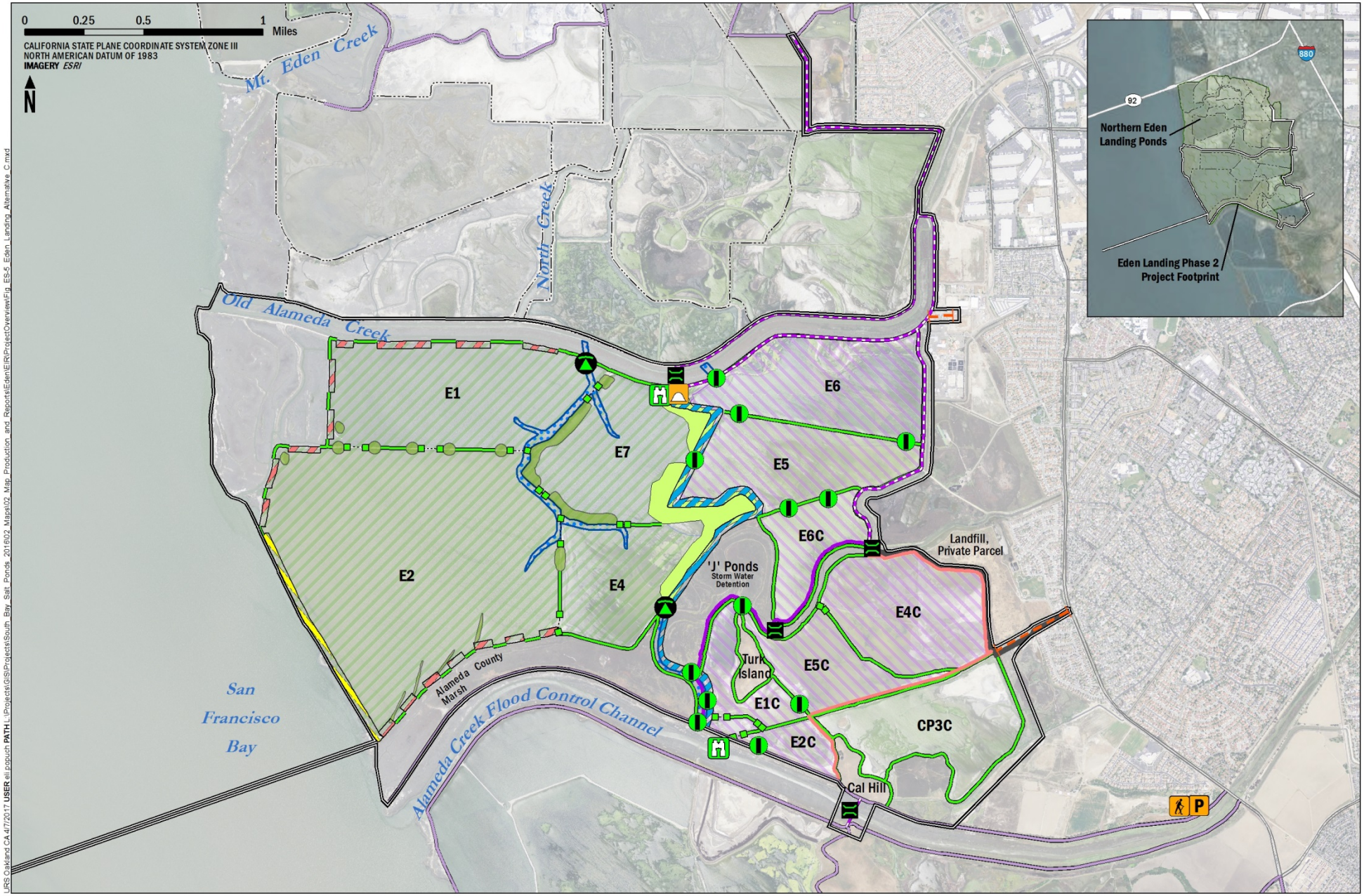
AECOM
South Bay Salt Pond Restoration Project

Figure ES-3
Alternative Eden A



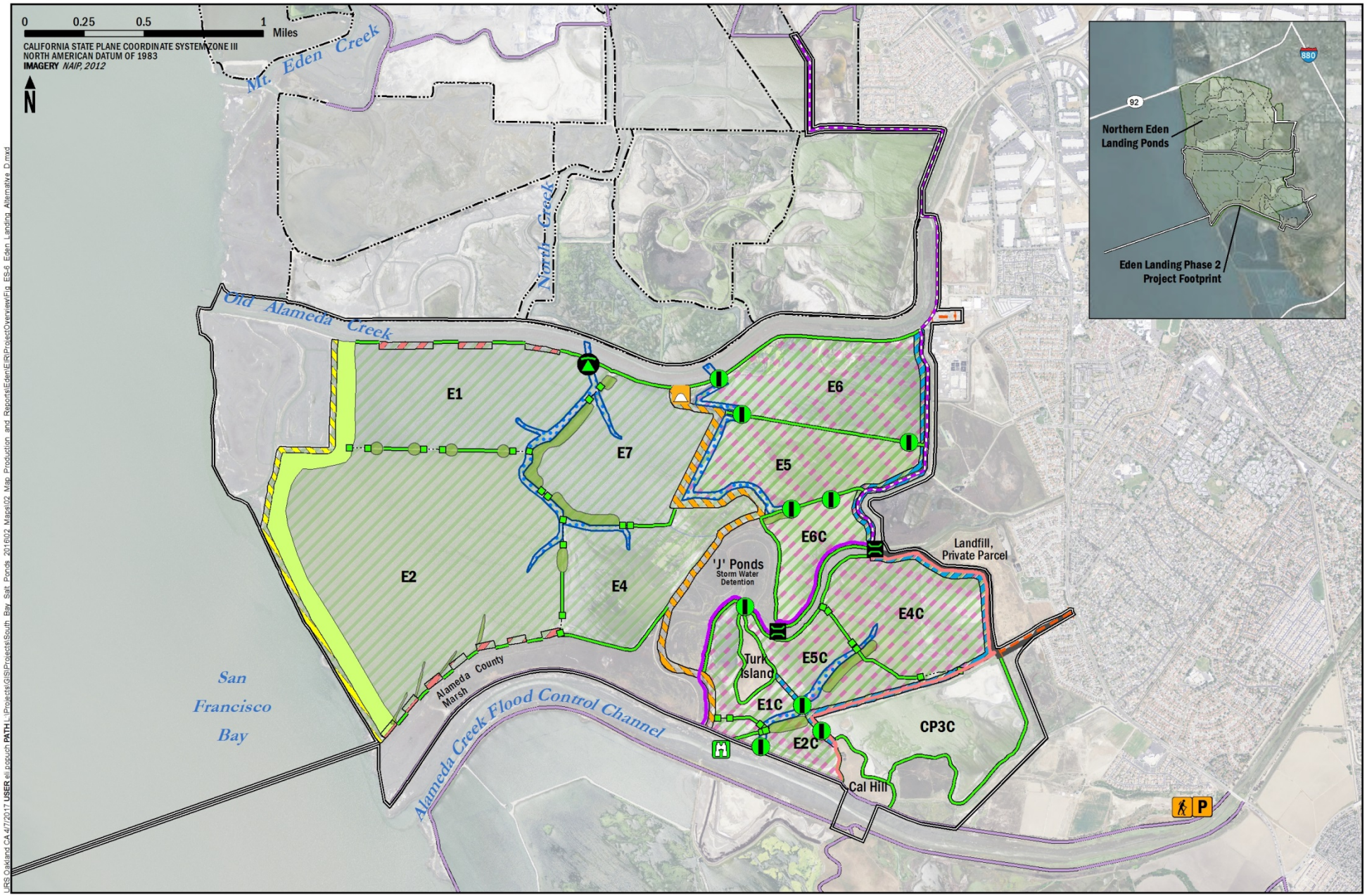
AECOM
South Bay Salt Pond Restoration Project

Figure ES-4
Alternative Eden B



AECOM
South Bay Salt Pond Restoration Project

Figure ES-5
Alternative Eden C



LEGEND

- Existing Alvarado Salt Works site
- Existing Trailhead
- Existing Parking Lot
- Viewing platform
- Water control structure
- Breach
- Existing trail
- Proposed trail
- Proposed trail: Route 1
- Proposed trail: Route 2
- Proposed trail: Route 3
- Community connection
- Boundary of current or former ELER pond
- Existing/residual levee
- Internal levee breach
- Eden Landing Phase 2 Project Area
- Island/Mound
- Pilot Channel
- Lowered Levee
- Improved Levee (Habitat Separation)
- Improved Levee (Flood Risk Management)
- Temporary Levee
- Habitat Transition Zone

Phase 2 Goal

- Managed Pond, then Tidal Marsh
- Tidal Marsh

AECOM
South Bay Salt Pond Restoration Project

Figure ES-6
Alternative Eden D

Table ES-1 Components of the Eden Landing Phase 2 Action Alternatives

ACTIONS	ALTERNATIVE EDEN B	ALTERNATIVE EDEN C	ALTERNATIVE EDEN D
Tidal Marsh Restoration	Bay Ponds, Inland Ponds, Southern Ponds	Bay Ponds only	Bay Ponds in stage 1; long-term option in Inland Ponds and Southern Ponds
Managed Pond Restoration	None	Inland Ponds and Southern Ponds (permanent)	Inland Ponds and Southern Ponds (temporary or permanent, depending on AMP)
Levee Raising for Flood Risk Management	Eastern edge of Inland and Southern Ponds	Mid-complex levee (permanent)	Eastern edge of Inland and Southern Ponds; mid-complex levee (temporary or permanent, depending on AMP)
Levee Improvement for Habitat and/or Trails	Parts of E6C's southern levee and E1C's western levee	Western edge of E2	Western edge of Pond E1 and E2
Levee Lowering	Bay, Inland, and Southern Ponds	Bay, Inland, and Southern Ponds	Bay, Inland, and Southern Ponds
Pilot Channels for Draining and Filling	Bay, Inland, and Southern Ponds	Bay, Inland, and Southern Ponds	Bay, Inland, and Southern Ponds
Pilot Channels for Fish Habitat Connectivity	Through ACFCC levee and ACFCWCD marsh into E2 and E4	Through ACFCC levee and ACFCWCD marsh into E4	None
Water Control Structures	Into and between Southern Ponds to simulate full tidal flows; through ACFCC levee for fish connectivity to Bay Ponds	Into and between Inland Ponds and Southern Ponds to allow managed flows; through ACFCC levee for fish connectivity to Bay Ponds	Into and between Inland Ponds and Southern Ponds to allow managed flows (temporary or permanent depending on AMP)
Habitat Transition Zones	Eastern Edge of Inland and Southern Ponds	West of the mid-complex Levee associated with the Inland Ponds	Western edge of the Bay Ponds
Habitat Islands	Bay, Inland, and Southern Ponds	Bay Ponds	Bay and Southern Ponds
Union Sanitary District Connection	Yes	No	No
Connection to Aquifer Reclamation Program wells	Yes	No	No
Trail	Bay Trail spine with 3 route options for southern portion	Inland and Southern Ponds	Inland and Southern Ponds
Viewing Platform	One; along ACFCC	Two total; one along ACFCC and one at Alvarado Salt Works site	One; along ACFCC
Bridges	One necessary to cross ACFCWCD channel; two locations possible	Three total; one necessary to cross ACFCWCD channel (two locations possible); one to cross OAC; one to cross ACFCC	One necessary to cross ACFCWCD channel; two locations possible
Construction Period Only: Dredge Material Placement Infrastructure	An offloading facility in the Bay's deep water channel; floating/submerged pipeline and a potential booster pump between the offloader and the shore; shore pipelines and other infrastructure on and within levees at the Bay and Inland Ponds; potential levee widening at the southern tip of Pond E2 for construction access	An offloading facility in the Bay's deep water channel; floating/submerged pipeline and a potential booster pump between the offloader and the shore; shore pipelines and other infrastructure on and within levees at the Bay Ponds; potential levee widening at the southern tip of Pond E2 for construction access	An offloading facility in the Bay's deep water channel; floating/submerged pipeline and a potential booster pump between the offloader and the shore; shore pipelines and other infrastructure on and within levees at the Bay and Inland Ponds; potential levee widening at the southern tip of Pond E2 for construction access

Alternative Eden A (No Action)

Under Alternative Eden A, the No Action (No-Project) Alternative, no new activities would be implemented as part of the Eden Landing Phase 2 project. The Eden Landing pond complex would continue to be maintained and operated by the CDFW, in accordance with current practices outlined in the *Eden Landing Ecological Reserve System E2 and E2C Operation Plan* (Operations Plan) and the activities described in the AMP. The high priority levees that function as inland flood risk management would continue to be maintained as appropriate and with consultation with the ACFCWCD. Power transmission and distribution lines owned and operated by Pacific Gas and Electric (PG&E) would not be affected by Alternative Eden A. All existing trails and recreation features, as well as limited, seasonal waterfowl hunting access would continue to be maintained, but no new facilities or trails would be constructed. Alternative Eden A is illustrated in Figure ES-3.

Alternative Eden B

Under Alternative Eden B, the entire Phase 2 Eden Landing project area would be restored to tidal marsh in one stage by major levee alterations and improvements. The easternmost levees would be improved to provide flood risk management to the inland communities. Under this alternative the internal levees along the J-ponds and other ACFCWCD-owned channels would also be improved, as needed. The tidal marsh habitats would be enhanced by using remnant levees as habitat islands, constructing habitat transition zones, increasing connectivity for anadromous fish habitat, and levee lowering. This alternative also includes the use of root wads and logs to trap sediment and create beach-like zones on the Bay side of Pond E2. Water control structures would be used during the transition of the Southern Ponds into tidal marsh. Implementation of this alternative would increase wildlife-oriented public access and recreational opportunities in the region. A piped connection from the Alameda County Water District's nearby Aquifer Reclamation Program wells would be added to deliver brackish groundwater and water habitat transition zones in the Inland and Southern Ponds. Finally, a piped connection with the adjacent USD would be added to deliver treated wastewater from that facility and deliver it onto the habitat transition zone that would be built in the Inland Ponds. This would water the vegetation on that feature and also add a salinity gradient to the marsh that would form there. Alternative Eden B is illustrated in Figure ES-4.

Alternative Eden C

Under Alternative Eden C, the Inland and Southern Ponds would be retained as managed ponds, and the Bay Ponds would be restored to tidal marsh. A mid-complex levee would be constructed mostly by improving existing internal levees along the Inland Ponds, the J-Ponds, and Pond E1C of the Southern Ponds. Several water control structures would be placed within the Inland and Southern Ponds so that a variety of pond characteristics could be modified as necessary to support a range of pond-dependent wildlife. This alternative would implement many of the same habitat enhancements as Alternative Eden B, but in different locations. For example, the habitat transition zone would be built against the mid-complex levee, and the excavated pilot channels would also be in different places. Similar recreational opportunities would be created under this alternative, but additional trails have been proposed. These include a set of trails along the OAC and a bridge to connect the trails over the OAC. These trails would end at the Alvarado Salt Works and a new viewing platform. This alternative also proposes to build a bridge to extend the Bay Trail spine over the ACFCC beyond the ELER boundary. Alternative Eden C is illustrated in Figure ES-5.

Alternative Eden D

Under Alternative Eden D, the Phase 2 Eden Landing ponds would be restored to tidal marsh in a staged approach. Similar to Alternative Eden C, a mid-complex levee would be constructed; however this levee would be temporary. The first stage of this alternative would restore the Bay Ponds to tidal marsh and retain the Inland and Southern Ponds as managed ponds using the temporary mid-complex levee and water control structures. These water control structures would be installed in the Inland and Southern Ponds while they are managed ponds. Once tidal marsh becomes established in the Bay Ponds, the Inland and Southern Ponds would likely be restored to tidal marsh by removing the water control structures and introducing tidal flows to the Inland and Southern Ponds. This end result would be much like Alternative Eden C. However, if ongoing wildlife monitoring conducted under the AMP shows that the pond-associated wildlife species continue to require pond habitat, the Inland Ponds and Southern Ponds could be retained in that managed pond configuration indefinitely. The end result in that case would be much like Alternative Eden C. The proposed recreational features for this alternative are identical to Alternative Eden B, which includes extending the Bay Trail spine through southern Eden Landing on top of improved internal levees and also adding a viewing platform. Alternative Eden D is illustrated in Figure ES-6.

Operations and Maintenance – All Action Alternatives

Operations and maintenance (O&M) activities for all Action Alternatives would continue to follow the existing Operations Plan and regulatory permits and be informed by the AMP and other CDFW management activities. Periodic maintenance of the pond infrastructure would be required following construction. Maintenance activities would include water control structure operation, invasive plant control, patrol, mosquito abatement, levee repairs, and trash removal/vandalism repairs. Some of these, such as the water control structure operation and patrol, would require regular CDFW staff visits to the ponds to perform. The others would be needed only occasionally and would involve larger groups of workers. In addition, ongoing monitoring activities would be necessary, and would be informed by the AMP. These monitoring activities can vary by season, with peak visits occurring during bird-breeding season.

Levees that provide inland flood risk management would need to be maintained to protect against erosion or unplanned breaches. Improved levees would be inspected and maintained annually to uphold slope stability, erosion control, seepage, slides and settlement. It is expected that additional fill would be needed to reduce impacts in areas where settlement occurs, approximately every five years. Most of the levee maintenance along areas subject to tidal flows could be accomplished from the levee crests during low tides. Levees between ponds could be maintained according to season and best practices, conditions or requirements for the protection of sensitive resources.

Under all Action Alternatives, the internal levees within the Bay Ponds would erode naturally and would not be maintained. Under Alternative Eden B, most of the internal levees in the Inland and Southern Ponds would also degrade naturally. However, under Alternative Eden C and D, the internal levees in the Inland and Southern Ponds would be maintained because these ponds would continue to be managed as open water and/or seasonal ponds. External levees connected to ponds being restored to tidal marsh (i.e., the Bay Ponds in all three Action Alternatives, and all of southern Eden Landing in Alternative Eden B) would only be maintained if they support public access routes or would hydraulically separate one pond from another. External levees would be maintained in the managed ponds.

Habitat features such as habitat transition zones and habitat islands would need to be maintained periodically. Habitat transition zones and islands need to be inspected periodically to assess slope stability, erosion, seepage, slides, settlement, invasive vegetation, and so on. These features may occasionally need maintenance, repairs, and/or vegetation plantings or removal. Water control structures would require inspections and maintenance throughout the life of the project. Inspection of these structures would be mandatory every month during the first year and semi-annually thereafter. Maintenance would occur annually or as needed.

Under all Action Alternatives, public access and recreation features would be maintained using similar methods. Trails would be kept clear for safety reasons, trash would be removed, and viewing platforms and interpretive signs would be inspected periodically for signs of vandalism. Trails may occasionally need to be resurfaced or regraded. Each Action Alternative includes at least one bridge. These bridges must be visually inspected every two years and a written report may be required every five years.

Under all Action Alternatives, the existing power distribution line that is located on the southern OAC levee, along the northern edge of ponds E1, E7, and E6 would be removed. The existing power distribution line and poles that run through the Southern Ponds would be retained, and PG&E would continue to have access to operate and maintain these facilities.

S.2 Purpose of the EIS/R

This Draft EIS/R is intended to provide the public and responsible and trustee agencies with information about the potential environmental effects of the SBSP Restoration Eden Landing Phase 2 Project. It will be used by the lead agencies when considering approval of the SBSP Restoration Project.

The Council on Environmental Quality (CEQ) regulations for implementing National Environmental Policy Act (NEPA) (40 CFR 1502.1) state that

> "the primary purpose of an [EIS] is to serve as an action-forcing device to ensure that the policies and goals defined in [NEPA] are infused into the ongoing programs and actions of the federal government. An EIS shall provide full and fair discussion of significant environmental impacts and shall inform decision makers and the public of the reasonable alternatives which would avoid or minimize adverse impacts or enhance the quality of the human environment."

California Environmental Quality Act (CEQA) Section 21002.1 states that the purpose of an EIR is to identify the significant effects on the environment of a project, to identify alternatives to the project, and to indicate the manner in which those significant effects can be mitigated or avoided.

Both NEPA and CEQA encourage the preparation of combined environmental planning documents. This document is a joint EIS/R. As noted above, NEPA and CEQA have similar purposes and thus use generally similar concepts and terminologies. In some cases, different terms are used to convey the same meaning. This joint EIS/R primarily uses CEQA terminology; however, many NEPA terms are also used.

S.3 Role of Adaptive Management in the SBSP Restoration Project

The 2007 Final EIS/R acknowledged that significant uncertainties remain with the project because of its geographic and temporal scale. To address these uncertainties, the project was planned to be carefully implemented in phases, with learning from the results incorporated into management and planning decisions. This adaptive management approach is described in the AMP (Appendix D of the 2007 Final

EIS/R), which is a comprehensive plan and program to generate information (applied studies, monitoring, and research) that the Project Management Team (PMT) can use to make decisions about both current management of the project area and future restoration actions to meet project objectives and avoid harmful impacts to the environment.

Adaptive management is essential to keeping the project on track to meet its objectives, and adaptive management was the primary tool that the 2007 Final EIS/R identified for avoiding significant impacts to the environment. Without adaptive management (and its associated information collection), the PMT would not understand the restored system and would not be able to explain its management actions to the public. Furthermore, responses to unanticipated changes would be based on guesswork, which could exacerbate problems. For these reasons, adaptive management is integral to the project, and construction projects are expected to feature applied studies, as called for in the AMP, so that the PMT can learn from project implementation. Adaptive management continues to be a significant part of Eden Landing Phase 2.

Although the preferred alternative in the 2007 Final EIS/R was Programmatic Alternative C, which would restore up to 90 percent of the project's ponds to tidal wetlands in phases, the document also states that if that alternative is not possible without causing undesired environmental impacts, as detected through the AMP and other adaptive management monitoring and applied studies, then the project would stop converting ponds to tidal wetlands. The actual amount of tidal wetlands restored at the end of the 50-year project horizon could be less than 90 percent.

S.4 Summary of Impacts and Mitigation Measures

This section summarizes the impacts and the resulting significance determinations made for each of them, as well as any mitigation measures that were developed to reduce the amounts and types of adverse impacts from the various project alternatives. Note that the program-level mitigation measures developed for the SBSP Restoration Project as a whole were incorporated into the Eden Landing Phase 2 alternatives as part of the project itself. Thus, they are no longer mitigation measures, but simply part of the project designs. The full list of program-level mitigation measures is presented in Chapter 2 of the main text.

S.4.1 Impacts Resulting from Phase 2 Alternatives

Table ES-2 summarizes the results of the impacts analysis that makes up Chapter 3. For each action and no action alternative at the pond complex, the table presents the significance determination for each enumerated impact within each environmental resource.

Potentially Significant Impacts

The impact analysis and significance determination conducted for this Draft EIS/R and explained in full in Chapter 3 identified the potentially significant impacts listed below. These are those impacts that could not be reduced to a less-than-significant level, even after implementation of project-specific mitigation measures or because no appropriate project-level mitigation measures exist that would that have that effect. In these rare cases, these impacts are significant.

- *Eden Landing Phase 2 Impact 3.5-3: Potential habitat conversion impacts to western snowy plovers*. Although transitional mudflat habitat in the Southern Ponds could provide temporary foraging opportunities for western snowy plover until the marsh forms, and islands that would be built on residual levees in the ponds could provide some western snowy plover roosting habitat,

there would be a reduction of potential western snowy plover habitat under Alternative Eden B. Also, the proposed Bay Trail spine and optional routes have the potential to bring trail uses close enough to disturb critical habitat and nesting areas. Overall, because the net habitat change would be the reduction of large areas of potential habitat for western snowy plover and because recreational use of proposed trails may disturb individual plovers, the impacts under Alternative Eden B would be potentially significant.

- *Eden Landing Phase 2 Impact 3.6-5: Result in the temporary construction-related closure of adjacent public parks or other recreation facilities, making such facilities unavailable for public use.* Existing parking areas, park access, and some trails would be temporarily closed during portions of the construction work under the Action Alternatives. This approach is necessary to keep the public safe and provide a route through existing parks to bring materials and equipment to the project areas. These impacts are significant and unavoidable.

- *Eden Landing Phase 2 Impact 3.11-1: Potential short-term degradation of traffic operations at intersections and streets due to construction.* A traffic impact analysis was prepared to analyze the impact of construction-related traffic on each of the Action Alternatives; this study found that at the AM peak hour the impact is considered significant. The optimization of the I-880 Southbound Ramps/Whipple Road/Dyer Street intersection would mitigate the impact to less than significant. However, this mitigation is not feasible as this intersection is part of a synchronized series of intersections. This would therefore cause a significant and unavoidable impact for each Action Alternative.

- *Eden Landing Phase 2 Impact 3.13-1: Short-term construction-generated air pollutant emissions.* Construction-generated average daily NO_x emissions would exceed applicable regional significance thresholds during import and placement of dredge materials. Project-specific mitigation measures (discussed below) will be used to reduce NO_x emissions to the greatest extent feasible, but for those options where diesel is used to power the offloading facility and booster pumps, NO_x emissions would still exceed the regional threshold of significance. Therefore, significant and unavoidable impacts would occur for each Action Alternatives if diesel is used to power the construction equipment during import and placement of dredge materials. (Annual emissions would be below General Conformity *de minimis* levels with incorporation of the project-specific mitigation measures. Therefore, construction-related emissions associated with diesel powered construction equipment would conform to the State Implementation Plan, and a formal conformity analysis would not be required.)

Eden Landing Phase 2 Mitigation Measures Identified in the EIS/R

There are two project-level mitigation measures developed for the Eden Landing Phase 2 alternatives. These measures are as follows:

- Mitigation Measure AQ-A, Construction Equipment. The construction contractor shall use off-road construction diesel engines with horsepower (hp) ratings between 50 hp and 750 hp that meet, at a minimum, the Tier 4 California Emissions Standards, unless such an engine is not available for a particular item of equipment. Tier 3 engines will be allowed on a case by case basis when the contractor has documented that no Tier 4 equipment, or emissions equivalent retrofit equipment is available for a particular equipment type that must be used to complete

construction. Documentation shall consist of signed written statements from at least two construction equipment rental firms.

- Mitigation Measure AQ-B, Harbor Craft. Harbor craft with a Category 1 or 2 marine engine, such as tugboats, shall meet, at a minimum, United States Environmental Protection Agency Tier 2 marine engine emission standards.

Cumulative Impacts

Chapter 4 of this Draft EIS/R also evaluated the potential environmental impacts of the proposed project when considered together with other projects. The analysis addressed impacts that could occur as a result of project construction and operation, based on the significance criteria provided for each resource discussion in Chapter 3, Environmental Setting, Impacts, and Mitigation Measures.

The analysis of cumulative impacts followed a multi-step approach. First, an evaluation was made as to whether a significant cumulative impact existed within each relevant study area for the impact under consideration. This evaluation was made by reviewing the conclusions of the No Action Alternative in the "Cumulative Impacts" section of the 2007 Final EIS/R. Then those conclusions were re-examined based on an updated list of relevant cumulative impact projects. Next, the Eden Landing Phase 2 project impacts were evaluated as to whether they, in combination with impacts from the other projects, would create a new significant cumulative impact. If so, then a potentially significant impact was found, and mitigation measures from Chapter 3, Environmental Setting, Impacts, and Mitigation Measures, were identified and recommended to reduce this impact to a less-than-significant level. In cases where a significant cumulative impact already existed, even without the SBSP Restoration Project, the Eden Landing Phase 2 project's impacts were examined to determine if they would make a considerable contribution to that impact. If it was determined that the Eden Landing Phase 2 project impacts would not make a considerable contribution to an existing significant cumulative impact, the Phase 2 project-level cumulative impacts were determined to be less than significant.

If an Eden Landing Phase 2 project impact were to have a considerable contribution to a cumulative impact, then mitigation from the project impact analysis in Chapter 3 would be recommended to reduce the project's contribution to cumulative impacts to a level that is less than considerable. Project-specific mitigation measures will be used to reduce NO_x emissions to the greatest extent feasible, but for those options where diesel is used to power the offloading facility and booster pumps during import and placement of dredge materials, NO_x emissions would still exceed the regional threshold of significance.

Table ES-2 SBSP Restoration Project Phase 2 Draft EIS/R Summary Impact Table

IMPACT	EDEN	LANDING	PHASE 2	ALTS.
	EDEN A	EDEN B	EDEN C	EDEN D
3.2 Hydrology, Flood Management, and Infrastructure				
Eden Landing Phase 2 Impact 3.2-1: Increased risk of flooding that could cause injury, death, or substantial property loss**.**	LTS	LTS	LTS	LTS
Eden Landing Phase 2 Impact 3.2-2: Alter existing drainage patterns in a manner which would result in substantial erosion or siltation on- or off-site.	LTS	LTS	LTS	LTS
Eden Landing Phase 2 Impact 3.2-3: Create a safety hazard for people boating in the project area.	LTS	LTS	LTS	LTS
Eden Landing Phase 2 Impact 3.2-4: Potential effects from tsunami and/or seiche.	LTS	LTS	LTS	LTS
Eden Landing Phase 2 Impact 3.2-5: Place structures within the 100-year-flood hazard area that would impede or redirect flood flows.	NI	LTS	LTS	LTS
3.3 Water Quality and Sediment				
Eden Landing Phase 2 Impact 3.3-1: Degradation of water quality due to changes in algal abundance or composition.	LTS	LTS	LTS	LTS
Eden Landing Phase 2 Impact 3.3-2: Degradation of water quality due to low dissolved oxygen levels.	LTS	LTS	LTS	LTS
Eden Landing Phase 2 Impact 3.3-3: Degradation of water quality due to increased methylmercury production or mobilization of mercury-contaminated sediments.	LTS	LTS	LTS	LTS
Eden Landing Phase 2 Impact 3.3-4: Potential impacts to water quality from other contaminants.	LTS	LTS	LTS	LTS
Eden Landing Phase 2 Impact 3.3-5: Potential to cause seawater intrusion of regional groundwater sources.	LTS	LTS	LTS	LTS
3.4 Geology, Soils, and Seismicity				
Eden Landing Phase 2 Impact 3.4-1: Potential effects from settlement due to consolidation of Bay mud.	LTS	LTS	LTS	LTS
Eden Landing Phase 2 Impact 3.4-2: Potential effects from liquefaction of soils and lateral spreading.	LTS	LTS	LTS	LTS
Eden Landing Phase 2 Impact 3.4-3: Potential for ground and levee failure from fault rupture.	LTS	LTS	LTS	LTS
Eden Landing Phase 2 Impact 3.4-4: Potential effects from consolidation of Bay mud on existing subsurface utility crossings and surface rail crossings.	LTS	LTS	LTS	LTS
3.5 Biological Resources				
Eden Landing Phase 2 Impact 3.5-1: Potential construction-related loss of or disturbance to special-status, marsh-associated wildlife.	NI	LTS	LTS	LTS
Eden Landing Phase 2 Impact 3.5-2: Potential construction-related loss of or disturbance to nesting pond associated birds.	NI	LTS	LTS	LTS
Eden Landing Phase 2 Impact 3.5-3: Potential reduction in numbers of small shorebirds using San Francisco Bay, resulting in substantial declines in flyway-level populations.	NI	LTS	LTS/B	LTS
Eden Landing Phase 2 Impact 3.5-4: Loss of intertidal mudflats and reduction of habitat for mudflat-associated wildlife species.	NI	LTS	LTS	LTS
Eden Landing Phase 2 Impact 3.5-5: Potential habitat conversion impacts to western snowy plovers.	NI	PS	LTS	LTS

Table ES-2 SBSP Restoration Project Phase 2 Draft EIS/R Summary Impact Table

IMPACT	EDEN	LANDING	PHASE 2	ALTS.
	EDEN A	EDEN B	EDEN C	EDEN D
Eden Landing Phase 2 Impact 3.5-6: Potential reduction in the numbers of breeding, pond-associated waterbirds (avocets, stilts, and terns) using the South Bay due to reduction in habitat, concentration effects, displacement by nesting California gulls, and other Project-related effects.	NI	LTS	LTS	LTS
Eden Landing Phase 2 Impact 3.5-7: Potential reduction in the numbers of non-breeding, salt-pond-associated birds (e.g., phalaropes, eared grebes, and Bonaparte's gulls) as a result of habitat loss.	NI	LTS	LTS	LTS
Eden Landing Phase 2 Impact 3.5-8: Potential reduction in foraging habitat for diving ducks, resulting in declines in flyway-level populations.	NI	LTS	LTS	LTS
Eden Landing Phase 2 Impact 3.5-9: Potential reduction in foraging habitat for ruddy ducks, resulting in declines in flyway-level populations.	NI	LTS	LTS	LTS
Eden Landing Phase 2 Impact 3.5-10: Potential habitat conversion impacts on California least terns.	NI	LTS	LTS	LTS
Eden Landing Phase 2 Impact 3.5-11: Potential loss of pickleweed-dominated tidal salt marsh habitat for the salt marsh harvest mouse and salt marsh wandering shrew, and further isolation of these species' populations due to breaching activities and scour.	NI	LTS/B	LTS/B	LTS/B
Eden Landing Phase 2 Impact 3.5-12: Potential disturbance to or loss of sensitive wildlife species due to ongoing monitoring, maintenance, and management activities.	LTS	LTS	LTS	LTS
Eden Landing Phase 2 Impact 3.5-13: Potential effects of habitat conversion and pond management on steelhead.	LTS	LTS/B	LTS/B	LTS/B
Eden Landing Phase 2 Impact 3.5-14: Potential long-term effects to estuarine fish.	NI	LTS/B	LTS/B	LTS/B
Eden Landing Phase 2 Impact 3.5-15: Potential impacts to piscivorous birds.	NI	LTS	LTS	LTS
Eden Landing Phase 2 Impact 3.5-16: Potential impacts to dabbling ducks.	NI	LTS	LTS/B	LTS
Eden Landing Phase 2 Impact 3.5-17: Potential impacts to harbor seals.	NI	LTS/B	LTS/B	LTS/B
Eden Landing Phase 2 Impact 3.5-18: Potential recreation-oriented impacts to sensitive species and their habitats.	NI	LTS	LTS	LTS
Eden Landing Phase 2 Impact 3.5-19: Potential impacts to special-status plants.	NI	NI	NI	NI
Eden Landing Phase 2 Impact 3.5-20: Colonization of mudflats and marsh plain by non-native *Spartina* and its hybrids.	LTS	LTS	LTS	LTS
Eden Landing Phase 2 Impact 3.5-21: Colonization by non-native *Lepidium*.	NI	LTS	LTS	LTS
Eden Landing Phase 2 Impact 3.5-22: Increase in exposure of wildlife to avian botulism and other diseases.	NI	LTS	LTS	LTS
Eden Landing Phase 2 Impact 3.5-23: Potential impacts to bay shrimp populations.	NI	LTS/B	LTS/B	LTS/B
Eden Landing Phase 2 Impact 3.5-24: Potential impacts to jurisdictional wetlands or waters.	NI	LTS	LTS	LTS
Eden Landing Phase 2 Impact 3.5-25: Potential construction-related loss of, or disturbance to, nesting raptors (including burrowing owls).	NI	LTS	LTS	LTS

Table ES-2 SBSP Restoration Project Phase 2 Draft EIS/R Summary Impact Table

IMPACT	EDEN	LANDING	PHASE 2	ALTS.
	EDEN A	EDEN B	EDEN C	EDEN D
3.6 Recreation Resources				
Eden Landing Phase 2 Impact 3.6-1: Provision of new public access and recreation facilities, including the opening of new areas for recreational purposes and completion of the Bay Trail spine.	LTS	LTS	LTS/B (1 & 2); LTS (3)	LTS
Eden Landing Phase 2 Impact 3.6-2: Permanent removal of existing recreational features (trails) in locations that visitors have been accustomed to using and that would not be replaced in the general vicinity of the removed feature.	NI	LTS	LTS	LTS
Eden Landing Phase 2 Impact 3.6-3: Increase the use of existing neighborhood and regional parks or other recreational facilities, such that substantial physical deterioration of the facility would occur or be accelerated.	NI	LTS	LTS	LTS
Eden Landing Phase 2 Impact 3.6-4: Result in substantial adverse physical impacts associated with the provision of new or physically altered park and recreational facilities, or result in the need for new or physically altered park and recreational facilities, the construction of which could cause significant environmental impacts.	NI	LTS	LTS	LTS
Eden Landing Phase 2 Impact 3.6-5: Result in the temporary construction-related closure of adjacent public parks or other recreation facilities, making such facilities unavailable for public use.	NI	SU	SU	SU
3.7 Cultural Resources				
Eden Landing Phase 2 Impact 3.7-1: Potential disturbance of known or unknown cultural resources.	NI	LTS	LTS	LTS
Eden Landing Phase 2 Impact 3.7-2: Potential disturbance of the historic salt ponds and associated structures which may be considered a significant cultural landscape.	NI	LTS	LTS	LTS
3.8 Land Use and Planning				
Eden Landing Phase 2 Impact 3.8-1: Land use compatibility impacts.	NI	LTS	LTS	LTS
3.9 Public Health and Vector Management				
Eden Landing Phase 2 Impact 3.9-1: Potential increase in mosquito populations.	LTS	LTS	LTS	LTS
3.10 Socioeconomics and Environmental Justice				
Eden Landing Phase 2 Impact 3.10-1: Displace, relocate, or increase area businesses, particularly those associated with the expected increase in recreational users.	NI	LTS/B	LTS/B	LTS/B
Eden Landing Phase 2 Impact 3.10-2: Change lifestyles and social interactions.	NI	LTS/B	LTS/B	LTS/B
Eden Landing Phase 2 Impact 3.10-3: Effects disproportionately placed on densely populated minority and low-income communities or effects or racial composition in a community.	NDE	NDE	NDE	NDE
3.11 Traffic				
Eden Landing Phase 2 Impact 3.11-1: Potential short-term degradation of traffic operations at intersections and streets due to construction.	NI	SU	SU	SU
Eden Landing Phase 2 Impact 3.11-2: Potential long-term degradation of traffic operations at intersections and streets during operation.	NI	LTS	LTS	LTS
Eden Landing Phase 2 Impact 3.11-3: Potential increase in parking demand.	NI	LTS	LTS	LTS

Table ES-2 SBSP Restoration Project Phase 2 Draft EIS/R Summary Impact Table

IMPACT	EDEN	LANDING	PHASE 2	ALTS.
	EDEN A	EDEN B	EDEN C	EDEN D
Eden Landing Phase 2 Impact 3.11-4: Potential increase in wear and tear on the designated haul routes during construction.	NI	LTS	LTS	LTS
3.12 Noise				
Eden Landing Phase 2 Impact 3.12-1: Short-term construction noise effects.	NI	LTS	LTS	LTS
Eden Landing Phase 2 Impact 3.12-2: Traffic-related noise impacts during construction.	NI	LTS	LTS	LTS
Eden Landing Phase 2 Impact 3.12-3: Traffic-related noise effects during operation.	NI	LTS	LTS	LTS
Eden Landing Phase 2 Impact 3.12-4: Potential operational noise effects from O&M activities.	LTS	LTS	LTS	LTS
Eden Landing Phase 2 Impact 3.12-5: Potential vibration effects during construction and/or operation.	LTS	LTS	LTS	LTS
3.13 Air Quality				
Eden Landing Phase 2 Impact 3.13-1: Short-term construction-generated air pollutant emissions.	NI	SU/LTSM (diesel); LTSM (electric)	SU/LTSM (diesel); LTSM (electric)	SU/LTSM (diesel); LTSM (electric)
Eden Landing Phase 2 Impact 3.13-2: Potential long-term operational air pollutant emissions.	LTS	LTS	LTS	LTS
Eden Landing Phase 2 Impact 3.13-3: Potential exposure of sensitive receptors to TAC emissions.	LTS	LTS	LTS	LTS
Eden Landing Phase 2 Impact 3.13-4: Potential odor emissions.	LTS	LTS	LTS	LTS
3.14 Public Services				
Eden Landing Phase 2 Impact 3.14-1: Increased demand for fire and police protection services.	NI	LTS	LTS	LTS
3.15 Utilities				
Eden Landing Phase 2 Impact 3.15-1: Reduced ability to access PG&E towers, stations or electrical transmission lines.	NI	NI	NI	NI
Eden Landing Phase 2 Impact 3.15-2: Reduced clearance between waterways and PG&E electrical transmission lines.	NI	NI	NI	NI
Eden Landing Phase 2 Impact 3.15-3: Reduced structural integrity of PG&E towers.	NI	LTS	LTS	LTS
Eden Landing Phase 2 Impact 3.15-4: Changes in water level, tidal flow and sedimentation near storm drain systems.	LTS	LTS	LTS	LTS
Eden Landing Phase 2 Impact 3.15-5: Changes in water level, tidal flow and sedimentation near pumping facilities.	LTS	LTS	LTS	LTS
Eden Landing Phase 2 Impact 3.15-6: Changes in water level, tidal flow and sedimentation near sewer force mains and outfalls.	NI	NI	NI	NI
Eden Landing Phase 2 Impact 3.15-7: Disrupt Hetch Hetchy Aqueduct service so as to create a public health hazard or extended service disruption.	NI	NI	NI	NI

Table ES-2 SBSP Restoration Project Phase 2 Draft EIS/R Summary Impact Table

IMPACT	EDEN	LANDING	PHASE 2	ALTS.
	EDEN A	EDEN B	EDEN C	EDEN D
Eden Landing Phase 2 Impact 3.15-8: Disruption of rail service due to construction of coastal flood levees and tidal habitat restoration.	NI	NI	NI	NI
Eden Landing Phase 2 Impact 3.15-9: Reduced access to sewer force mains due to levee construction.	NI	LTS	LTS	LTS
Eden Landing Phase 2 Impact 3.15-10: Increased demands on regional energy supply or substantial increase in peak and base period electricity demand.	NI	LTS	LTS	LTS
3.16 Visual Resources				
Phase 2 Impact 3.16-1: Alter views of the SBSP Restoration Project Area and vicinity.	NI	LTS	LTS	LTS
3.17 Greenhouse Gas Emissions				
Eden Landing Phase 2 Impact 3.17-1: Construction-generated GHG emissions.	NI	LTS	LTS	LTS
Eden Landing Phase 2 Impact 3.17-2: Operational GHG emissions.	LTS	LTS	LTS	LTS
Eden Landing Phase 2 Impact 3.17-3: Conflicts with applicable GHG emissions reduction plan, policy, or regulation.	LTS	LTS	LTS	LTS

Notes:

Alternative A is the No Action/No Project Alternative.

B = Beneficial; LTS = Less Than Significant; LTSM = Less Than Significant with Mitigation; NDE = No Disproportionate Effect; NI = No Impact; PS = Potentially Significant; SU = Significant and Unavoidable

The levels of significance for the impacts listed above assume that the program-level mitigation measures from the 2007 Final EIS/R and the elements of the Adaptive Management Plan are integral components of the Eden Landing Phase 2 project alternatives, and that management responses would be implemented based on ongoing monitoring and applied studies.

S.5 Environmentally Preferred Alternative

The environmentally preferred alternative is defined by the Council on Environmental Quality as the alternative that best meets the criteria of Section 101(b) of NEPA (42 United States Code [USC] 4331)[1]. The environmentally preferred alternative is a NEPA term for the alternative that will promote the national environmental policy as expressed in NEPA's Section 101. Ordinarily, this means the alternative that causes the least damage to the biological and physical environment, but it also means the alternative that best protects, preserves, and enhances historical, cultural, and natural resources. The SBSP Restoration Project would provide benefits such as increased and improved tidal marshes and other habitats, additional public access and recreation opportunities, reduced risk of unplanned levee failure, and added potential for carbon sequestration. None of these benefits would be realized under the No Action Alternative.

The SBSP Restoration Project's lead agencies will identify an Environmentally Preferred Alternative during preparation of the Final EIS/R with consideration of the public and agency comment on this Draft EIS/R.

S.6 Environmentally Superior Alternative

CEQA Guidelines Section 15126.6 addresses the selection of the Environmentally Superior Alternative among the alternatives proposed. That section states that, if the environmentally superior alternative is the No Project Alternative, then the EIR must also identify and environmentally superior alternative among the other alternatives. However, as noted above, and explained in this Draft EIS/R, the environmentally superior alternative is not the No Project Alternative. The SBSP Restoration Project's Phase 2 action alternatives would bring numerous benefits, none of which would be realized under the No Project Alternative.

The SBSP Restoration Project's lead agencies will identify an Environmentally Superior Alternative during preparation of the Final EIS/R with consideration of the public and agency comments on this Draft EIS/R.

S.7 Areas of Controversy

CEQ Regulations for Implementing NEPA (40 CFR 1502.12) and Section 15123 of the CEQA Guidelines require that an EIS/R identify areas of controversy.

[1] The environmentally preferred alternative is the alternative that will promote the national environmental policy expressed in NEPA (Sec. 101 (b)), as follows:

- Fulfill the responsibilities of each generation as trustee of the environment for succeeding generations.
- Ensure for all Americans safe, healthful, productive, and esthetically and culturally pleasing surroundings.
- Attain the widest range of beneficial uses of the environment without degradation, risk of health or safety, or other undesirable and unintended consequences.
- Preserve important historic, cultural, and natural aspects of our national heritage and maintain, wherever possible, an environment that supports diversity and variety of individual choice.
- Achieve a balance between population and resource use that will permit high standards of living and a wide sharing of life's amenities.
- Enhance the quality of renewable resources and approach the maximum attainable recycling of depletable resources.

In the 2007 Final EIS/R, the following issues were identified as being of the greatest concern:

- Potential effects on mercury bioaccumulation in the South Bay;
- Trade-offs between habitat restoration and public access/recreation opportunities;
- Trade-offs between tidal and managed pond species;
- The need to first provide flood protection in order to undertake tidal restoration in many areas;
- Availability of funding for implementation of the AMP (monitoring); and
- The potential entrainment of salmonids and estuarine fish in managed ponds.

Many of these areas were addressed by the ongoing monitoring and research projects conducted under the direction of the SBSP Restoration Project's Science Program and AMP. The early results of those monitoring and research questions were used to develop, refine, and analyze the Eden Landing Phase 2 actions. For example, the observed sediment accretion rates in breached ponds were higher than expected; the results of the ongoing biological monitoring indicated which shapes and locations make the most successful habitat islands and also indicated that enhancements in managed ponds can lead to increased bird breeding and success rates even at lower total areas. All of these insights and others were used to develop preliminary alternatives which were configured into the project alternatives to include in this Draft EIS/R for Phase 2 at Eden Landing.

The SBSP Restoration Project's lead agencies, PMT, and other stakeholders use the AMP, results from the Science Program, and other established systems to incorporate new insights and observations into ongoing management actions and into the decisions about how and where to implement future restoration actions. In doing so, these entities seek to collaboratively resolve these Areas of Controversy and address new ones as they develop.

It is expected that other areas of controversy will be identified during the public comment period. The comments from all of the SBSP Restoration Project's stakeholders will be tracked and addressed, and a revised list of areas of controversy will be developed and published as part of the Final EIS/R.

S.8 Issues to be Resolved

CEQ Regulations for Implementing NEPA (40 CFR 1502.12) and Section 15123 of the CEQA Guidelines require that an EIS/R identify Issues to be Resolved. The SBSP Restoration Project's adaptive management approach is intended to address uncertainties regarding the restoration project. Consequently, the AMP identifies applied studies that are intended to resolve key uncertainties and to provide a better understanding of how restoration actions affect environmental resources. The results of these studies and ongoing monitoring would allow for more effective achievement of restoration goals and objectives in each successive phase of implementation, and avoidance of potentially adverse environmental impacts.

The AMP initially proposed applied studies to resolve the following key uncertainties:

- Is there sufficient sediment available in the South Bay to support marsh development without causing unacceptable impacts to existing intertidal habitats?

- Can the existing number and diversity of migratory and breeding shorebirds and waterfowl be supported in a changing (reduced salt pond) habitat area?
- Can restoration actions be configured to maximize benefits to non-avian species both onsite and in adjacent waterways?
- Will mercury be mobilized into the food web of the South Bay and beyond at a greater rate than prior to restoration?
- Can invasive and nuisance species such as *Spartina alterniflora* (or the invasive Spartina hybrid), corvids and the California gull be controlled? If not, how can the impacts of these species be reduced in future phases of the Project?
- Will restoration adversely affect water quality and productivity (food web dynamics)?
- Will trails and other public access features/activities have significant negative effects on wildlife species?
- How will the SBSP Restoration Project gain support from the public now and into the future, including support for continued funding of restoration and management?

During the design and implementation of Phase 1 and Phase 2 projects, some of these questions concerning the effectiveness and cost/benefit trade-offs of particular restoration design elements or management approaches were addressed through examination of specific restoration techniques. The results of those projects informed the conceptual designs for restoration actions and pond locations to include in the Eden Landing Phase 2 project alternatives. Similarly, updated results of those studies and implemented project actions will help eventually guide the selection of the Eden Landing Phase 2 preferred alternative.

As with the discussion above concerning the areas of controversy, the public comment period for this Draft EIS/R is expected to identify Eden Landing Phase 2-specific issues that will need additional study to be resolved. The comments and input received from the general public, regulatory agencies, and other stakeholders, including nearby cities and counties, special districts, businesses, and other interests will be used to develop this list of issues, which will then be included in the Final EIS/R.