3.6 Recreation Resources

This section of the Draft Environmental Impact Statement/Report (EIS/R) describes the existing recreational resources within the project area for Phase 2 of the South Bay Salt Pond (SBSP) Restoration Project at Eden Landing Ecological Reserve (ELER, or Reserve). It then analyzes whether the project implementation would cause a substantial adverse effect on recreational resources. The information presented is based on a review of existing recreational resources within the Eden Landing Phase 2 project area and vicinity, including existing local agency bicycle/pedestrian trail plans, and other pertinent federal, state, and local regulations. The analysis of the project's potential impacts to recreational resources is presented for each alternative. The program-level mitigation measures described in Chapter 2, Alternatives, would be implemented as part of this project. Therefore, this section only identifies additional mitigation measures as needed, related to recreation resources.

Appendix G, Public Access and Recreation Resources Technical Appendix, contains a detailed discussion of recreation resources for the Phase 2 project area and provides information on the following topics:

- Regulatory framework;
- Existing recreation and public access facilities;
- Recreation regulatory permit requirements;
- Phase 1 recreation and public access features;
- Phase 2 public access and recreation alternatives;
- Consistency with regional recreation resources plans;
- Projected trail use; and
- Recreation and public access design guidelines.

3.6.1 Physical Setting

Methodology

The development of the baseline conditions, significance criteria, and impact analysis in this section is commensurate to and reliant on the analysis conducted in the 2007 SBSP Restoration Project Final Environmental Impact Statement/Report (2007 Final EIS/R). It is incorporated by reference. The baseline conditions specific to the Eden Landing Phase 2 project area is based on the current conditions of these areas.

Regional Setting

The Phase 2 project area includes the ponds in the southern half of Eden Landing. All of the Eden Landing pond complex ponds are owned and managed by the California Department of Fish and Wildlife (CDFW) as part of the ELER. In between some of the CDFW-owned lands, the Alameda County Flood Control and Water Conservation District (ACFCWCD) owns a stormwater channel, a stormwater detention basin, and a section of existing high marsh. There are also some private inholdings – including ponds, levees, and other lands – owned by Cargill Inc. (Cargill). To the east of the project area itself, there

are other parcels and facilities owned by the Union Sanitary District (USD), a private landfill operation company, and a mix of other private owners.

Project Setting

Existing recreation and public access facilities in and near the project area (as well as facilities proposed by projects or general, master, or recreation plans other than the SBSP Restoration Project) are described in Table 3.6-1. This list is not meant to be comprehensive or exhaustive of every public access opportunity or recreational resource, but it is intended to give a sense of the existing conditions regarding recreation and public access in the vicinity of Eden Landing. Figure 3.6-1 shows the existing and planned public access routes for the Bay Trail. Figure 3.11-1 shows transit services and bike paths in the vicinity of southern Eden Landing. The Bay Trail is discussed in more detail in Section 3.6.2, Regulatory Setting.

Recreational Features	Nearby Locations						
Trails	 Phase 1 of the SBSP Restoration Project added year-round and seasonal trails inside of northern Eden Landing (a Bay Trail spur). 						
	 The nearest segment of the Bay Trail on open space is in northern Eden Landing over a mile to the north of the Phase 2 project area. City streets used for Bay Trail access are approximately 0.5 mile to the east. 						
	 The Alameda Creek Regional Trail is an EBRPD-managed pair of trails on both levees of the ACFCC, one of which is on the southern border of Eden Landing. 						
	The Coyote Hills Regional Park is to the south of the ACFCC and includes several trails.						
Boating	Phase 1 of the SBSP Restoration Project added a launch for non-motorized boats (e.g., kayaks) along Mt. Eden Creek, which drains into San Francisco Bay from northern Eden Landing.						
Access Points and	Northern Eden Landing						
Staging Areas	 The Phase 1 actions (trails and non-motorized boat launch in northern Eden Landing) are connected to the existing Bay Trail parking lot and staging area. 						
	Alameda Creek Regional Trail						
	 There is a parking area and a trail access point on the north side of the Alameda Creek Regional Trail east of the Phase 2 project area. This access includes equestrian staging. 						
	Eden Shores Access						
	 Bay Trail connector via Eden Shores neighborhood, Hayward 						
Historic Features	 Oliver Salt Works at the northwest end of Pond E13 						
	 Union City Salt Works at the northwest end of Pond E6 						
Waterfowl Hunting	CDFW allows limited waterfowl hunting, currently 10 annually specified days within the season, by issuing written permission at a hunter check station for certain portions of Eden Landing.						
Dog Use	Dogs are allowed for retrieval use in hunting areas during waterfowl hunting season. Dogs are allowed on leash on the Alameda Creek Regional Trail. Dogs are precluded from certain sections of the Bay Trail, including areas within Eden Landing, per EBRPD regulations.						
Equestrian Use	Horses are allowed on Alameda Creek Regional Trail.						
Fishing	Fishing by boat is allowed in the Bay and sloughs and from shore in areas designated by CDFW.						
Active Recreation	 Gordon E. Oliver Eden Shores Park, Hayward, located 1,000 feet east of a project proposed trail, has basketball, tennis, playfields, parking area and picnic facilities 						
	 Sea Breeze Park, Union City, located 700 feet east of the project proposed Route 3 and 3,000 feet east of Routes1 and 2, has ball fields, play area, picnic facilities and parking area. 						
ACFCC = Alameda Creel	k Flood Control Channel EBRPD = East Bay Regional Park District						
CDEW - California Dans	urtment of Fich and Wildlife SBSP - South Bay Salt Ponds						

Table 3.6-1 Existing Public Access and Recreation at or near Eden Landing

CDFW = California Department of Fish and Wildlife

3.6-2



3.6.2 Regulatory Setting

This section provides a summary of the regulatory framework pertaining to the public access and recreation features of the SBSP Restoration Project. More complete descriptions of recreation-related plans and policies of federal, state, and local agencies are described in Appendix G.

Regulatory and Managerial Framework

California Department of Fish and Wildlife

CDFW is the owner of Eden Landing, and as an ecological reserve, the Eden Landing pond complex is governed by laws and directives that guide public use and recreation on State ecological reserves. The State's ecological reserve system was authorized by the California Legislature in 1968 and is designed to conserve areas for the protection of rare plants, animals, and habitats, and to provide areas for education and scientific research. The reserves also provide recreational opportunities for wildlife viewing, outdoor education, hunting, and fishing, subject to regulation. At ELER, bicycles and horseback riding are allowed only on designated trails.

Aside from the existing Alameda Creek Regional Trail segment at the western end of the Alameda Creek Flood Control Channel (ACFCC), recreation use currently within the Phase 2 area is generally limited to seasonal waterfowl hunting (currently 10 days per year with written permission from CDFW).

Bay Conservation and Development Commission

The San Francisco Bay Conservation and Development Commission (BCDC) is a California state planning and regulatory agency with regional authority over the San Francisco Bay (or Bay) and the Bay's shoreline. The McAteer-Petris Act (California Government Code 66600 – 66682) is the key legal provision under California state law that preserves San Francisco Bay from indiscriminate filling and to regulate shoreline public access. The McAteer-Petris Act requires that any person or governmental agency wishing to place fill in, or to extract materials exceeding 20 dollars in value from, or make any substantial change in use of any land, water, or structure within the area of BCDC's jurisdiction must secure a permit from BCDC.

BCDC administers the *San Francisco Bay Plan* (Bay Plan) for the long-term use of the Bay, reviews applications for projects that fall within BCDC jurisdiction. With respect to the ELER, the Bay Plan states: "The California Department of Fish and Game manages and proposes to restore 5,500 acres of salt ponds and adjacent tidal habitats added to the Eden Landing Ecological Reserve to a mix of tidal and managed pond habitats. The proposed restoration use would be in accord with Bay Plan policies and provides excellent wildlife compatible recreation opportunities."

Association of Bay Area Governments Bay Trail

The Bay Trail, administered by Association of Bay Area Governments (ABAG), is a planned recreational corridor that, when complete, would encircle San Francisco Bay and San Pablo Bay with a continuous network of bicycling and hiking trails. It would connect the shoreline of all nine Bay Area counties, link 47 cities, and cross major toll bridges in the region. To date, approximately 310 miles of the alignment – over 60 percent of the Bay Trail's ultimate length – have been completed.

Segments of the Bay Trail are located near the Eden Landing Phase 2 project area, including a segment of the Bay Trail that was added in northern Eden Landing as part of Phase 1 of the SBSP Restoration

3.6-4

Project. Many of the public access facilities that would be constructed as part of the project could connect to these existing trail segments. Some new trail segments being considered as part of Phase 2 actions are not currently segments of the Bay Trail but could be considered to become part of the Bay Trail network in the future, if appropriate.

The Bay Trail Plan includes a shoreline spur to the Bay at Old Alameda Creek (OAC), as well as a bridge across ACFCC to access Coyote Hills Regional Park (see Figure 3.6-1). The spur trail on Mt. Eden Creek, constructed under Phase 1 of the SBSP Restoration Project, was included along the managed ponds in northern Eden Landing to provide a similar experience for trail users and because it was anticipated that a spur trail along OAC would be problematic because of potential tidal breaches and adjacent species conservation concerns. Although not a regulatory agency, ABAG has an interest in the project as a partner and potential funding source. The Bay Trail Plan has been prepared in consultation with local governments, and is periodically amended and updated in consultation with them. BCDC considers the Bay Trail Plan in making determinations as to whether a project is consistent with their policies on public access.

San Francisco Bay Area Water Trail (Water Trail)

The Water Trail was authorized by the San Francisco Bay Area Water Trail Act, which was signed into law in September 2005. The Water Trail is a network of access sites (or "trailheads") that enables people using non-motorized small boats or other beachable sailcraft, such as kayaks, canoes, dragon boats, and stand-up paddle and windsurf boards, to safely enjoy single and multiple-day trips around San Francisco Bay.

Non-motorized boat launch facilities constructed in the Phase 1 actions at northern Eden Landing are designated as existing Water Trail Sites; they have launch facilities that are used for non-motorized small boat access and are open to the public. No additional Water Trail facilities are planned for Phase 2.

East Bay Regional Park District

The East Bay Regional Park District (EBRPD) is a system of public parks and trails in Alameda and Contra Costa counties. The EBRPD owns and manages over 120,000 acres of open space, protected habitat, and other parklands. The 2013 District Master Plan provides the guidance for future expansion of parks trails and services. Policies relevant to Phase 2 public access at Eden Landing are discussed in Appendix G.

EBRPD is the owner and operator of Coyote Hills Regional Park, located south of Eden Landing, and Hayward Regional Shoreline, located north of Eden Landing. EBRPD also operates the Alameda Creek Regional Trail under an agreement with the ACFCWCD and manages the Bay Trail "spine" in the northern Eden Landing area, but not the "spur" trails and non-motorized launch. At the present time, no formal arrangements exist between CDFW and EBRPD for maintenance and shared responsibility of trails and other public access features in the Phase 1 or Phase 2 project area.

Alameda County Flood Control and Water Conservation District

The ACFCWCD is part of Alameda County Public Works Agency, responsible for maintaining the area's flood control facilities, including channels, levees, pumps and infrastructure related to flood control and stormwater management. The ACFCWCD provides planning, design and inspection of flood control projects, maintains flood control infrastructure, reviews new developments and supports watershed

enhancement and education. ACFCWCD does not construct or manage trails, and would need to enter into an agreement with another entity for trail management, making them responsible for construction, maintenance, and operations of the trail, including patrol policing and emergency response. Flood control channels and creeks in the Eden Landing Phase 2 project area are in Zone 3A.

Some of the proposed trail route options are located on County lands, including levees, access roads, ponds and the 20-tide gate structure crossing on OAC.

Cargill, Inc.

Cargill owns and operates lands in the Phase 2 project area including Cargill Pond 3C (CP3C), Cal Hill and Turk Island. Proposed Trail Route 2 would be located on the existing Cargill owned levee only if an agreement with Cargill and all stakeholders were reached, or if they no longer owned the property.

City of Hayward

ELER is within the city limits of Hayward, as are portions of County-owned lands west of Westport Way. Facilities that are located within the Reserve would not be subject to regulation by the City, since they are State-owned lands.

City of Union City

The eastern and southern part of the Eden Landing Phase 2 project area, including County and Cargillowned lands, is within the Union City limits. In 2004, Union City (Alta Planning 2004) commissioned a study analyzing the feasibility of a Bay Trail segment from the EBRPD trail in northern Alameda County to the Alameda Creek Regional Trail. Some of the trails proposed for the Phase 2 actions include portions of the trail segments analyzed as part of this feasibility study, including the northern Eden Landing segment along OAC, and portions of Trail Route Option 3. In addition to access at Union City Boulevard, the study identified five community connecters, "*an important part of the Bay Trail system, ensuring that residents of neighborhoods located near the primary Bay Trail alignment have ready access to the regional trail network*." These community connecters were located at the OAC south levee, Horner Street, Whipple/Benson Road, Mariner Park, and Westport Way. These routes have been incorporated into the City's Bicycle and Pedestrian Plans, as well as those of Alameda County.

Depending on the alignment selected, recreation and public access improvements completed as part of the project (but outside the boundaries of the Reserve) may be subject to permit review and approval by Union City.

Alameda Countywide Bicycle and Pedestrian Plans

The Alameda County Transportation Commission (ACTC) plans, funds and delivers transportation programs to expand and improve access and mobility in Alameda County. They administer funds from local state and federal funding sources, including Measures B and BB, vehicle registration, Clean Air funds, State Transportation Improvement Program and federal programs.

The Countywide Bicycle and Pedestrian Plans (ACTC 2012a, 2012b) adopted by ACTC identify specific investments and strategies to maintain, manage, and improve the non-motorized transportation network in Alameda County. The bicycle and pedestrian plans incorporate the ABAG Bay Trail Plan components (ACTC central and south) within the Eden Landing Phase 2 project area, including the Bay Trail spine (with notation that final alignment is to be determined), a spur trail on OAC, and a bridge across ACFCC.

The plans also include a new connection to the city street network in the general vicinity of the 20-tide gate structure.

Coordination with ACTC would be needed if the project partnered with them for funding of bicycle and pedestrian improvements.

Accessibility Regulations

Access to project facilities by people of all abilities is subject to regulations and standards set forth by the United States Access Board (https://www.access-board.gov/). The United States Access Board is an independent federal agency that promotes equality for people with disabilities, and develops and maintains design criteria for the built environment. The United States Access Board has developed standards for facilities as part of the Americans with Disabilities Act (ADA), which ensures access to the built environment for people with disabilities. The ADA Standards establish design requirements for the construction and alteration of facilities subject to this law. These enforceable standards apply to places of public accommodation, commercial facilities, and state and local government facilities.

In California, the State has adopted a set of design regulations for accessible facilities that incorporate both State mandates and federal ADA standards. These provisions are contained in the California Code of Regulations, Title 24, Part 2, California Building Code (CBC). CBC contains building design and construction requirements relating to fire and life safety, structural safety, and access compliance. The 2016 CBC became effective on January 1, 2017 and is updated every 3 years.

Recreation and public access facilities that are built as part of Phase 2 would need to comply with Title 24 and ADA accessibility regulations. This will be reviewed as part of permitting actions for project construction.

Recreation-Related Review and Permits

Proposed recreation components may be subject to various state and federal regulations that would require approvals and/or permits for proposed recreation and public access development. Table 3.6-2 provides a summary of the types of permits or agreements that may be required to carry out specific construction or maintenance activities associated with recreation and public access development.

Administering Agencies	Design Review/Agreement/Permit	Regulation			
USFWS	Issues "no effect" or "not likely to affect" letter.	Consultation with USACE under Section 7			
	Protects against destruction of migratory bird nests and possession of migratory bird "parts."	Migratory Bird Treaty Act			
	Federal Lead Agency	National Environmental Policy Act			
CDFW	State Lead Agency; Project Applicant	California Environmental Quality Act			
BCDC	Conducts reviews and issues permits for filling, dredging, substantial change in use, or development activities within the shoreline band, at the salt ponds or managed wetland areas, including recreation-related projects.	McAteer-Petris Act			
RWQCB	Issues water quality certification.	Section 401 of the Clean Water Act, Porter-Cologne Water Quality Act			

 Table 3.6-2
 Recreation-Related Regulations and Permit Summary

USACE = United States Army Corps of Engineers USFWS = United States Fish and Wildlife Service

Administering Agencies	Design Review/Agreement/Permit	Regulation				
USACE	Issues Nationwide or Individual Permit to perform dredge or fill activities in the Waters of the U.S., including wetlands.	Section 404 of Clean Water Act				
	Issues permit to create obstructions or fill of navigable waters of the U.S. (bridges)	Section 10 of the Rivers and Harbors Act of 1899				
	Alteration of federal flood control levees (Bridge at ACFCC)	Section 408, Operations and Maintenance				
United States Coast Guard	Navigable waterways (bridges)	Section 9, Coast & Harbors Act				
EBRPD	Review if project partner for implementation: consultation regarding temporary closure of EBRPD trails, if needed	Master Plan and Trails Plan consistency				
Alameda County	Construction of facilities on County-owned land (Responsible Agency)	Grading, encroachment, use agreement				
Union City and/ or Hayward	Construction of facilities on land within the City limits that is not within County or State owned lands (Responsible Agency)	Grading, encroachment, use agreement possible design or recreation review				
ACFCC = Alameda Creek Flood Control Channel BCDC = San Francisco Bay Conservation and Control Board						

BCDC = San Francisco Bay Conservation and Development Commission

CDFW = California Department of Fish and Wildlife

EBRPD = East Bay Regional parks District

California Department of Fish and Wildlife

As the primary landowner, CDFW will be the primary internal review and approval agency for public access and regulatory facilities implemented on its lands. Currently, there is no public access within the Eden Landing Phase 2 project area, except when hunting on specified dates with access from the OAC trail. South of the Reserve boundaries public access is provided on the Alameda Creek Regional Trail segment at the western end of the ACFCC.

<u>Hunting</u>. Since the acquisition in 2003, CDFW has permitted limited waterfowl hunting on specified dates (currently 10 days annually between November and January, providing entry by written permission from CDFW at a hunter check station) within the ELER lands in the Phase 2 area, as well as areas north of OAC that were part of the Phase 1 actions. Restoration actions within the Eden Landing Phase 2 project area would change the use and configuration of the current pond system, affecting the physical area available for such recreation activities, and/or the character of the recreation experience. For instance, managed ponds provide the best conditions for waterfowl hunting, so an increase in tidal ponds may reduce the physical area available for waterfowl hunting.

Only a portion of the southern Eden Landing ponds (those within the "Open Hunt Zone") is currently open to hunting. With implementation of Phase 2 actions, there could be a considerable loss of hunting opportunities in those managed ponds that transition to tidal marsh habitat. Managed ponds at northern Eden Landing would remain, and hunting opportunities would continue to be available in those managed ponds and existing tidal areas. North Creek marsh in northern Eden Landing, which has been open to full tidal action for approximately 10 years, has been a popular waterfowl hunting area, as are fully tidal areas within OAC, and the outboard Whale's Tail Marsh and mouth of Mount Eden Creek areas. More isolated marsh areas are accessed by hunters using small boats or kayaks, while some remaining berms and perimeter levees provide access by foot for hunting along and within such tidal areas.

Where existing blinds are removed to facilitate Phase 2 restoration activities, installation of new blinds (to facilitate hunting) by CDFW would be consistent with Reserve policies in areas where the use or management changes. Should access to the disabled access blind cease due to project design, it would be relocated to a similar location to provide an equivalent recreation experience, where feasible and available. Relocated blinds could reduce hunter access for others or contribute to overcrowding if quotas remain the same.

<u>Public Access.</u> For other recreation facilities added as part of Phase 2 implementation, use and operation would be prescribed by the managing authority and regulatory permit conditions. For instance, for portions of any trail designated as Bay Trail "spine" (the primary segment connecting Pond 20B in north Eden Landing with the Alameda Creek Regional Trail), it is expected that bicycles would be allowed, and the trail would be open year-round with the exception of waterfowl hunt days. As is the current practice, the Bay Trail spine would be closed to general use on waterfowl hunt days (currently 10 days per year) to ensure public safety. In addition, hunters are allowed to drive on portions of the Bay Trail spine to reach areas more remote from the sole entry allowed at the hunter check station. Any other trails (such as those that provide point access) might be similarly subject to seasonal closures or other restrictions. Equestrian use, which is allowed on the EBRPD's ACFCC trail, may be regulated or restricted within the Phase 2 area. Management of dog use would likely be coordinated with policies on adjacent non-Reserve trails that connect to any new trail constructed for Phase 2.

Bay Conservation and Development Commission

BCDC would have jurisdiction in the Eden Landing Phase 2 recreation and public access components and administer permit conditions related to their authority, as appropriate. As discussed above, a BCDC permit is required for filling, dredging, and substantial change in use of land, water, or structures within the area of BCDC's jurisdiction. Typical BCDC permit conditions include requirements for public access and other improvements, as related to the construction, installation, use, and maintenance of public access areas. Permit conditions might also include making a commitment to ongoing management and monitoring of public access improvements. Recreation and public access facilities would be evaluated for compliance with the State's climate change policies, including sea-level rise.

Recreation and public access facilities included in Phase 2 actions would be evaluated by BCDC for compliance with Bay Plan and ABAG Bay Trail Plan and policies. Where a proposed alignment does not fully comply with policies such as sea-level rise, alternate design strategies may be appropriate; these are discussed in Section 7 of the Public Access and Recreation Resources Technical Appendix (Appendix G), and may include features such as:

- Constructing a trail footprint of sufficient width to allow raising the trail in the future (and have a trail with sufficient functional width).
- Reserving additional lands on the sides of unimproved trail for dedicated future trail improvements.
- Dedicating an alternate alignment where the trail would be located in the future. For instance, according to the Reserve Manager, the Mt. Eden Creek spur trail is intended to replace the ABAG Bay Trail planned spur trail along OAC out to the Bay at Whale's Tail Marsh.

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Trails on Alameda County or Cargill Lands

Some of the trail options being evaluated would be placed on lands not owned by CDFW. This includes the trail connection from northern Eden Landing to the Phase 2 area, as well as portions of several trail routes at the perimeter of the Phase 2 area. For those routes to be implemented, the owners of those parcels (e.g., Cargill, Alameda County) would have to sell, donate or enter into an agreement with the lead agency or implementing entity for public access, such as easement, memorandum of understanding or license agreement, for trail construction, use and/or management. The landowners would also review and approve of the designs, plans, and other details.

Depending on the location of the proposed recreation and public access facilities located outside of the ELER (e.g., those on private and/or City or County –owned lands), local and regional jurisdictions may have regulatory review authority. In addition, the lead agency may partner with local or regional entities (e.g., EBRPD) to execute specific recreation-related agreements for implementation of public access components. Depending on the location and type of facilities to be built, agencies that may have review and/or permit requirements over proposed recreational components include the cities of Hayward and/or Union City, EBRPD and Alameda County.

3.6.3 Proposed Recreation and Public Access Facilities

The Phase 2 project area at Eden Landing includes all eleven CDFW-owned ponds in the southern half of Eden Landing; the levees surrounding each pond; the fringing marsh outside of these levees; the ACFCWCD-owned storm water detention ponds and high marsh, portions of the OAC channel, the northern levee of the ACFCC, and some Cargill-owned levees bordering CDFW's ponds. A USD outflow pipe and East Bay Discharge Authority (EBDA) treated wastewater force main immediately adjacent to the border of Eden Landing is also included in the project area, as well as connections to Alameda County Water District's (ACWD) Aquifer Reclamation Program (ARP) wells. Existing Pacific Gas and Electric (PG&E) power transmission and distribution lines are also included in the project area. Recreation and public access facilities are evaluated that would be located on lands owned by ACFCWCD and Cargill, as well as construction access that would occur across land owned by USD, Union City, and Alameda County.

The Eden Landing Phase 2 Action Alternatives propose restoration, flood management, and recreation/ public access activities in the southern half of Eden Landing. Existing trails, trailheads, access points and viewing platforms in the surrounding areas that are not within the project area would remain unchanged; however, some existing trail facilities may be subject to temporary closure or relocation during project construction.

The Action Alternatives focus on different restoration and flood risk management options: (1) restoring the entire area to predominantly tidal marsh; (2) restoring a mix of tidal marsh and managed ponds; and (3) a two-stage restoration that would restore the entirety of southern Eden Landing to tidal marsh with an adaptive management process. Three recreation and public access route options are evaluated within the context of the Action Alternatives. The proposed recreation and public access features would construct a segment of the Bay Trail spine through southern Eden Landing to close an existing gap in the Bay Trail. The recreation and public access to existing parks and trails by adding two local connector trails, and would also provide interpretive amenities. The new recreation and public access features to CDFW lands that would not occur without the project.

At a minimum, the Action Alternatives include construction of a Bay Trail spine segment to provide partial-to-complete closure of a gap in the Bay Trail. This trail is proposed along one of three routes being evaluated in the Action Alternatives. Additional spur trails could also be implemented, as shown in Alternative Eden C; these trails would not be considered the primary Bay Trail spine.

Two construction access points have been identified to accommodate site construction, via the Horner/Veasy Street access, and via Westport Way in the vicinity of Sea Breeze Park. The SBSP Restoration Project intends to coordinate with EBRPD, the City of Union City, and other adjacent landowners (including USD and ACFCWCD) regarding these access points as "community connections" that would provide ongoing public access connections through agreement with the underlying property owners. Although physical improvement of the access roads or trails for construction purposes (such as leveling, widening and/or surfacing) may be necessary, it is anticipated that physical improvements needed to convert this access for trail use will be minimal, such as signage and entry gates.

The proposed recreation and public access features are shown in Chapter 2, Alternatives.

Alternative Eden A (No Action)

Under Alternative Eden A, no new public access or recreation features would be completed. Existing trails, the non-motorized boat launch, and other features in northern Eden Landing would be retained and managed by CDFW, as would the EBRPD's Alameda Creek Regional Trail along the north and south ACFCC levees. The latter of these would continue to be separately maintained by EBRPD. Seasonal hunting in portions of Eden Landing would continue. The existing Bay Trail spine would continue to have a gap between the current trail near the Eden Shores development (along the eastern edge of northern Eden Landing) and the Alameda Creek Regional Trail adjacent to ACFCC and Coyote Hills Regional Park. See Figures 2-3 and 3.6-1 for the location of existing trails.

Recreation and Public Access Components Included in all Action Alternatives

Each of the Action Alternatives includes extending the Bay Trail from the existing trail in northern Eden Landing near the Eden Shores development to the southeast corner of Pond E6C. The Bay Trail would extend approximately 16,000 feet from the junction of Pond NCMP and Pond 20B, south and east along the border of ELER, across the 20-tide gate structure in the OAC channel and on the ACFCWCD levee near Veasy Street and USD into southern ELER. It would then continue on CDFW levees to the southeast corner of Pond E6C. There would be no restoration, levee improvements or flood risk management measures implemented in the northern ponds associated with completion of this trail segment. Fencing, infrastructure or other improvements may be needed to protect ACFCWCD facilities, as discussed in Appendix G.

The existing levees in this portion of northern Eden Landing are at elevations 7 to 9 feet (North American Vertical Datum of 1988 or NAVD88) for interior levees, and 10 feet along OAC, with a crest width of 9 to 12 feet. The USD/ACFCWCD levee is at elevation 14 to 16 feet (NAVD88) with a surfaced width of 12 feet or more. Levees on the east side of Ponds E5 and E6 are at elevations 12 feet (NAVD88) and above, with a minimum crest width of at least 12 feet, and the east side of Pond E4C is at elevation 11 feet (NAVD88) with a surfaced width of 6 feet or less.

Trail Route Options. From this location, the trail would continue on one of three routes:

• Route 1: CDFW Property only; 7,400 linear feet; to be placed on existing or improved levees.

- Route 2: CDFW & Cargill Property (subject to sale, easement, or use agreement with CDFW or another cooperating partner); 10,500 linear feet; to be placed on the eastern and southern levees of the Southern Ponds, where they wrap around the CP3C and Cal Hill or provide access to Turk Island.
- Route 3: CDFW & Alameda County Property; approximately 5,200 linear feet; to be placed on the CDFW-owned levee on the eastern side of Pond E4C and then route onto County lands to the east onto existing sidewalks in Union City at Westport Way. The eastern portion of this trail would be located on 1,000 feet of existing 10 to 12 foot-wide access road to be improved for trail use, terminating at Westport Way, at approximate elevation 7 to 8 feet.
- Each of the Action Alternatives would include one new viewing platform on the Alameda Creek Regional Trail.
- Each of the Action Alternatives would include improvements to the project construction access roads at two locations to allow neighborhood access to the trail.

This section describes each of these route options within the context of the restoration and flood management alternatives being evaluated.

Route 3 Modifications. During the scoping process for the Phase 2 project at southern Eden Landing, an additional trail segment for Route 3 was under consideration. As discussed above, Route 3 includes a segment that connect from the bridge over the ACFCWCD channel, around Pond E4C, and then along the 1,000 feet of improved access road to Westport Way. From there, however, an additional trail segment would have turned south through County-owned lands located behind houses on Monterey Drive, and wrap around to Union City Boulevard. The trail would have used Union City Boulevard sidewalks for about 700 feet, and then ACFCWCD access roads (at elevation 9 feet [NAVD88], with a width of at least 8 to 10 feet) for about 3,000 feet until it connected with the Alameda Creek Regional Trail.

This route was identified as the preferred alignment in the Union City Bay Trail Feasibility Study, with the caveat that this segment could be one of the most challenging, with potential wetland/biological impacts, berm/fill geotechnical and structural issues, right of way ownership, and cost, including either extensive fill and retaining wall, or construction of a boardwalk behind Monterey Drive (estimated at 1.4 to 2.9 million in 2005 dollars). Due to the range of potential environmental issues and costs associated with this segment, Route 3 was subsequently shortened to terminate at Westport Way. The additional trail segment (south of Westport Way) would not be precluded if implemented as a future, separate project by local agencies, but would not be implemented as part of Phase 2 actions.

Alternative Eden B

Alternative Eden B focuses on restoring much of the Phase 2 area to tidal marsh. In this alternative, the existing levee along the eastern edge of the project area would be raised and improved, as would the levees along the northern and western edges of CP3C. Levees would also be improved for habitat separation purposes along the western edge of Pond E1C and the southern edge of Pond E6C. Trails south of OAC would be located on levees improved for habitat or flood risk management purposes, and would be constructed of sufficient width to comply with Bay Trail guidelines, with a minimum top width of 18 feet. See Figure 2-4 for the proposed trails in Alternative B.

Recreation/Public Access Alternative Eden B, Route 1

Minimum trail width: 18 feet (south of OAC) Trail elevation: minimum 12 feet (south of OAC)

Route B1 includes continuation of the Bay Trail from its current trail within the Phase 1 area on existing CDFW and Alameda County facilities 16,000 feet to the southeast corner of Pond E6C.

From there, it would continue an additional 7,400 feet southwesterly on the improved habitat levees, terminating at the Alameda Creek Regional Trail east of the J-ponds. One 300-foot long pedestrian bridge would be constructed crossing the J-ponds at the southwestern tip of Pond E6C. One viewing platform with interpretive exhibits would be constructed along the Alameda Creek Regional Trail.

Anticipated shoreline views would be predominantly of tidal marsh, with water views expected at OAC and at the Alameda Creek Regional Trail terminus.

Recreation/Public Access Alternative Eden B, Route 2

Minimum trail width: 18 feet (south of OAC) Trail elevation: minimum 12 feet (south of OAC)

Route B2 includes continuation of the Bay Trail from its current trail within the Phase 1 area on existing CDFW and Alameda County facilities 16,000 feet to the southeast corner of Pond E6C.

From there, it would continue an additional 10,500 feet south and west along Pond E4C improved levee, west/south along CP3C levee and connect with the Alameda Creek Regional Trail on the west side of Cal Hill (owned by Cargill). One 250-foot long pedestrian bridge would be constructed crossing the J-ponds at the southeastern tip of Pond E6C. One viewing platform with interpretive exhibits would be constructed along Alameda Creek Regional Trail.

Anticipated shoreline views would be predominantly of tidal marsh, with water views expected at OAC and at the Alameda Creek Regional Trail terminus.

Recreation/Public Access Alternative Eden B, Route 3

Minimum trail width: 8 to 10 feet (south of OAC) Trail elevation: 7 to 8 feet

Route B3 includes continuation of the Bay Trail from its current trail within the Phase 1 area on existing CDFW and Alameda County facilities 16,000 feet to the southeast corner of Pond E6C.

From there, it would continue south along Pond E4C improved levee, then east along an existing access road that terminates at Westport Way. No new Bay Trail facilities would be built south of Westport Way. One viewing platform with interpretive exhibits would be constructed along Alameda Creek Regional Trail.

Anticipated shoreline views would include tidal marsh, managed lands, and landscaped urban areas, with water views expected at OAC and along the Alameda Creek Regional Trail.

Alternative Eden C

Alternative Eden C focuses on a combination of tidal marsh and permanently managed ponds. This would be accomplished by constructing a mid-complex levee bisecting the project area, with a habitat separation levee along a portion of the existing Bay shoreline. Trails would be located on existing and unimproved levees at current widths and elevations, except for a 1,000-foot long section west of Pond E1C. Where the

trail is located adjacent to managed ponds or other habitat areas, operations and maintenance (O&M) agreements would be used to permit routine maintenance, however, the ability to provide maintenance and reconstruction may be constrained in the future due to potential wildlife or habitat disruption. See Figure 2-5 for the proposed trails in Alternative C.

Alternative Eden C includes several features for improved recreation and public access; these would be completed in addition to any of the Alternative Eden C trail route options:

- A 600-foot long bridge over ACFCC near Pond E2C to connect with the existing Bay Trail that continues to the south. This bridge would be high enough in the center to allow periodic channel dredging as well as high enough over its entire length to allow 100-year floods to pass beneath the bridge. The bridge would be intended to be accessible to pedestrians and bicycles and not necessarily by maintenance vehicles.
- A new Bay Trail spur trail to the former site of the Alvarado Salt Works. This spur trail would run along the northern edge of Pond E6 to a viewing platform and interpretive feature that would be included there to explain the history and the remnant structures there. The mid-complex levee would be built to the west of the former salt works site so that its degradation would not be accelerated. From this point, a 500-foot long bridge would cross over the OAC channel, and a parallel trail would run eastward, back to the Bay Trail spine, along the southern levees of Pond A8 and E6A to form a loop. The total length of this trail loop is approximately 13,500 feet.

Recreation/Public Access Alternative Eden C, Route 1

Minimum trail width: 8 feet (south of OAC) Trail elevation: minimum 8 to 9 feet

In addition to the recreation features described above, Route C1 includes continuation of the Bay Trail from its current trail within the Phase 1 area on CDFW and Alameda County facilities 16,000 feet to the southeast corner of Pond E6C.

From there, it would continue an additional 7,400 feet southwesterly on an existing levee, terminating at the Alameda Creek Regional Trail east of the J-ponds. One 300-foot long pedestrian bridge would be constructed crossing the J-ponds at the southwestern tip of Pond E6C. One viewing platform with interpretive exhibits would be constructed along Alameda Creek Regional Trail.

Trail improvements would include clearing, grading, and/or surfacing the existing levee surface as needed to be appropriate for trail use, but no levee reconstruction, widening or raising for the trail elevation would be completed, except for a 1,000-foot long section to be located on the improved levee west of Pond E1C. This route would be protected from flooding and sea-level rise impacts by the improved levee further west.

In some areas, the trail would be located on unimproved levees that may deteriorate over time, necessitating maintenance such as topping or reconstruction to provide usable trail width and elevation.

Anticipated shoreline views would be predominantly of managed ponds and the improved levee, with water views expected on the 1,000-foot long segment of improved levee, at OAC and at the Alameda Creek Regional Trail terminus.

Recreation/Public Access Alternative Eden C, Route 2

Minimum trail width: 8 to 10 feet (south of OAC) Trail elevation: minimum 8 to 9 feet

In addition to the recreation features described above, Route C2 includes continuation of the Bay Trail from its current trail within the Phase 1 area on CDFW and Alameda County facilities 16,000 feet to the southeast corner of Pond E6C.

From there, it would continue an additional 10,500 feet south and west along Pond E4C existing levee, west/south along the existing CP3C levee and connect with the Alameda Creek Regional Trail on the west side of Cal Hill (owned by Cargill). One 250-foot long pedestrian bridge would be constructed crossing the J-ponds at the southeastern tip of Pond E6C. One viewing platform with interpretive exhibits would be constructed along Alameda Creek Regional Trail.

Trail improvements would include clearing, grading, and/or surfacing the existing levee surface as needed to be appropriate for trail use, but no levee reconstruction, widening or raising for the trail elevation would be completed. This route would be protected from flooding and sea-level rise impacts by the improved levee further west.

In some areas, the trail would be located on unimproved levees that may deteriorate over time, necessitating maintenance such as topping or reconstruction to provide usable trail width and elevation.

Anticipated shoreline views would be predominantly of managed ponds, with water views expected at OAC and at the Alameda Creek Regional Trail terminus.

Recreation/Public Access Alternative Eden C, Route 3

Minimum trail width: 8 to 10 feet (south of OAC) Trail elevation: 7 to 8 feet

In addition to the recreation features described above, Route C3 includes continuation of the Bay Trail from its current trail within the Phase 1 area on CDFW and Alameda County facilities 16,000 feet to the southeast corner of Pond E6C.

From there, it would continue south along Pond E4C improved levee, then east along an existing access road that terminates at Westport Way. One viewing platform with interpretive exhibits would be constructed along Alameda Creek Regional Trail. This option would also include the bridge across ACFCC.

Trail improvements would include clearing, grading, and/or surfacing the existing land surface as needed to be appropriate for trail use, but no levee widening or raising for the trail would be completed. This route would be protected from flooding and sea-level rise impacts by the improved levee further west.

Anticipated shoreline views would include managed ponds, lands and landscaped urban areas, with water views expected at OAC and at the Alameda Creek Regional Trail terminus.

Alternative Eden D

Alternative Eden D provides a two-stage approach to tidal restoration, to be accomplished by constructing an improved habitat levee at the existing Bay shoreline, as well as a temporary levee bisecting the project area. In this alternative, the Inland and Southern Ponds are intended to eventually become salt marsh subject to tidal action but may be retained as managed ponds, if ongoing Adaptive Management Plan (AMP) monitoring of pond-associated wildlife shows that it is necessary. A new habitat levee and habitat transition zone would be built at the existing Bay shoreline, but the existing levees that currently provide access to the western side of Eden Landing would be breached, and no public access or recreation facilities would be provided in that area. See Figure 2-6 for the proposed trails in Alternative D.

Recreation/Public Access Alternative Eden D, Route 1

Minimum trail width: 8 feet (south of OAC) Trail elevation: minimum 8 to 9 feet

Route D1 includes continuation of the Bay Trail from its current trail within the Phase 1 area on existing CDFW and Alameda County facilities 16,000 feet to the southeast corner of Pond E6C.

From there, it would continue an additional 7,400 feet southwesterly on an existing levee, terminating at the Alameda Creek Regional Trail east of the J-ponds. One 300-foot long pedestrian bridge would be constructed crossing the J-ponds at the southwestern tip of Pond E6C. One viewing platform with interpretive exhibits would be constructed along Alameda Creek Regional Trail.

Trail improvements would include clearing, grading, and/or surfacing the existing land surface as needed to be appropriate for trail use, but no levee reconstruction, widening or raising for the trail elevation would be completed.

In some areas, the trail would be located on unimproved levees that may deteriorate over time, necessitating maintenance such as topping or reconstruction to provide usable trail width and elevation.

Anticipated shoreline views would include managed ponds transitioning to tidal marsh, with water views expected at OAC and at the Alameda Creek Regional Trail terminus.

If Alternative Eden D1 is selected for implementation, it is likely that portions of the route along the existing J-ponds and E6C levees will eventually be lost due to settlement, deterioration and sea-level rise. The portion of the trail that is located on the temporary levee could be retained as a spur trail (this portion of the levee would need to be retained), and/or improvements considered to create a loop trail through Turk Island and along the improved levee along E1C.

Recreation/Public Access Alternative Eden D, Route 2

Minimum trail width: 18 feet (south of OAC) Trail elevation: minimum 12 feet

Route D2 includes continuation of the Bay Trail from its current trail within the Phase 1 area on existing CDFW and Alameda County facilities 16,000 feet to the southeast corner of Pond E6C.

From there, it would continue an additional 10,500 feet south and west along Pond E4C improved levee, west/south along CP3C levee (owned by Cargill) and connect with the Alameda Creek Regional Trail on the west side of Cal Hill (Cargill). These levees would be improved for flood risk management. One 250 foot long pedestrian bridge would be constructed crossing the J-ponds at the southeastern tip of Pond E6C. One viewing platform with interpretive exhibits would be constructed along Alameda Creek Regional Trail.

Anticipated shoreline views would be predominantly of managed ponds, transitioning to tidal marsh, with water views expected at OAC and at the Alameda Creek Regional Trail terminus.

Recreation/Public Access Alternative Eden D, Route 3

Minimum trail width: 8 to 10 feet (south of OAC) Trail elevation: 7 to 8 feet

Route D3 includes continuation of the Bay Trail from its current trail within the Phase 1 area on existing CDFW and Alameda County facilities 16,000 feet to the southeast corner of Pond E6C.

From there, it would continue south along Pond E4C improved levee, then east along an existing access road that terminates at Westport Way. One viewing platform with interpretive exhibits would be constructed along Alameda Creek Regional Trail.

Anticipated shoreline views would include managed lands transitioning to tidal marsh, and landscaped urban areas, with water views expected at OAC and at the Alameda Creek Regional Trail terminus.

3.6.4 Environmental Impacts and Mitigation Measures

Significance Criteria

The significance criteria for evaluating environmental impacts and mitigation measures related to recreation resources were developed in the 2007 Final EIS/R, from which this document tiers. For the purposes of this EIS/R, the project would cause a significant impact to recreational resources if it:

- Would not be consistent with regional and local laws and recreation plans including CDFW mission and regulatory requirements;
- Would not be consistent with existing recreational uses;
- Would substantially reduce recreational opportunities at existing facilities;
- Would substantially displace public recreation activities or opportunities and comparable recreation opportunities would not be available;
- Would cause an increase in the use of existing recreational facilities such that substantial physical deterioration of the facilities would occur or be accelerated; or
- Would include recreational facilities which might have an adverse physical effect on the environment.

Under the No Action Alternative, no new recreation and public access facilities would be constructed. Impact evaluations for the Action Alternative are evaluated based on the existing conditions described in Section 3.6.3 above, and not the proposed conditions that would occur under the No Action Alternative. This approach is consistent with California Environmental Quality Act (CEQA) and National Environmental Policy Act (NEPA) protocols for analyzing project impacts. In this case, the No Action Alternative represents the continuation of the current management actions provided for in the area and would continue to be subject to evaluation of future actions or actions taken under the AMP. Typical O&M practices would continue into the future.

As explained in Section 3.1.2, Environmental Setting and Impact Analysis, while both CEQA Regulations for Implementing NEPA and the CEQA Guidelines were considered during the impact analysis, impacts identified in this Draft EIS/R are characterized using CEQA terminology. Beneficial impacts (as defined

by NEPA of the project are also identified. Please refer to Section 3.1.2 for a description of the terminology used to explain the evaluation and the significance determinations of the impacts.

Program-Level Evaluation

The 2007 Final EIS/R evaluated potential recreation impacts of three long-term program-level alternatives. Programmatic Alternative A would be the No Action Alternative. Programmatic Alternative B would be a 50/50 mix of tidal marsh and enhanced managed ponds called the Managed Pond Emphasis. Programmatic Alternative C would be a mix of 90 percent tidal marsh/10 percent managed pond called the Tidal Marsh Emphasis. The determination was made in the 2007 Final EIS/R that under the implementation of Programmatic Alternative C, there would be a less-than-significant impact to most recreation resources. Under CEQA, that alternative would result in less-than-significant impacts on the provision of new public access and recreation facilities, including the opening of new areas for recreational purposes and completion of the Bay Trail spine.

In the 2007 Final EIS/R, it was determined that Programmatic Alternatives B and C would provide public access and recreation in areas of the South Bay that never existed before, allowing recreation, education and informational interpretive opportunities. They would also allow for gaps in the Bay Trail spine to be closed and provide connection to existing trail segments outside the SBSP Restoration project area. These trail connections would provide more proximal access to the Bay, its shoreline and adjacent restored areas that would not be possible without the Project. These positive impacts from the Project provide considerable benefits to a large urbanized group of recreational and research-based visitors.

Consistency with Public Access Policies

Shoreline Access

Phase 2 actions would essentially move the Bay shoreline to the east, replacing some or all managed ponds with tidal marsh. Point access to the open bay shoreline will continue to be provided in all alternatives via the Alameda Creek Regional Trail, as well as the existing trails in northern Eden landing, created as part of Phase 1. Alternative Eden C would provide improved shoreline access with a loop trail at OAC.

Strategies to Address Sea-Level Rise for Public Access Facilities

Project trail components may be affected by future sea-level rise and storm activity during the life of the project. In such cases, regional policies indicate that public access facilities should:

- Be set back far enough from the shoreline to avoid flooding;
- Be elevated above expected flood levels;
- Be designed to tolerate flooding; or
- Employ other means of addressing flood risks.

Levees that are improved for flood risk management or habitat separation are currently proposed to be raised to a minimum elevation of 12 feet NAVD88 with a 12-foot crest width and at least 4:1 side slopes (in some alternatives, some improved levees also have habitat transition zones to assist in long-term sea-level rise adaptation). Some trail improvements are proposed to be located on existing unimproved levees,

where improvements would include leveling and surfacing the levee top, but not raising or widening for trail purposes. Depending on the alternative, these levees and facilities may be landward of levees that are higher and or improved or otherwise are suitable as flood risk management infrastructure.

Levee improvements have been designed to provide equivalent levels of de facto flood protection for inland areas, as compared to the existing conditions, for southern Eden Landing. Project levees are not intended to protect against sea-level rise. To provide potential future adaptive management, such as raising a levee's top elevation where feasible and needed, some of the levees would need to have a wider footprint or be created at a higher elevation to allow for raising the trail elevation in the future with sufficient width. This may require steeper side slopes, a narrower trail surface, use of retaining walls, rails or other features in the future to ensure trail user safety. This is discussed in more detail in Appendix G.

Public Access and Impacts to Wildlife; Adaptive Management

A central theme to developing and implementing the overall SBSP project has been the concept of "adaptive management." Under an adaptive management approach, the outcomes of previously implemented restoration efforts and ongoing management actions are evaluated and analyzed, and the resulting information is used to address uncertainties, modify management, and/or to develop new strategies to lessen impacts and achieve better restoration results. This approach is particularly effective with regards to potential impacts of trail use on future wildlife, especially threatened and endangered species that would inhabit the restored ponds. The public access and wildlife compatibility studies conducted for the project have identified potential impacts from trail use in certain areas and on certain species, such as the endangered western snowy plover.

The programmatic portion of the 2007 Final EIS/R contained the following notation referring to certain trails and facilities along OAC and in southern Eden Landing: "Denotes trails that were identified during the alternatives development process as being of particular concern to permitting agencies for potential to disrupt habitat." These locations are where known threatened and endangered species occur and where important habitat exists for California Ridgway's rail, California black rail, salt marsh harvest mouse, and western snowy plover.

This notation indicated that the concerns of those agencies with respect to certain trails or recreational features may preclude the implementation of public access and recreation features that were represented conceptually in the 2007 Final EIS/R.

The public access alternatives evaluated as part of Phase 2 project actions has included extensive input from regulatory agencies as well as site-specific studies. All proposed trails are located on existing levees, and several project alternatives include the construction of habitat transition zones to increase habitat diversity. These features could provide a buffer between trails and areas that is expected to become habitat to sensitive species in the future.

The Eden Landing Phase 2 Action Alternatives were developed with a focus on habitat restoration that also provides flood risk management and overall habitat enhancement along with public access facilities. Of the more than 2,000 acres at southern Eden Landing site, recreation and public access features would directly impact approximately 7 to 10.8 acres (if all options shown in Alternative Eden C are implemented), as discussed in Appendix D. Additionally, several public access features shown in the 2007 Final EIS/R were eliminated, which would further reduce potential wildlife impacts due to human use.

Recreation and Public Access Features Not in Current Plan

The programmatic portions of the 2007 Final EIS/R included the following recreation and public access features that were not included in Phase 1 and are not included in the current plans for the Phase 2 actions:

- Wildlife viewing platform at the northwest corner of Pond E6A (in northern Eden Landing).
- Wildlife viewing platform within the Southern Ponds.
- Potential trail alignments along the north and west side of Pond E6C, rather than only on the east and south sides.
- Bay Trail alignment along the east side of Pond E4C and CP3C (instead, one proposed alignment has shifted further west and wraps around the Southern Ponds; another stays east and terminates at Westport Way).

The Action Alternatives under consideration for Phase 2 at Eden Landing include substitutes for some features that were not included in these alternatives. For example, there is a proposed wildlife viewing platform along the Alameda Creek Regional Trail adjacent to the Southern Ponds and not far from the location on the map of Programmatic Alternative C. Adjustments to portions of the Bay Trail spine through southern Eden Landing have been made to reflect constraints from the review of preliminary alternatives and updated restoration and flood risk management analyses. They would provide similarly enhanced access features to those shown in the 2007 Final EIS/R.

Consistency with Regional Planning Policies

Consistency with recreation and public access goals and policies as they relate to shoreline or waterfront access may vary depending on the habitat or flood risk management alternative initially selected as the preferred alternative or ultimately selected for implementation. Many of these policies include considerations for implementation feasibility, avoiding adverse impacts on wildlife, the selection of appropriate locations for public access features, or other constraints. Selection of recreation and public access features must be balanced with other project goals, and an alternative could be consistent with these policies even while not providing every public access feature shown in previous project documents. In addition, trail route options on lands that are not part of the Reserve may be precluded if the owners of those lands and/or other project partners do not agree to participate in construction and/or ongoing operations, maintenance and management. Permanent access arrangements, including agreements or easements may be necessary, and if such arrangements cannot be implemented, an alternate alignment would need to be provided in order to fully meet project and regulatory goals and policies for recreation and public access, including completion of the Bay Trail spine.

Recreation resources for the Action Alternatives and trail route options, and consistency with specific BCDC, ABAG Bay Trail and EBRPD policies, are discussed in Appendix G.

Project-Level Evaluation

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.

Alternative Eden A (No Action). Under Alternative Eden A, no new public access or recreation features would be completed. Existing trails and staging areas in northern Eden Landing, as well as the annual waterfowl hunt program would continue (see Figures 2-3 and 3.6-1 for the location of existing trails). EBRPD's Alameda Creek Regional Trail and staging area, as well as the non-motorized boat launch, and parks and trails within Union City, Hayward, and Fremont would also continue to be used and maintained separately.

The No Action Alternative would not be consistent with SBSP Restoration Project goals to provide recreation and public access. Public access as part of a future phase is not precluded at the southern Eden Landing ponds, but portions of a given location or trail alignment could be limited or precluded depending on future habitat conditions and resource management needs. This alternative also would not further the implementation of BCDC's Bay Plan and would be inconsistent with the ABAG Bay Trail Plan, EBRPD Master Plan, and the Bicycle and Pedestrian Plans of Alameda County and the Cities of Hayward and Union City, but would not preclude such actions.

Because Alternative Eden A would provide similar levels of recreation access in the southern Eden Landing ponds as existing conditions (primarily limited waterfowl hunting), impacts to public access and recreation facilities would be less than significant.

Alternative Eden A Level of Significance: Less than Significant

Alternative Eden B

Under Alternative Eden B, new recreation and public access facilities would be built on improved levees to connect the existing Bay Trail with Alameda Creek Regional Trail (see Figure 2-4 for the proposed trails in Alternative B). In addition, raised pond bottom elevations and restored tidal marsh and other habitats would enhance wildlife-viewing, consistent with regional public access policies to provide wildlife viewing opportunities.

During the preliminary design phase of this project, hydrodynamic modeling showed a need to add breaches and sections of lowered levees along the northern boundary of the Bay Ponds (i.e., the southern levee of the OAC where a Bay Trail spur had been proposed by others) in order to obtain adequate draining and filling of the ponds. This makes retention of these levees in their current condition incompatible with restoring tidal marshes while maintaining current levels of flood risk management, unless bridges and/or boardwalks are provided for the spur trail to span the breaches, and this would likely be prohibitively expensive and could adversely affect sensitive species. Given these constraints, Alternative Eden B is consistent with policies regarding providing maximum feasible public access and wildlife- and water-viewing opportunities along the OAC.

Alternative Eden B neither includes nor precludes installation of a bridge over the ACFCC. That bridge was included as a potential feature in the 2007 Final EIS/R as a way to offset losses from what was then thought to be a necessary permanent closure of the existing Alameda Creek Regional Trail on the northern side of the ACFCC levee. However, the hydraulic modeling and analysis conducted since then

indicates that there is no need to close that trail segment. All existing trails in the Eden Landing area would be retained.

In general, the public access and recreation components proposed in Alternative Eden B would increase public access. It would substantially increase public access to tidal marsh areas and provide new community connector trails. This alternative would provide additional facilities that currently do not exist. This alternative does not include the bridge over ACFCC, but does not preclude future implementation by another project proponent at this location, or at another location that would facilitate Bay Trail gap closure.

Alternative Eden B1. Under Alternative Eden B1, new recreation and public access facilities would be built on levees that would be improved for habitat or flood risk management. The trail would connect the existing Bay Trail with Alameda Creek Regional Trail. In addition, restored tidal marsh and other habitats would add and enhance wildlife-viewing and water-viewing opportunities. Alternative Eden B1 would be consistent with regional recreation and public access policies by adding the Bay Trail spine through southern Eden Landing and adding a viewing platform. This alternative does not preclude future implementation of a bridge over the ACFCC by another project proponent. The public access and recreation components proposed would increase public access and provide additional facilities that currently do not exist. Therefore, impacts to public access and recreation facilities would be less than significant.

Alternative Eden B1 Level of Significance: Less than Significant

Alternative Eden B2. Under Alternative Eden B2, new recreation and public access facilities would be built on improved flood risk management levees on Reserve and other lands to connect the existing Bay Trail with Alameda Creek Regional Trail. In addition, restored tidal marsh and other habitats near trails would enhance wildlife-viewing opportunities. Alternative Eden B2 would be consistent with regional recreation and public access policies by adding the Bay Trail spine through southern Eden Landing and adding a viewing platform. As above, this alternative does not preclude future implementation of a bridge over the ACFCC by another project proponent. The public access and recreation components proposed would increase public access and provide additional facilities that currently do not exist, making it less than significant.

Alternative Eden B2 Level of Significance: Less than Significant

Alternative Eden B3. Under Alternative Eden B3, new recreational and public access facilities would be built that would increase recreational access in the area. Some public access facilities would be built on improved levees, or on existing access roads. As above, this alternative does not preclude future implementation of a bridge over the ACFCC by another project proponent.

Alternative Eden B3 would not complete the Bay Trail spine within the project area; rather this alternative would include a route that terminates at existing streets. This would not be fully consistent with regional public access and recreation policies and project goals to complete the Bay Trail spine through the project area as described in the 2007 Final EIS/R. Portions of this alternative would provide water views and access to what would become the new intertidal shoreline, which is consistent with external plans and policies for public access.

Implementation of the proposed facilities would not preclude completion of additional public access facilities in the future, but they would not be part of this project phase, nor implemented by the lead

agency, and therefore, the project goal of completing the Bay Trail spine would not be met. The public access and recreation components proposed would increase public access and provide additional facilities that currently do not exist, but does not include completion of the Bay Trail spine, leaving a 1 mile gap in the trail.

Although Alternative Eden B3 would not compare favorably to other route options because it does not meet the project goal of completing the Bay Trail spine, the proposed public access and recreation components would increase public access and provide additional facilities that currently do not exist. Therefore, impacts to public access and recreation facilities would be less than significant.

Alternative Eden B3 Level of Significance: Less than Significant

Alternative Eden C

Under Alternative Eden C, there would be new public access and recreational facilities that would increase recreational facilities in the project area (see Figure 2-5 for the proposed trails in Alternative C). Most of the new trails would be located on existing levees that would not need to be improved for habitat or flood risk management purposes, since this alternative features a flood risk management levee that bisects the site further west. Some of the proposed Bay Trail spine would be located on existing unimproved levees that may deteriorate over time, and may need periodic repair to remain functional, with sufficient width for an accessible trail meeting regional trail standards. The Bay Trail would be located east of the improved levee, so wildlife-viewing opportunities would primarily be of managed ponds. Alternative Eden C provides more shoreline viewing opportunities and additional Bay access via the OAC loop trail.

During the preliminary design phase of this project, hydrodynamic modeling showed a need to add breaches and sections of lowered levees along the northern boundary of the Bay Ponds (i.e., the southern border of the OAC where a Bay Trail spur had been proposed) in order to obtain adequate draining and filling of the ponds. This makes retention of these levees in their current condition incompatible with restoring tidal marshes to the Bay Ponds while maintaining current levels of flood risk management. Extensive bridges and/or boardwalks to span the breaches would be prohibitively expensive and such trails and facilities could adversely affect sensitive resources. Levee lowering is not proposed along the northern boundary of the Inland Ponds.

Alternative Eden C would add the most public access features of any of the Action Alternatives by including installation of a bridge over ACFCC (which is part of the conceptual plan for the Bay Trail in Alameda Countywide Bicycle and Pedestrian Plans) and expanded water viewing opportunities along OAC as well as the trail and additional viewing platform at the Alvarado salt works site. This is consistent with the provision of additional trails and facilities as described in the 2007 Final EIS/R. Unlike Alternatives Eden B and Eden D, the spur trail and the bridge over the OAC would be along managed ponds in northern Eden Landing and connect to the Inland Ponds which would be retained as managed ponds and protected from daily tidal flows by the enhanced mid-complex levee to the west. The retention of these managed ponds allows Alternative Eden C to potentially provide more feasible public access than Alternatives Eden B or Eden D.

Alternative Eden C1. Under Alternative Eden C1, the trail would run between managed ponds on existing unimproved levee berms. Alternative Eden C1 would be consistent with external policies to maximize feasible public access. It includes installation of a bridge over ACFCC and expanded water viewing

opportunities along OAC. This is consistent with the provision of additional trails and facilities as described in the 2007 Final EIS/R.

The public access and recreation components proposed would increase public access. This alternative would provide additional facilities that currently do not exist. Implementation of these proposed facilities would not preclude completion of additional public access facilities in the future, and the impact would be less than significant under CEQA and beneficial under NEPA.

Alternative Eden C1 Level of Significance: Less than Significant (CEQA); Beneficial (NEPA)

Alternative Eden C2. Under Alternative Eden C2, the trail would be located on Reserve levees and other existing levees owned by others, where such access could become available. Alternative Eden C2 would be consistent with external policies to maximize feasible public access. It includes installation of a bridge over ACFCC and expanded water viewing opportunities along OAC. This is consistent with the provision of additional trails and facilities as described in the 2007 Final EIS/R. The trail would not be located near the new shoreline, and some portions of the trail would not include open Bay shoreline views.

The public access and recreation components proposed would increase public access. This alternative would provide additional facilities that currently do not exist. Implementation of these proposed facilities would not preclude completion of additional public access facilities in the future, and the impact would be less than significant under CEQA and beneficial under NEPA.

Alternative Eden C2 Level of Significance: Less than Significant (CEQA); Beneficial (NEPA)

Alternative Eden C3. Under Alternative Eden C3, the trail would be located on Reserve levees and an access road, ending at Westport Way in Union City. Alternative Eden C3 would not complete the Bay Trail spine within the project area; rather this alternative would include parts of the route and terminate at existing streets. This would not be fully consistent with regional public access and recreation policies and project goals to complete the Bay Trail spine through the project area as described in the 2007 Final EIS/R. Portions of this alternative would provide water views and access at OAC and ACFCC, which is consistent with external plans and policies for public access.

Implementation of the proposed facilities would not preclude completion of additional public access facilities in the future, but they would not be part of this project phase, nor implemented by the lead agency, and therefore, the project goal of completing the Bay Trail spine would not be met. The public access and recreation components proposed would increase public access and provide additional facilities that currently do not exist, but does not include completion of the Bay Trail spine, leaving a 1 mile gap in the trail.

Although Alternative Eden C3 would not compare favorably to other route options because it does not meet the project goal of completing the Bay Trail spine, the proposed public access and recreation components would increase public access and provide additional facilities that currently do not exist. Therefore, impacts to public access and recreation facilities would be less than significant.

Alternative Eden C3 Level of Significance: Less than Significant

Alternative Eden D

Under Alternative Eden D, new recreation and public access facilities would be built on improved levees and/or existing unimproved levees to connect the existing Bay Trail with Alameda Creek Regional Trail

(see Figure 2-6 for the proposed trails in Alternative D). Some levees (those in the Inland Ponds) would be improved to an elevation of 10 feet NAVD88 prior to the placement dredge materials. Restored tidal marsh and other habitats would enhance wildlife- and water-viewing opportunities.

During the preliminary design phase of this project, hydrodynamic modeling showed a need to add breaches and sections of lowered levees along the northern boundary of the Bay Ponds (i.e., the southern border of the OAC where a Bay Trail spur had been proposed) in order to obtain adequate draining and filling of the ponds. This makes retention of these levees in their current condition incompatible with restoring tidal marshes while maintaining current levels of flood risk management. Extensive bridges and/or boardwalks to span the breaches would be prohibitively expensive and such trails and facilities could adversely affect sensitive resources. Given these constraints, Alternative Eden D is consistent with policies regarding providing maximum feasible public access and wildlife- and water-viewing opportunities along the OAC.

Alternative Eden D neither includes nor precludes installation of a bridge over the ACFCC. That bridge was included as a potential feature in the 2007 Final EIS/R as a way to offset losses from what was then thought to be a necessary permanent closure of the existing Alameda Creek Regional Trail on the northern side of the ACFCC levee. However, the hydraulic modeling and analysis conducted since then indicates that there is no need to close that trail segment. All existing trails in the Eden Landing area would be retained.

In general, the public access and recreation components proposed in Alternative Eden D would increase public access. It would substantially increase public access to tidal marsh areas and provide new community connector trails. This alternative would provide additional facilities that currently do not exist. This alternative does not include the bridge over ACFCC, but does not preclude future implementation by another project proponent at this location, or at another location that would facilitate Bay Trail gap closure.

This alternative would increase access to tidal marsh areas and managed ponds, but portions of the trail would not provide long-term resilience to tidal flows that may eventually be introduced there. There would be a potential need to raise the levee or relocate a segment of the Bay Trail (i.e., a segment of Route 1 between Pond E6C and the ACFCC) at some point in the future, which may affect adjacent restored habitat.

Alternative Eden D1. Under Alternative Eden D1, new recreation and public access facilities would be built on an improved flood risk management levee as well as an existing unimproved levee along managed ponds that would transition to tidal marsh habitat. Facilities would enhance water- and wildlife-viewing opportunities. This alternative does increase access to tidal marsh areas, to be considered part of the new shoreline, but portions of the trail would not be designed for resilience, with the potential need to relocate further inland in the future.

In general, this alternative would provide additional recreational facilities that currently do not exist. Implementation of these proposed facilities would not preclude completion of additional public access facilities in the future. However, a permanent, long-term Bay Trail spine would not be ensured, and may require relocation in the future. A segment of Route 1 between Pond E6C and the ACFCC would not be constructed on improved levees and therefore the trail may be subject to intermittent coastal inundation at some point in the future after removal of the temporary mid-complex levee. In addition, restored habitat adjacent to this trail segment could constrain or prohibit implementation of new public access in the future.

The placement of the Bay Trail spine on unimproved levees, at a width and elevation inconsistent with regional public access policies, may necessitate additional repairs or improvements in the future, the construction of which could cause adverse environmental effects, since the trail would be located adjacent to habitat created for wildlife use. However, the project would not preclude completion of additional public access facilities in the future and the trail could be relocated to reestablish the trail connection if coastal inundation closes the trail and if reconstruction of this trail segment is precluded due to habitat and consequent permitting challenges.

Although Alternative Eden D1 would not compare favorably to other route options because a portion of the trail segment between Pond E6C and the ACFCC would not provide long-term resilience to tidal flows, the proposed public access and recreation components of Alternative Eden D1 would increase public access and provide additional facilities that currently do not exist. Therefore, impacts to public access and recreation facilities would be less than significant.

Alternative Eden D1 Level of Significance: Less than Significant

Alternative Eden D2. Under Alternative Eden D2, new recreation and public access facilities would be built on improved levees constructed for flood risk management to connect the existing Bay Trail with Alameda Creek Regional Trail. Wildlife-viewing would be of managed ponds transitioning to tidal influence (representing the "new" shoreline) and provide wildlife viewing opportunities.

This alternative would increase public access and provide additional facilities that currently do not exist. Implementation of these proposed facilities would not preclude completion of additional public access facilities in the future. Some public access features proposed under Alternative Eden C may not be completed as part of Alternative Eden D2, but substantial new features are added with the opportunity to add or improve more in the future as part of this project or others. Because of this, the impacts to public access and recreation facilities would be less than significant.

Alternative Eden D2 Level of Significance: Less than Significant

Alternative Eden D3. Under Alternative Eden D3, the trail would be located on Reserve levees and access roads and would end at Westport Way. Alternative Eden D3 would not complete the Bay Trail spine but would instead add much of it and then reroute the trail on to existing streets. This would not be fully consistent with project goals to complete the Bay Trail spine. Portions of this alternative may not be considered shoreline access or provide shoreline views.

Implementation of the proposed facilities would not preclude completion of additional public access facilities in the future, but they would not be part of this project phase, nor implemented by the lead agency, and therefore, the project goal of completing the Bay Trail spine would not be met. The public access and recreation components proposed would increase public access and provide additional facilities that currently do not exist, but does not include completion of the Bay Trail Spine, leaving a 1 mile gap in the trail.

Although Alternative Eden D3 would not compare favorably to other route options because it does not meet the project goal of completing the Bay Trail spine, the proposed public access and recreation

components would increase public access and provide additional facilities that currently do not exist. Therefore, impacts to public access and recreation facilities would be less than significant.

Alternative Eden D3 Level of Significance: Less than Significant

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.

Alternative Eden A (No Action). Under Alternative Eden A, there are currently no existing recreational features (trails) that are in use or would be permanently removed. Existing trails on levees adjacent to the project area would not be affected. Hunting opportunities would be unchanged. There would be no impact.

Alternative Eden A Level of Significance: No Impact

Alternative Eden B. Under Alternative Eden B, there are currently no existing recreational features (trails) that are in use that would be permanently removed. Existing trails in northern Eden Landing and the Alameda Creek Regional Trail would remain. The limited waterfowl hunting (currently 10 days specified annually) would continue, though there would be a loss of available managed ponds for hunting. Hunting would be constrained during construction, particularly at the Bay and Inland Ponds during dredge material placement. Hunting would also be constrained post-construction due to public use of some trail segments, unless seasonal closure of those trail segments is used to avoid potential safety concerns. The overall land area available for hunting could remain similar to its present state if additional portions of the Hunt Closed Zone were added to the Open Hunt Zone. Regardless, within the larger area, managed ponds at northern Eden Landing would remain, and hunting opportunities would continue to be available in nearby managed ponds and existing tidal areas. North Creek marsh in northern Eden Landing, which has been open to full tidal action for approximately 10 years, has been a popular waterfowl hunting area, as are fully tidal areas within OAC, and the outboard Whale's Tail Marsh and mouth of Mount Eden Creek areas. More isolated marsh areas are accessed by hunters using small boats or kayaks, while some remaining berms and perimeter levees provide access by foot for hunting along and within such tidal areas. Because hunting opportunities exist in tidal areas and because alternative locations are available for hunting in the northern Eden Landing managed ponds, impacts would be less than significant.

Alternative Eden B Level of Significance: Less than Significant

Alternative Eden C. Under Alternative Eden C, there are currently no existing recreational features (trails) that are in use that would be permanently removed. Existing trails in northern Eden Landing and the Alameda Creek Regional Trail would remain. The limited waterfowl hunting (currently 10 days specified annually) would continue, though there would be a loss of available managed ponds for hunting. Hunting would be constrained during construction, particularly at the Bay Ponds during dredge material placement. Hunting would also be constrained post-construction due to public use of some trail segments, unless seasonal closure of those trail segments is used to avoid potential safety concerns. The overall land area available for hunting could remain similar to its present state if additional portions of the Hunt Closed Zone were added to the Open Hunt Zone. Regardless, within the larger area, managed ponds at northern Eden Landing would remain, and hunting opportunities would continue to be available in managed ponds and existing tidal areas. Because hunting opportunities exist in tidal areas and because

alternative locations are available for hunting in the northern Eden Landing managed ponds, impacts would be less than significant.

Alternative Eden C Level of Significance: Less than Significant

Alternative Eden D. Under Alternative Eden D, there are currently no existing recreational features (trails) that are in use that would be permanently removed. Existing trails in northern Eden Landing and the Alameda Creek Regional Trail would remain. The limited waterfowl hunting (currently 10 days specified annually) would continue, though there would be a loss of available managed ponds for hunting. Hunting would be constrained during construction, particularly at the Bay and Inland Ponds during dredge material placement. Hunting would also be constrained post-construction due to public use of some trail segments, unless seasonal closure of those trail segments is used to avoid potential safety concerns. The overall land area available for hunting could remain similar to its present state if additional portions of the Hunt Closed Zone were added to the Open Hunt Zone. Regardless, within the larger area, managed ponds at northern Eden Landing would remain, and hunting opportunities exist in tidal areas and because alternative locations are available for hunting in the northern Eden Landing managed ponds, impacts would be less than significant.

Alternative Eden D Level of Significance: Less than Significant

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.

Alternative Eden A (No Action). Under Alternative Eden A, no new public access or recreation features would be completed. Existing trails adjacent to the area would continue to be used and separately maintained, and limited waterfowl hunting, currently 10 days specified annually, would continue. There would be no increase in recreation use as a result of this alternative, and there would be no impacts on adjacent recreational facilities.

Alternative Eden A Level of Significance: No Impact

Alternative Eden B. Under Alternative Eden B, additional recreation and public access facilities would provide a partial or complete connection (depending on the route that is feasible to construct) between two existing trail segments with trailhead parking areas (i.e., the Alameda Creek Regional Trail and staging area, and ELER Bay Trail and staging area). In addition, two construction access roads, at Veasy Street and Westport Way, would be improved to provide neighborhood access to the Bay Trail.

Use of the new trail and public access facilities by visitors may increase use and demand for existing trailhead facilities. The projected increase in recreation use as a result of this alternative is estimated to be approximately 150 to 250 additional users per day during peak use periods. New trail segments and viewing facilities are proposed, and this incremental increased use is minimal, and within the capacity of existing facilities.

Provision of two new neighborhood access connections could also reduce potential deterioration of existing trailheads. This is consistent with local and regional bicycle, pedestrian, and trail plans.

This alternative would not substantially increase recreation use or cause substantial physical deterioration of adjacent recreational facilities and the impact would be less than significant.

Alternative Eden B Level of Significance: Less than Significant

Alternative Eden C. Under Alternative Eden C, additional recreation and public access facilities would provide a partial or complete connection (depending on the route that is feasible to construct) between two existing trail segments with trailhead parking areas (i.e., the Alameda Creek Regional Trail and staging area, and ELER Bay Trail and staging area). In addition, two construction access roads, at Veasy Street and Westport Way, would be improved to provide neighborhood access to the Bay Trail.

Use of the new trail and public access facilities by visitors may increase use and demand for existing trailhead facilities. The projected increase in recreation use as a result of this alternative is estimated to be approximately 150 to 250 additional users per day during peak use periods. New trail segments and viewing facilities are proposed, and this incremental increased use is minimal, and within the capacity of existing facilities.

Provision of two new neighborhood access connections could also reduce potential deterioration of existing trailheads. This is consistent with local and regional bicycle, pedestrian, and trail plans.

This alternative would not substantially increase recreation use or cause substantial physical deterioration of adjacent recreational facilities and the impact would be less than significant.

Alternative Eden C Level of Significance: Less than Significant

Alternative Eden D. Under Alternative Eden D, additional recreation and public access facilities would provide a partial or complete connection (depending on the route that is feasible to construct) between two existing trail segments with trailhead parking areas (i.e., the Alameda Creek Regional Trail and staging area, and ELER Bay Trail and staging area). In addition, two construction access roads, at Veasy Street and Westport Way, would be improved to provide neighborhood access to the Bay Trail.

Use of the new trail and public access facilities by visitors may increase use and demand for existing trailhead facilities. The projected increase in recreation use as a result of this alternative is estimated to be approximately 150 to 250 additional users per day during peak use periods. New trail segments and viewing facilities are proposed, and this incremental increased use is minimal, and within the capacity of existing facilities.

Provision of two new neighborhood access connections could also reduce potential deterioration of existing trailheads. This is consistent with local and regional bicycle, pedestrian, and trail plans.

This alternative would not substantially increase recreation use or cause substantial physical deterioration of adjacent recreational facilities and the impact would be less than significant.

Alternative Eden D Level of Significance: Less than Significant

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.

Alternative Eden A (No Action). Under Alternative Eden A, no new public access or recreation facilities would be provided under Phase 2. Therefore, there would be no physical impacts associated with construction of park and recreational facilities.

Alternative Eden A Level of Significance: No Impact

Alternative Eden B. Under Alternative Eden B, depending on the route chosen, recreation and public access facilities would be provided on existing levees, levees improved for habitat separation and/or flood risk management purposes, and existing access roads. Physical impacts associated with construction of recreation and public access facilities would include minor grading and surfacing of levees, construction of a viewing platform at the edge of an existing trail, as well as bridge crossings, with associated physical impacts. Facilities would be designed, where reasonable and feasible, to meet policies for sea-level rise resiliency and Bay Trail guidelines.

The physical impacts associated with implementing trail-related levee improvements and bridge crossings are addressed in the geology/soils, hydrology, water quality, biology, and other resource sections of this EIS/R. Trail-related levee improvements and bridge crossings represent less than 0.5 percent of the total project area. According to the respective sections on geology/soils, hydrology, water quality, and biology, the project has been designed to fully address physical impacts associated with all project components.

Improved recreation and public access facilities, including completion of a new trail segment, and additional viewing facilities is consistent with SBSP Restoration Project goals and other project plans and policies to provide public access, resilient design, and wildlife viewing opportunities. None of these new or alternative public access and recreation features would adversely affect any others or necessitate other new features, the construction of which would bring adverse environmental impacts. The impacts would be less than significant.

Alternative Eden B Level of Significance: Less than Significant

Alternative Eden C. Under Alternative Eden C, depending on the route chosen, recreation and public access facilities would be provided on existing levees, levees improved for flood risk management purposes, and access roads. Physical impacts associated with construction of recreation and public access facilities would include minor grading and surfacing of levees, construction of a viewing platform at the edge of the existing trail, as well as bridge crossings, with associated physical impacts. Depending on existing levee condition, trails may not meet all Bay Trail design guidelines such as trail width, or other public access plans and policies.

Trails located on unimproved levees would often be located inland of other levees improved to provide flood risk management. These facilities would not be exposed to tidal flows and would therefore be afforded this protection. The bridges at OAC and ACFCC would be high enough to allow for periodic channel dredging and 100–year floods.

The physical impacts associated with implementing trail-related levee improvements and bridge crossings are addressed in the geology/soils, hydrology, water quality, and biology resource sections of this EIS/R. Trail-related improvements and bridge crossings represent less than 0.5 percent of project area. According to the respective sections on geology/soils, hydrology, water quality, and biology, the project has been designed to fully address physical impacts associated with all project components.

Improved recreation and public access facilities, including completion of a new trail segment, and additional viewing facilities are consistent with SBSP Restoration Project goals and public access plans and policies, including resilient design and wildlife viewing opportunities. In addition, Alternative Eden C would provide more public access features than other Action Alternatives, including two bridges

for enhanced connectivity with regional trails, and a loop trail to an interesting cultural site (historic salt works).

Although the improved mid-complex levee may be subject to wave run-up, overtopping, and ponding at some point in the future, levees improved to 12 feet NAVD88 would generally be protected from coastal inundation during interim future conditions.¹ Because the mid-complex levee provides a barrier to coastal inundation, landward trails located along the Bay and Inland Ponds would also be protected from damaging flows. The backside levee of Ponds E5 and E6 is generally above 11 feet NAVD88, while the backside levee at Pond E6C is at 9 feet NAVD88 or more. The lowest trail segment is between Pond E6C and the ACFCC with a low point in the trail at elevation of 8 feet NAVD88. Although sections of the trail would likely be closed during large storm and tidal events, substantial damage that would necessitate relocation of the trail is not anticipated.

Because the project has been designed to fully address physical impacts associated with all project components including trail-related levee improvements and bridge crossings, and because physically altered park and recreational facilities would not be required as a result of the project, impacts would be less than significant.

Alternative Eden C Level of Significance: Less than Significant

Alternative Eden D. Under Alternative Eden D, depending on the route chosen, recreation and public access facilities would be provided on existing levees, levees improved for flood risk management purposes, or access roads. Physical impacts associated with construction of recreation and public access facilities would include minor grading and surfacing of levees, the construction of a viewing platform along the existing trail, as well as bridge crossings, with associated physical impacts. Facilities would not initially be designed to be consistent with sea-level rise resiliency policies, but nor would they be exposed to tidal flows for a period of years following initial completion of full tidal restoration of the Bay Ponds. When the Inland Ponds are no longer needed as open water, seasonal or managed ponds and the next stage of tidal restoration is constructed, additional improvements may be needed. It is also possible that, under Alternative Eden D, tidal flows would never be introduced to the Inland Ponds or Southern Ponds, if AMP studies show the need to retain these areas or portions thereof as managed ponds to support migratory and/or resident waterbirds.

The physical impacts associated with implementing trail-related levee improvements and bridge crossings are addressed in the geology/soils, hydrology, water quality, and biology resource sections of this EIS/R. Trail-related levee improvements and bridge crossings represent less than 0.5 percent of project area. According to the respective sections on geology/soils, hydrology, water quality, and biology, the project has been designed to fully address physical impacts associated with all project components.

Some facilities would not be designed to be consistent with sea-level rise policies for resilient design and/or Bay Trail design guidelines. For example, depending on existing levee condition, trails may not meet ABAG Bay Trail design guidelines such as trail width. However, in this alternative, those facilities would be located behind a temporary levee that would protect the trail from being exposed to tidal flows, and therefore the trail is afforded this protection.

¹ Based on best estimates for sea-level rise in the Bay, which is an increase of 0.9 feet for interim future conditions in 2050 (projections range from 0.4 to 2 feet) (National Research Council 2012), coastal stillwater elevations for mean higher high water (MHHW), the 10-year and 100-year events (Appendix D), and estimates for wave run-up.

Under Alternative Eden D, though the routes are the same as Alternative Eden B, there would be somewhat less improvement of the levees supporting those routes. Thus, some of the levees on which the trail would be constructed are in fair to poor condition, and may need additional maintenance over time. This trail would be located inland of a mid-complex levee that may be breached many years subsequent to tidal restoration of the Bay Ponds, as much as a decade or more, to return tidal flows to the Inland Ponds. If that occurs, this levee and the associated trail may need to be further raised and improved.

If Route 1 is selected and if the staged marsh restoration in the Inland Ponds proceeds, that trail would potentially bisect tidal marsh with the potential for marsh and wildlife disruption, as discussed in the Section 3.5, Biological Resources. The placement of the Bay Trail spine on the unimproved levees between Pond E6C and the ACFCC, at a width and elevation inconsistent with various public access policies, may necessitate ongoing maintenance, additional repairs or improvements, or other new features, the construction of which could cause adverse environmental impacts, since the trail would be located adjacent to habitat created for wildlife use, or would need to be relocated elsewhere.

Although Pond E6C levees would be improved to an elevation of 10 feet NAVD88 prior to placement of dredge material in the Inland Ponds, some levees along the Route 1 trail segment between Pond E6C and the ACFCC may be subject to regular coastal inundation at some point in the future when the temporary mid-complex levee is breached or removed. Under interim future conditions, inundation could occur for short periods of time every 2 weeks at the lowest point in the trail, making this section of the trail unusable without future modifications.² Levees improved to 12 feet NAVD88 would rarely be overtopped.

Adaptive management would be used to address trail resiliency prior to the development of substantial adverse effects under future conditions, such as regular trail damage from frequent overtopping, frequent trail closures, or dangerous trail conditions. Adaptive management measures could include widening and raising the trail or relocating the trail along the improved levees in alternate locations of southern Eden Landing. Adverse effects to wildlife and other aspects of the environment would be minimized or avoided, where reasonable and feasible. Substantial, unmitigated adverse effects are not anticipated.

Because adaptive management would be used to address trail resiliency prior to the development of substantial adverse physical impacts under future conditions, and because impacts would be minimized and avoided during implementation of alternative measures (levee raising or trail realignment), impacts would be less than significant.

Alternative Eden D Level of Significance: Less than Significant

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.

Alternative Eden A (No Action). Under Alternative Eden A, no activities would occur under Phase 2 that would result in the temporary closure of adjacent public park and recreation facilities.

Alternative Eden A Level of Significance: No Impact

² Ibid.

Alternative Eden B. Under Alternative Eden B, temporary closure of some of the existing recreation facilities may be necessary due to construction of the restoration project elements and flood risk management and recreation improvements, including reconstruction of some levees that currently provide public access (Alameda Creek Regional Trail, and portions of the north Eden Landing Bay Trail). The construction contractor would be required as part of the construction bid documents to provide alternative routes to access public facilities, wherever safe and feasible. Some areas would be closed at least periodically to the public during construction; however, existing recreation features near the area and in most of Phase 1 would be available. All closures would be posted in advance of construction activities, and closure notice materials would direct users to alternate recreation features. Closures of the Alameda Creek Regional Trail are not anticipated during the initial portion of the construction period when dredge materials are placed in the Bay and Inland Ponds.

In Phase 1 of the SBSP Restoration Project, permit conditions associated with construction related to closure of existing facilities required the following protocols. Similar measures may be employed at southern Eden Landing to address effects related to trail closure.

- Limit trail closures to the immediate work area, and minimum time needed.
- Provide a Public Access Plan, indicating how public access will be accommodated during construction; signage to inform and direct trail users to alternate routes or about areas affected; and possible use of flaggers in the vicinity of construction activity.

Although public notification of all closures would be posted and alternate recreation opportunities would be provided, construction activities related to the project would result in the temporary closure of existing trails and recreation facilities; therefore, impacts are significant and unavoidable.

Alternative Eden B Level of Significance: Significant and Unavoidable

Alternative Eden C. Under Alternative Eden C, temporary closure of some of the existing recreation facilities may be necessary due to construction of the restoration project elements and flood risk management and recreation improvements, including reconstruction of some levees that currently provide public access (Alameda Creek Regional Trail, and portions of the north Eden Landing Bay Trail). The construction contractor would be required as part of the construction bid documents to provide alternative routes to access public facilities, wherever feasible. Some areas would be closed to the public during construction; however, existing recreation features near the area and in most of Phase 1 would be available. All closures would be posted in advance of construction activities, and closure notice materials would direct users to alternate recreation features. Closures of the Alameda Creek Regional Trail are not anticipated during the initial portion of the construction period when dredge materials are placed in the Bay Ponds.

In Phase 1 of the SBSP Restoration Project, permit conditions associated with construction related to closure of existing facilities required the following protocols. Similar measures may be employed at southern Eden Landing to address effects related to trail closure.

- Limit trail closures to the immediate work area, and minimum time needed
- Provide a Public Access Plan, indicating how public access will be accommodated during construction; signage to inform and direct trail users to alternate routes or about areas affected; and possible use of flaggers in the vicinity of construction activity.

Although public notification of all closures posted and alternate recreation opportunities provided, construction activities related to the project would result in the temporary closure of existing trails and recreation facilities; therefore, impacts are significant and unavoidable.

Alternative Eden C Level of Significance: Significant and Unavoidable

Alternative Eden D. Under Alternative Eden D, temporary closure of some of the existing recreation facilities may be necessary due to construction of the restoration project elements and flood risk management and recreation improvements, including reconstruction of some levees that currently provide public access (Alameda Creek Regional Trail, and portions of the north Eden Landing Bay Trail). The construction contractor would be required as part of the construction bid documents to provide alternative routes to access public facilities, wherever feasible. Some areas would be closed to the public during construction; however, existing recreation features near the area and in most of Phase 1 would be available. All closures would be posted in advance of construction activities, and closure notice materials would direct users to alternate recreation features. Closures of the Alameda Creek Regional Trail are not anticipated during the initial portion of the construction period when dredge materials are placed in the Bay and Inland Ponds.

In Phase 1 of the SBSP Restoration Project, permit conditions associated with construction related to closure of existing facilities required the following protocols. Similar measures may be employed at southern Eden Landing to address effects related to trail closure.

- Limit trail closures to the immediate work area, and minimum time needed.
- Provide a Public Access Plan, indicating how public access will be accommodated during construction; signage to inform and direct trail users to alternate routes or about areas affected; and possible use of flaggers in the vicinity of construction activity.

Although public notification of all closures posted and alternate recreation opportunities provided, construction activities related to the project would result in the temporary closure of existing trails and recreation facilities; therefore, impacts are significant and unavoidable.

Alternative Eden D Level of Significance: Significant and Unavoidable

Impact Summary

Phase 2 impacts and levels of significance are summarized in Table 3.6-3. The levels of significance are those remaining after implementation of program-level mitigation measures, project-level design features, the AMP and other Refuge management practices. In some cases, the design of recreation and public access facilities could include completion of the OAC loop or the bridge over the ACFCC or incorporate strategies discussed in Appendix G to reduce impacts to levels that would be less than significant.

For temporary impacts associated with construction activities that include construction-related closures of popular public access and recreation facilities (Impact 3.6-5 for the Action Alternatives) there are no feasible mitigation measures to reduce these impacts to less than significant. The specific construction activity and associated closure would be related to installing the water control structure(s) along the ACFCC levee and the existing public access trail that runs atop it. This trail would be reconstructed and reopened once the water control structure is in place, but that closure would be significant and unavoidable.

	ALT.	ALT. EDEN B		ALT. EDEN C			ALT. EDEN D			
IMPACT	EDEN A	Route 1	Route 2	Route 3	Route 1	Route 2	Route 3	Route 1	Route 2	Route 3
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	LTS	LTS/B	LTS/B	LTS	LTS	LTS	LTS
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		
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		
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			
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			

Notes: Alternative Eden A is the No Action Alternative (No Project Alternative under CEQA).

B = Beneficial (NEPA only)

LTS = Less than Significant

NI = No Impact,

PS = Potentially Significant SU = Significant and Unavoidable

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