

REVISED

BIOLOGICAL RESOURCES TECHNICAL REPORT

POINT EDEN U-HAUL DEVELOPMENT PROJECT

HAYWARD, ALAMEDA COUNTY, CALIFORNIA



Prepared for:

U-HAUL, 815 Marketing Company
8000 San Leandro Street
Oakland, California 94621

Attn: Jerry Owen, President
jerry_owen@uhaul.com

Prepared by:

WRA, Inc.
2169-G East Francisco Boulevard
San Rafael, CA 94901

Attn: Hope Kingma
Hope.Kingma@wra-ca.com

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LIST OF PREPARERS

Justin Semion – Principal-in-Charge
Hope Kingma – Regulatory Permitting Specialist
Nick Wagner – Regulatory Permitting Specialist
Peter Kobylarz – GIS Analyst

DEFINITIONS

Project Site: The 7.86 acres of the parcel of APN 461-85-20-02.

Preserve: The 32 acres of the “Preserve” that includes APN 461-90-1 and 461-61-1.

LIST OF ACRONYMS

BGEPA	Bald and Golden Eagle Protection Act
BIOS	Biogeographic Information and Observation System
CCR	California Code of Regulations
CDFW	California Department of Fish and Wildlife
CESA	California Endangered Species Act
CEQA	California Environmental Quality Act
CFGC	California Fish and Game Code
CFP	California Fully Protected Species
CFR	Code of Federal Regulations
CNDDDB	California Natural Diversity Database
CNPPA	California Native Plant Protection Act
CNPS	California Native Plant Society
County	County of Alameda
Corps	U.S. Army Corps of Engineers
CSRL	California Soils Resources Lab
CWA	Clean Water Act
EFH	Essential Fish Habitat
EPA	U.S. Environmental Protection Agency
ESA	Federal Endangered Species Act
Magnuson-Stevens Act	Magnuson-Stevens Fishery Conservation & Management
MBTA	Migratory Bird Treaty Act
NMFS	National Marine Fisheries Service
NRCS	Natural Resource Conservation Service
NWI	National Wetland Inventory
OHWM	Ordinary High Water Mark
Rank	California Rare Plant Ranks
RWQCB	Regional Water Quality Control Board
SSC	Species of Special Concern
SSI	Special-status Invertebrates
SWRCB	State Water Resource Control Board
TOB	Top of Bank
USDA	U.S. Department of Agriculture
USFWS	U.S. Fish and Wildlife Service
USGS	U.S. Geological Survey
WBWG	Western Bat Working Group
WRA	WRA, Inc.

1.0 INTRODUCTION

This Biological Resources Technical Report evaluates existing biological resources, potential impacts, and proposed mitigation measures for the Point Eden U-Haul Development Project located in Hayward, California (Figures 1 and 2, Appendix A). The proposed project (Project) involves construction of an industrial/commercial development on the approximate 8.3-acre project site.

1.1 Overview and Purpose

This report provides an assessment of biological resources within the Project site area and immediate vicinity. The purpose of the assessment was to develop and gather information on sensitive biological communities and special-status plant and wildlife species to support an evaluation of the Project under the California Environmental Quality Act (CEQA). This report describes the results of the site visit conducted by WRA staff and several previous site visits conducted by Monk & Associates, Inc. staff (M&A), which assessed the Project site area for (1) the presence of sensitive biological communities, special status plant species, and special status wildlife species, (2) the potential for the site to support special-status plant and wildlife species. Based on the results of the site assessment, potential impacts to sensitive biological communities and special status species resulting from the proposed project were evaluated. If the project has the potential to result in significant impacts to these biological resources, measures to avoid, minimize, or mitigate for those significant impacts are described.

A biological resources assessment provides general information on the presence, or potential presence, of sensitive species and habitats. Additional focused studies (such as protocol level species surveys) may be required to support regulatory permit applications or to implement mitigation measures included in this report. This assessment is based on information available at the time of the study, the wetland delineation map for the project site that was confirmed by the U.S. Army Corps of Engineers in 2016 (File No. 2003-279785S), and on-site conditions that were observed on the dates the site was visited. Conclusions are based on currently available information used in combination with the professional judgement of the biologists completing this study.

1.2 Project Description

The proposed project consists of a new industrial building providing approximately 110,231 square feet of warehouse space and 2,785-square-foot of office space, for a total size of approximately 113,730 square feet and 50 feet in height. The proposed project will provide approximately 228 parking spaces, including two spaces dedicated for electric vehicles and two accessible spaces compliant with the Americans with Disabilities Act (ADA). Two bike lockers and two bike stalls would also be provided on-site. Ingress and egress to the site would be from a new driveway on Point Eden Way.

The property, located at 4150 Point Eden Way, is currently vacant with the exception of three dilapidated structures and two salt evaporation ponds associated with a former solar salt production operation. The proposed project includes demolition of existing structures and filling a portion of the evaporation ponds prior to construction of the proposed industrial building. Finally, the proposed project also involves a land swap with the East Bay Regional Park District to relocate the Bay Trail from its current location along the eastern property line to meander along the northern property line and then to turn south to run along the western property line.

To offset the loss of the on-site ponds and other on-site wetlands, the project will preserve the remaining wetlands onsite, and the Applicant proposes to purchase wetland mitigation credits at a 1:1 mitigation ratio from an approved mitigation bank with a Service Area that covers the project site. The San Francisco Bay Wetland Mitigation Bank currently has "Tidal Wetland and Other Waters Creation" credits available. In addition, this conservation bank restored 88 acres of historic baylands to full tidal influence, and enhanced and expanded essential habitat for the salt marsh harvest mouse (*Reithrodontomys raviventris*) and California Ridgway's rail (*Rallus obsoletus obsoletus*) to promote the recovery of these species. Accordingly, the proposed compensatory mitigation will fully mitigate for impacts to waters of the U.S. and State and for impacts to salt marsh harvest mouse habitat.

The Applicant also purchased approximately 32 acres east of the project site, on the south side of Highway 92. This 32-acre area (Preserve) contains six old salt ponds totaling 26 acres. The 32-acre Preserve will be preserved in perpetuity via recordation of a Deed Restriction, or other appropriate legal mechanism, ensuring that the salt ponds are permanently preserved as open space in perpetuity. No conservation easement or conservator endowment would be provided under this scenario. In lieu of purchasing credits from a mitigation bank or implementing other off-site mitigation, the applicant may opt to implement a salt pond restoration plan to restore and enhance the permanently preserved salt ponds within the 32-acre Preserve. The project applicant has indicated that this opportunity could be sought out in the future, but there are no such negotiations currently taking place.

Table 1. Summary of Biological Resources Evaluation

CEQA ASSESSMENT CATEGORY 1 IV. - BIOLOGICAL RESOURCES	BIOLOGICAL RESOURCES CONSIDERED	RELEVANT LAWS AND REGULATIONS	RESPONSIBLE REGULATORY AGENCY	SUMMARY OF FINDINGS & REPORT SECTION 2
Question A. Special-status species	Special-status Plants Special-status Wildlife Designated Critical Habitat	Federal Endangered Species Act (ESA) California Endangered Species Act (CESA) California Native Plant Protection Act (CNPPA) Migratory Bird Treaty Act (MBTA) Bald and Golden Eagle Protection Act (BGEPA)	U.S. Fish and Wildlife Service (USFWS) National Marine Fisheries Service (NMFS) California Department of Fish and Wildlife (CDFW)	Potentially significant impacts were identified and mitigation measures are included that reduce those impacts to a level that is less than significant. See Section 5.2 for more information
Question B. Sensitive natural communities & Riparian habitat	Sensitive Natural Communities Streams, Lakes, & Riparian Habitat	California Fish and Game Code (CFGC) Oak Woodland Conservation Act Porter-Cologne Act Clean Water Act (CWA)	California Department of Fish and Wildlife (CDFW) U.S. Army Corps of Engineers (Corps) U.S. Environmental Protection Agency (EPA) State Water Resources Control Board Regional Water Quality Control Board	Potentially significant impacts were identified and mitigation measures are included that reduce those impacts to a level that is less than significant. See Section 5.1 for more information
Question C. State and federally protected wetlands	Wetlands Unvegetated surface waters	Clean Water Act (CWA) Sections 404/401 Rivers and Harbors Act Section 10 Porter Cologne Act	U.S. Army Corps of Engineers (Corps) U.S. Environmental Protection Agency (EPA) State Water Resources Control Board Regional Water Quality Control Board	Potentially significant impacts were identified and mitigation measures are included that reduce those impacts to a level that is less than significant. See Section 5.1 for more information

¹ CEQA Questions have been summarized here; see Section 6.2 for details.

² As given in this report; see Section 5.0 subheadings

CEQA ASSESSMENT CATEGORY 1 IV. - BIOLOGICAL RESOURCES	BIOLOGICAL RESOURCES CONSIDERED	RELEVANT LAWS AND REGULATIONS	RESPONSIBLE REGULATORY AGENCY	SUMMARY OF FINDINGS & REPORT SECTION 2
Question D. Fish & wildlife corridors	Essential Fish Habitat Wildlife Corridors	California Fish and Game Code Magnusen-Stevens Fishery Conservation & Management Act	California Department of Fish and Wildlife (CDFW) National Marine Fisheries Service (NMFS)	No potentially significant impacts were identified.
Question E. Local policies	Protected Trees Coastal zone resources Other biological protections	Local Tree Ordinance General Plan (e.g., Stream & Wetland Setbacks) Local ordinances	Local and regional agencies California Coastal Commission San Francisco Bay Conservation and Development Commission	Project is consistent with local policies. See Section 5.2 for more information
Question F. Local, state, federal conservation plans	Habitat Conservation Plans Natural Community Conservation Plans	Federal Endangered Species Act (ESA) Natural Community Conservation Planning Act (NCCPA)	U.S. Fish and Wildlife Service (USFWS) California Department of Fish and Wildlife (CDFW)	No potentially significant impacts were identified.

2.0 REGULATORY BACKGROUND

The following sections explain the regulatory context of the biological assessment, including applicable laws and regulations that were applied to the field investigations and analysis of potential project impacts. Table 1 shows the correlation between these regulations and each Biological Resources question in the Environmental Checklist Form (Appendix G) of the CEQA guidelines.

2.1 Federal and State Regulatory Setting

2.1.1 Vegetation and Aquatic Communities

CEQA provides protections for particular vegetation types defined as sensitive by the California Department of Fish and Game (CDFW), and aquatic communities protected by laws and regulations administered by the U.S Army Corps of Engineers (Corps), State Water Resources Control Board (SWRCB), and Regional Water Quality Control Boards (RWQCB). The laws and regulations that provide protection for these resources are summarized below.

Sensitive Natural Communities: Sensitive natural communities include habitats that fulfill special functions or have special values. Natural communities considered sensitive are those identified in local or regional plans, policies, regulations, or by the CDFW. CDFW ranks sensitive communities as "threatened" or "very threatened" (CDFG 2010, CDFW 2018) and keeps records of their occurrences in its California Natural Diversity Database (CNDDDB; CDFW 2018). CNDDDB vegetation alliances are ranked 1 through 5 based on NatureServe's (2018) methodology, with those alliances ranked globally (G) or statewide (S) as 1 through 3 considered sensitive. Impacts to sensitive natural communities identified in local or regional plans, policies, or regulations or those identified by the CDFW or U.S. Fish and Wildlife Service (USFWS) must be considered and evaluated under CEQA (CCR Title 14, Div. 6, Chap. 3, Appendix G). In addition, this general class includes oak woodlands that are protected by local ordinances under the Oak Woodlands Protection Act.

Waters of the United States, Including Wetlands: The United States Army Corps of Engineers (Corps) regulates "Waters of the United States" under Section 404 of the Clean Water Act (CWA). Waters of the United States are defined in the Code of Federal Regulations (CFR) as including the territorial seas, and waters which are currently used, or were used in the past, or may be susceptible to use in interstate or foreign commerce, such as tributaries, lakes and ponds, impoundments of waters of the U.S., and wetlands (33 CFR 328.3). Potential wetland areas, according to the three criteria used to delineate wetlands as defined in the Corps Wetlands Delineation Manual (Environmental Laboratory 1987), are identified by the presence of (1) hydrophytic vegetation, (2) hydric soils, and (3) wetland hydrology. Unvegetated waters including lakes, rivers, and streams may also be subject to Section 404 jurisdiction and are characterized by an ordinary high water mark (OHWM) identified based on field indicators such as the lack of vegetation, sorting of sediments, and other indicators of flowing or standing water. The placement of fill material into Waters of the United States generally requires a permit from the Corps under Section 404 of the CWA.

The Corps also regulates construction in navigable waterways of the U.S. through Section 10 of the Rivers and Harbors Act (RHA) of 1899 (33 USC 403). Section 10 of the RHA requires Corps approval and a permit for excavation or fill, or alteration or modification of the course, location, condition, or capacity of, any port, roadstead, haven, harbor, canal, lake, harbor or refuge, or enclosure within the limits of any

breakwater, or of the channel of any navigable water of the United States. Section 10 requirements apply only to navigable waters themselves, and are not applicable to tributaries, adjacent wetlands, and similar aquatic features not capable of supporting interstate commerce.

Waters of the State, Including Wetlands: The term “Waters of the State” is defined by the Porter-Cologne Act as “any surface water or groundwater, including saline waters, within the boundaries of the state.” The State Water Resources Control Board (SWRCB) and nine Regional Water Quality Control Boards (RWQCB) protect waters within this broad regulatory scope through many different regulatory programs. Waters of the State in the context of a CEQA Biological Resources evaluation include wetlands and other surface waters protected by the *State Wetland Definition and Procedures for Discharges of Dredged or Fill Material to Waters of the State*. The SWRCB and RWQCB issue permits for the discharge of fill material into surface waters through the State Water Quality Certification Program, which fulfills requirements of Section 401 of the CWA and the Porter-Cologne Water Quality Control Act. Projects that require a Clean Water Act permit are also required to obtain a Water Quality Certification. If a project does not require a federal permit, but does involve discharge of dredge or fill material into surface waters of the State, the SWRCB and RWQCB may issue a permit in the form of Waste Discharge Requirements.

Sections 1600-1616 of California Fish and Game Code: Streams and lakes, as habitat for fish and wildlife species, are regulated by CDFW under Sections 1600-1616 of California Fish and Game Code (CFG). Alterations to or work within or adjacent to streambeds or lakes generally require a 1602 Lake and Streambed Alteration Agreement. The term “stream”, which includes creeks and rivers, is defined in the California Code of Regulations (CCR) as “a body of water that flows at least periodically or intermittently through a bed or channel having banks and supports fish or other aquatic life [including] watercourses having a surface or subsurface flow that supports or has supported riparian vegetation” (14 CCR 1.72). The term “stream” can include ephemeral streams, dry washes, watercourses with subsurface flows, canals, aqueducts, irrigation ditches, and other means of water conveyance if they support aquatic life, riparian vegetation, or stream-dependent terrestrial wildlife (CDFG 1994). Riparian vegetation has been defined as “vegetation which occurs in and/or adjacent to a stream and is dependent on, and occurs because of, the stream itself” (CDFG 1994). Removal of riparian vegetation also requires a Section 1602 Lake and Streambed Alteration Agreement from CDFW.

San Francisco Bay and Shoreline: Enacted in 1965, the McAteer-Petris Act (California Government Code Section 66600 *et seq.*) established the San Francisco Bay Conservation and Development Commission (BCDC) as a state agency charged with preparing a plan for the long-term use of the Bay. BCDC has several areas of jurisdiction, including: San Francisco Bay (including sloughs and marshlands lying between mean high tide and five feet above mean sea level) and a shoreline band consisting of all territory located between the shoreline of the Bay and a line 100 feet landward of and parallel with the shoreline (California Government Code 66610). Any person or governmental agency wishing to place fill, to extract materials, or to make any substantial change in use of any water, land or structure within BCDC jurisdiction must secure a permit from BCDC.

2.1.2 Special-status Species

Endangered and Threatened Plants, Fish and Wildlife. Specific species of plants, fish, and wildlife species may be designated as threatened or endangered by the federal Endangered Species Act (ESA), or the California Endangered Species Act (CESA). Specific protections and permitting mechanisms for these species differ under each of these acts, and a species’ designation under one law does not automatically provide protection under the other.

The ESA (16 USC 1531 et seq.) is implemented by the United States Fish and Wildlife Service (USFWS) and the National Marine Fisheries Service (NMFS). The USFWS and NMFS maintain lists of "endangered" and "threatened" plant and animal species (referred to as "listed species"). "Proposed" or "candidate" species are those that are being considered for listing, and are not protected until they are formally listed as threatened or endangered. Under the ESA, authorization must be obtained from the USFWS or NMFS prior to take of any listed species. Take under the ESA is defined as "harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect, or to attempt to engage in any such conduct." Take under the ESA includes direct injury or mortality to individuals, disruptions in normal behavioral patterns resulting from factors such as noise and visual disturbance, and impacts to habitat for listed species. Actions that may result in "take" of an ESA-listed species may obtain a permit under ESA Section 10, or via the interagency consultation described in ESA Section 7. Federally listed plant species are only protected when take occurs on federal land.

The ESA also provides for designation of critical habitat, which are specific geographic areas containing physical or biological features "essential to the conservation of the species". Protections afforded to designated critical habitat apply only to actions that are funded, permitted, or carried out by federal agencies. Critical habitat designations do not affect activities by private landowners if there is no other federal agency involvement.

The CESA (California Fish and Game Code 2050 et seq.) prohibits a "take" of any plant and animal species that the California Fish and Game Commission determines to be an endangered or threatened species in California. CESA regulations include take protection for threatened and endangered plants on private lands, as well as extending this protection to "candidate species" which are proposed for listing as threatened or endangered under CESA. The definition of a "take" under CESA ("hunt, pursue, catch, capture, or kill, or attempt to hunt, pursue, catch, capture, or kill") only applies to direct impact to individuals, and does not extend to habitat impacts or harassment. CDFW may issue an Incidental Take Permit under CESA to authorize take if it is incidental to otherwise lawful activity and if specific criteria are met. Take of these species is also authorized if the geographic area is covered by a Natural Community Conservation Plan (NCCP), as long as the NCCP covers that activity.

Fully Protected Species and Designated Rare Plant Species. This category includes specific plant and wildlife species that are designated in California Fish and Game Code (CFGF) as protected even if not listed under CESA or the ESA. Fully Protected Species includes specific lists of birds, mammals, reptiles, amphibians, and fish designated in CFGF. Fully protected species may not be taken or possessed at any time. No licenses or permits may be issued for take of fully protected species, except for necessary scientific research and conservation purposes. The definition of "take" is the same under the California Fish and Game Code and the CESA. By law, CDFW may not issue an Incidental Take Permit for Fully Protected Species. Under the California Native Plant Protection Act (NPPA), CDFW has listed 64 "rare" or "endangered" plant species, and prevents "take", with few exceptions, of these species. CDFW may authorize take of species protected by the NPPA through the Incidental Take Permit process, or under a NCCP.

Special Protections for Nesting Birds and Bats. The federal Bald and Golden Eagle Protection Act provides relatively broad protections to both of North America's eagle species (bald [*Haliaeetus leucocephalus*] and golden eagle [*Aquila chrysaetos*]) that in some regards are similar to those provided by the ESA. In addition to regulations for special-status species, most native birds in the United States, including non-status species, have baseline legal protections under the Migratory Bird Treaty Act of 1918 and CFGF, i.e., sections 3503, 3503.5 and 3513. Under these laws/codes, the intentional harm or collection of adult birds

as well as the intentional collection or destruction of active nests, eggs, and young is illegal. For bat species, the Western Bat Working Group (WBWG) designates conservation status for species of bats, and those with a high or medium-high priority are typically given special consideration under CEQA.

Essential Fish Habitat. The Magnuson-Stevens Fishery Conservation and Management Act (Magnuson-Stevens Act) provides for conservation and management of fishery resources in the U.S., administered by NMFS. This Act establishes a national program intended to prevent overfishing, rebuild overfished stocks, ensure conservation, and facilitate long-term protection through the establishment of Essential Fish Habitat (EFH). EFH consists of aquatic areas that contain habitat essential to the long-term survival and health of fisheries, which may include the water column, certain bottom types, vegetation (e.g. eelgrass (*Zostera* spp.)), or complex structures such as oyster beds. Any federal agency that authorizes, funds, or undertakes action that may adversely affect EFH is required to consult with NMFS.

Species of Special Concern, Movement Corridors, and Other Special Status Species Under CEQA. To address additional species protections afforded under CEQA, CDFW has developed a list of special species as “a general term that refers to all of the taxa the CNDDDB is interested in tracking, regardless of their legal or protection status.” This list includes lists developed by other organizations, including for example, the Audubon Watch List Species, the Bureau of Land Management Sensitive Species, and USFWS Birds of Special Concern. Plant species on the California Native Plant Society (CNPS) Rare and Endangered Plant Inventory (Inventory) with California Rare Plant Ranks (Rank) of 1, 2, and 3 are also considered special-status plant species and must be considered under CEQA. Rank 4 species are typically only afforded protection under CEQA when such species are particularly unique to the locale (e.g., range limit, low abundance/low frequency, limited habitat) or are otherwise considered locally rare. Additionally, any species listed as sensitive within local plans, policies and ordinances are likewise considered sensitive. Movement and migratory corridors for native wildlife (including aquatic corridors) as well as wildlife nursery sites are given special consideration under CEQA.

2.2 Local Regulatory Setting

2.2.1 City General Plan

On July 1, 2014, the Hayward City Council approved the Hayward 2040 General Plan and certified the Final General Plan Environmental Impact Report. The plan provides a community-based vision for the future of the Hayward community, and identifies a variety of goals, policies, and implementation programs to advance the vision. The Natural Resources Element (Part 3 of the Hayward 2040 General Plan) establishes goals and policies to protect and enhance the natural resources within the Hayward Planning Area. The goals and policies address a variety of topics, including biological resources. Below we present the biological resources goals and policies that are relevant to this project.

GOAL NR-1: Protect, enhance, and restore sensitive biological resources, native habitat, and vegetation communities that support wildlife species so they can be sustained and remain viable.

NR-1.1: Native Wildlife Habitat Protection

The City shall limit or avoid new development that encroaches into important native wildlife habitats; limits the range of listed or protected species; or creates barriers that cut off access to food, water, or shelter of listed or protected species.

NR-1.2: Sensitive Habitat Protection

The City shall protect sensitive biological resources, including State and Federally designated sensitive, rare, threatened, and endangered plant, fish, and wildlife species and their habitats from urban development and incompatible land uses.

NR-1.3: Sensitive Species Identification, Mapping, and Avoidance

The City shall require qualified biologists to identify, map, and make recommendations for avoiding all sensitive biological resources on the project site, including State and Federally sensitive, rare, threatened, and endangered plant, fish, and wildlife species and their habitats using methods and protocols in accordance with the U.S. Fish and Wildlife Service, California Department of Fish and Wildlife, and California Native Plant Society for all development applications proposed within sensitive biological resource areas.

NR-1.4 Shoreline Protection and Enhancement

The City shall coordinate with the Hayward Area Shoreline Planning Agency, Bay Conservation and Development Commission, and California Coastal Commission to conserve, protect, and enhance natural and cultural resources along the San Francisco Bay shoreline by balancing uses that support multiple community needs, such as recreation, tourism, cultural resource preservation, and natural resource protection.

NR-1.5 Large-Scale Natural Area Access

The City shall support efforts to improve access to publicly owned large-scale natural areas located within the Planning Area, including the shoreline, creeks, regional parks, riparian corridors, and hillside open space areas, by allowing them to be open for controlled access to improve public enjoyment and education, while also limiting access to extremely sensitive natural habitat and minimizing human-related environmental impacts.

NR-1.6 Migratory Bird Habitat Protection

The City shall support the efforts of the Hayward Area Shoreline Planning Agency and other agencies to preserve and protect tidal flats and salt ponds with low salinity for migratory waterfowl that depend on these areas.

NR-1.9 Native Plant Species Protection and Promotion

The City shall protect and promote native plant species in natural areas as well as in public landscaping.

3.0 ASSESSMENT METHODOLOGY

3.1 Previous Site Investigations

M&A biologists Mr. Geoff Monk and Ms. Hope Kingma conducted surveys of the project site on January 7, 2015 to record biological resources and to assess the likelihood that habitats on the project site could support listed species. In addition, Mr. Monk and Ms. Kingma conducted surveys of the 32 acres of the “Preserve” on July 1, 2015 and August 29, 2016. The surveys involved systematically searching all habitats on the site and the “Preserve” to record all observed plant and wildlife species.

On January 7, 2015 M&A biologists Mr. Monk and Ms. Kingma conducted a wetland delineation of the project site, using criteria prescribed in the Corps’ 1987 Wetland Delineation Manual (Corps 1987) and

the Corps' Regional Supplement for the Arid West Region (Corps 2008). A draft wetland delineation map was submitted to the Corps along with a Request for a Jurisdictional Determination on March 27, 2015. The Corps conducted the site verification on November 10, 2015 and issued the Preliminary Jurisdictional Determination letter and map on January 27, 2016. The confirmed Preliminary Jurisdictional Determination Map of the Point Eden Project Site that was confirmed and stamped by the Corps is provided as Appendix D.

3.2 Current Site Assessment

On June 19, 2020, WRA biologists visited the project site to map vegetation, aquatic communities, unvegetated land cover types, document plant and wildlife species present, and evaluate habitat on site for the potential to support special status species as defined by the California Environmental Quality Act (CEQA).

Prior to the site visit, WRA biologists reviewed literature resources and performed database searches to assess the potential for sensitive biological communities (e.g., wetlands) and special-status species (e.g., endangered plants), including:

- Soil Survey of Alameda County, California (USDA 1981)
- Redwood Point 7.5-minute quadrangle (USGS 2020)
- Contemporary aerial photographs (Google Earth 2020)
- National Wetlands Inventory (USFWS 2020a)
- California Aquatic Resources Inventory (SFEI 2020)
- California Natural Diversity Database (CNDDDB, CDFW 2020a)
- California Native Plant Society Electronic Inventory (CNPS 2020a)
- Consortium of California Herbaria (CCH 2020)
- USFWS List of Federal Endangered and Threatened Species (USFWS 2020b)
- eBird Online Database (eBird 2020)
- CDFW Publication, California Bird Species of Special Concern in California (Shuford and Gardali 2008)
- CDFW and University of California Press publication California Amphibian and Reptile Species of Special Concern (Thomson et al. 2016)
- A Field Guide to Western Reptiles and Amphibians (Stebbins 2003)
- A Manual of California Vegetation, 2nd Edition (Sawyer et al. 2009)
- A Manual of California Vegetation Online (CNPS 2020b)
- Preliminary Descriptions of the Terrestrial Natural Communities (Holland 1986)

Database searches (i.e., CNDDDB, CNPS) focused on the Redwood Point, Hunters Point, San Leandro, Hayward, Newark, Mountain View, Palo Alto, Woodside, and San Mateo USGS 7.5-minute quadrangles for special-status plants and wildlife.

Following the remote assessment, WRA biologists completed a field review to document: (1) land cover types (e.g., terrestrial communities, aquatic resources), (2) existing conditions and to determine if such provide suitable habitat for any special-status plant or wildlife species, (3) if and what type of aquatic natural communities (e.g., wetlands) are present, and (4) if special-status species are present.

3.3 Vegetation Communities and Other Land Cover Types

During the site visit, WRA evaluated the species composition and area occupied by distinct vegetation communities, aquatic communities, and other land cover types. Mapping of these classifications utilized a combination of aerial imagery and ground surveys. In most instances, communities are characterized and mapped based on distinct shifts in plant assemblage (vegetation), and follow the California Natural Community List (CDFW 2020), Preliminary Descriptions of the Terrestrial Natural Communities of California (Holland 1986), and A Manual of California Vegetation, Online Edition (CNPS 2018b). These vegetation manuals cannot anticipate every component of every potential vegetation assemblage in California, and so in some cases, it is necessary to identify other appropriate vegetative classifications based on best professional judgment of WRA biologists. When undescribed variants are used, it is noted in the description. Vegetation alliances (natural communities) with a CDFW Rank of 1 through 3 (globally critically imperiled (S1/G1), imperiled (S2/G2), or vulnerable (S3/G3), were evaluated as sensitive as part of this evaluation.

3.4 Special-status Species

3.4.1 General Assessment

Potential occurrence of special-status species in the Project site area was evaluated by first determining which special-status species occur in the vicinity of the Project site through a literature and database review as described above. Presence of suitable habitat for special-status species was evaluated during the site visit(s) based on physical and biological conditions of the site, as well as the professional expertise of the investigating biologists. The potential for each special-status species to occur on the project site was then determined according to the following criteria:

- **No Potential.** Habitat on and adjacent to the site is clearly unsuitable for the species requirements (foraging, breeding, cover, substrate, elevation, hydrology, plant community, site history, disturbance regime).
- **Unlikely.** No suitable habitat is present on the site, but suitable habitat may be located adjacent to the site. The species is unlikely to be found on the site but may be found in nearby habitat.
- **Low Potential.** Few of the habitat components meeting the species requirements are present, and/or the majority of habitat on the site is unsuitable or of very poor quality. The species has a low probability of being found on the site.
- **Moderate Potential.** Some of the habitat components meeting the species requirements are present, and/or only some of the habitat on or adjacent to the site is unsuitable. The species has a moderate probability of being found on the site.
- **High Potential.** All of the habitat components meeting the species requirements are present and/or most of the habitat on or adjacent to the site is highly suitable. The species has a high probability of being found on the site.

- Present. Species is observed on the site or has been recorded (i.e. CNDDDB, other reports) on the site in the recent past.

If a more thorough assessment was deemed necessary, a targeted or protocol-level assessment or survey was recommended as a future study. If a special-status species was observed during the site visit or is assumed to be present, its presence was discussed below in Section 5.2. If designated critical habitat is present for a species, the extent of critical habitat present and an evaluation of critical habitat elements is provided as part of the species discussions below.

3.4.2 Special-status Wildlife

Mr. John Krause, CDFW's manager of the adjacent Eden Landing Ecological Reserve, is familiar with the habitat on the Project site and "Preserve". Mr. Krause provided personal observations of special-status wildlife species to Ms. Kingma and this information was taken into consideration in this analysis.

3.5 Wildlife Corridors and Native Wildlife Nursery Sites

To account for potential impacts to wildlife movement/migratory corridors, biologists reviewed maps from the California Essential Connectivity Project (CalTrans 2010), and habitat connectivity data available through the CDFW Biogeographic Information and Observation System (BIOS) (CDFW 2018). Additionally, aerial imagery (Google 2020) for the local area was referenced to assess if local core habitat areas were present within, or connected to the project site. This assessment was refined based on observations of on-site physical and/or biological conditions, including topographic and vegetative factors that can facilitate wildlife movement, as well as on-site and off-site barriers to connectivity.

The potential presence of native wildlife nursery sites is evaluated as part of the site visit and discussion of individual wildlife species below. Examples of native wildlife nursery sites include nesting sites for native bird species (particularly colonial nesting sites), and colonial roosting sites for other species (such as for monarch butterfly).

4.0 ECOLOGICAL SETTING

The 8.3-acre project site is located at 4150 Point Eden Way in the City of Hayward, Alameda County, California (Figures 1 and 2). The project site is situated just south of Highway 92 and directly north of the CDFW Eden Landing Ecological Reserve. The San Francisco Bay Trail begins at the end of Point Eden Way directly adjacent to the entrance to the project site. This trail runs along the eastern border of the project site and continues along the Eden Landing Ecological Reserve. Point Eden Way to the east of the project site provides access to multiple office buildings including many technical and pharmaceutical companies. To the north of the project site is Highway 92 and the East Bay Regional Park District (EBRPD) Hayward Marsh Regional Shoreline. To the north of Highway 92 and northwest of the project site is the Hayward Shoreline Interpretive Center. To the west of the project site is an approximately 5 acre restored salt pond known as the "Caltrans Pond" that is also part of the CDFW's Eden Landing Ecological Reserve. Further to the west beyond the "Caltrans Pond", there are six salt ponds that occur in the approximately 32 acre "Preserve" (Figure 3).

4.1 Topography and Hydrology

While the site is relatively flat, water appears to drain in the southwest direction towards the drainage ditches and salt ponds onsite, and towards the adjacent salt ponds and San Francisco Bay further to the west and south. The project site is approximately 6-8+ feet in elevation above sea level (abs).

Numerous small depressions occur throughout the project site as a result of remediation grading. These undulations and slight topographic depressions, especially in the parking lot areas, are a byproduct of when dirt piles were created and removed from the site and from all construction related to remediation of the soils. As such, there is depressional topography that now collects vertical precipitation that does not readily drain owing to the underlying compacted soils. Rather, water evaporated from these minor depressions, as indicated by the alkaline/salt crusts and colonization by salt tolerant, wetland plants.

There are two historic finishing salt ponds along the southwestern boundary of the project site. These ponds were originally constructed as part of the salt processing plant. The bottom of the larger pond (the western pond) is approximately 3-4 feet in elevation abs, and the bottom of the smaller pond (the eastern pond) is approximately 5-6 feet in elevation abs. These salt ponds are several feet higher in elevation than the adjacent salt ponds associated with the Eden Landing Ecological Reserve. Both depressions are hydrologically isolated from adjacent salt ponds by elevation and by levees/berms that were constructed at the turn of the last century. Historically, these higher elevation salt ponds were infrequently flooded with Bay water, and hypersaline brines and salt were concentrated in the ponds via evaporation for salt production. The water control structures are in a dilapidated condition, and no longer appear to be operational. Currently these salt ponds only receive water from vertical precipitation and surface runoff from the former working surfaces of the salt plant operation area. They are not subject to tidal influence.

There are 6 former salt ponds in the 32-acre "Preserve" as shown in Figure 3. The former use of these salt ponds as evaporation ponds for salt production is clearly evident today by the remaining salt crusts in the impounded areas. Old water control structures that used to convey water into these ponds are in poor and dilapidated condition and do not function today. Today, each pond supports varying depths of standing water, and/or is dry over the course of the year.

4.2 Climate and Hydrology

The project site is located in the bayside region of the City of Hayward. The average monthly maximum temperature in the area is 67 degrees Fahrenheit, while the average monthly minimum temperature is 51 degrees Fahrenheit. Predominantly, precipitation falls as rainfall between November and March with an annual average precipitation of 18 inches.

The local watershed is Ward Creek-Frontal San Francisco Bay Estuaries (HUC 12: 180500040804) and the regional watershed is San Francisco Bay (HUC 8: 18050004). The project site is located in the lower portion of the Ward Creek watershed, but does not contribute flow to Ward Creek. There is/are no blue-line streams within the project site (USGS 2015). The project site does not include mapped resources in the National Wetlands Inventory (NWI; USFWS 2018a), and California Aquatic Resources Inventory (CARI; SFEI 2018), however the salt ponds adjacent to the project site are included as mapped resources. Detailed descriptions of aquatic resources are provided in Section 5.1 below.

4.3 Land-use

The project site is part of the former Oliver Brothers Salt Company plant (Origer 2016). The majority of the project site was used for salt works processing and equipment staging. The salt ponds adjacent to the project site provided product for the salt plant. There is one remnant building and two smaller structures on the project site, which were part of the Oliver Salt Company located in the northeast corner of the project site (Figure 2). This main building was constructed many decades ago, and is currently in a state of disrepair. The salt processing plant has not been in operation for approximately 30 years and its closure left all the adjacent parking and storage areas contaminated. The RWQCB required a toxics cleanup and remediation program following the closure, which was completed in 2012.

There is an old “wash station” on the site where there are remnant low profile wooden platform boards and hoses. This “wash station” was created and used to clean remediation equipment and vehicles before leaving the project site so as to keep toxics fully contained on the project site. The remaining portions of the site are characterized by ruderal (weedy) vegetation, a few landscaping plantings, scattered fill piles and numerous topographic low areas that remain as a result of toxic soil removal and replacement measures conducted at this site for the last 15+ years to remove contaminated soils.

5.0 ASSESSMENT RESULTS

5.1 Vegetation Communities and Other Land Cover

WRA observed four land cover types within the project site: developed, ruderal habitats dominated by upland vegetation, wetlands, and historic salt ponds (Figure 4). Remedial action measures that have been taking place for years have greatly altered the project site’s plant communities. Much of the project site has undergone manipulation in one form or another, resulting in limited natural plant communities found on the project site.

Table 2. Land Cover Types on the Project Site

COMMUNITY/LAND COVERS	SENSITIVE STATUS	RARITY RANKING	ACRES WITHIN PROJECT SITE
<i>Terrestrial Community/Land Cover</i>			
Developed	Non-sensitive	None	1.45
Ruderal Uplands	Non-sensitive	None	5.17
<i>Aquatic Resources</i>			
Seasonal Wetland	Sensitive	S3G4; Corps-, RWQCB-jurisdictional	0.28
Former Salt Ponds/Salt Marsh	Sensitive	S3G4; Corps-, RWQCB-jurisdictional	1.41

5.1.1 Terrestrial Land Cover

Developed Area (no vegetation alliance). CDFW Rank: None. A portion of the subject parcel is characterized by the abandoned and dilapidated Oliver Salt Company plant, including one remnant building and two smaller structures located in the northeast corner of the project site which was part of the historic Oliver Salt Company, including gravel parking areas and former dirt access roads. This also includes the portion of the Bay Trail along the eastern edge of the parcel that will be relocated to the western perimeter of the Project Site.



Photo 1. Photograph of typical developed area on-site.

Ruderal Uplands (no vegetation alliance). CDFW Rank: None. Ruderal (weedy) communities are assemblages of plants that thrive in areas that have been disturbed by human activity. Dominant upland plant species on the project site include non-native species such as soft chess (*Bromus hordeaceus*), ripgut grass (*Bromus diandrus*), slender wild oat (*Avena barbata*), broad-leaf filaree (*Erodium botrys*), white-stem filaree (*Erodium moschatum*), wall barley (*Hordeum murinum leporinum*), bitter lettuce (*Lactuca virosa*), dove's foot geranium (*Geranium molle*), cut-leaf geranium (*Geranium dissectum*), California burclover (*Medicago polymorpha*), stinkwort (*Dittrichia graveolens*), short-podded mustard (*Hirschfeldia incana*), Italian thistle (*Carduus pycnocephalus pycnocephalus*), bristly ox-tongue (*Helminthotheca echioides*), common vetch (*Vicia sativa*), white sweet clover (*Melilotus albus*), and bindweed (*Convolvulus arvensis*). These are just a few of the non-native weedy species found on the project site. The uplands also support a few scattered native species, including common spikeweed (*Centromadia pungens pungens*) and coyote brush (*Baccharis pilularis ssp. consanguinea*).

5.1.2 Aquatic Resources

Seasonal Wetlands. (*Salicornia/Sarcocornia pacifica* and *Salicornia depressa* Herbaceous Alliance). CDFW Rank: S3G4, Sensitive. Seasonal wetlands include areas which hold water for part of the year, typically during the rainy season (between October and March), which are dominated by hydrophytic vegetative cover, such as hyssop loosestrife (*Lythrum hyssopifolia*), cut-leaf plantain (*Plantago coronopus*), and Mediterranean barley (*Hordeum marinum ssp. gussoneanum*), rabbit's-foot grass (*Polypogon monspeliensis*), birdfoot trefoil (*Lotus corniculatus*), and plants that withstand higher salinities including perennial pickleweed (*Salicornia pacifica*), annual pickleweed (*Salicornia depressa*), tumbleweed (*Salsola tragus*), slender-leaved iceplant (*Mesembryanthemum nodiflorum*), and brass-buttons (*Cotula coronopifolia*).

Salt Ponds/Salt Marsh (*Sarcocornia pacifica* and *Salicornia depressa* Herbaceous Alliance). CDFW Rank: S3G4, Sensitive.

There are two man-made, historic salt ponds and associated ditches at the southwestern edge of the project site that are associated with the historic salt production factory that operated on the project site for over 50 years, as is evident from historical aerial photographs available on Google Earth. These features were abandoned when the salt production plant ceased operations in 1981. The historic salt ponds and associated ditches on the site are dominated by perennial pickleweed, Mediterranean barely, cut-leaf plantain, fathen (*Atriplex prostrata*), alkali heath (*Frankenia salina*), and tall flatsedge (*Cyperus eragrostis*). These areas are not tidally influenced and occur in drainage ditches and diked basins within the project site that are seasonally ponded or saturated.



Photo 2. Photograph of diked salt ponds on the project site.

The 6 man-made salt ponds within the 32-acre “Preserve” support a fringe of perennial pickleweed around the outer perimeter of the ponds. Other species observed around the edges of the historic salt ponds included annual pickleweed, slender-leaved iceplant, brass-buttons, alkali heath, Mediterranean barely, saltgrass (*Distichlis spicata*), and fleshy jaumea (*Jaumea carnosa*).



Photo 3. Photograph of salt ponds in the Preserve.

The majority of the salt ponds are characterized by salt crusts and open water that support a somewhat turbid organic “soup” with various concentrations of algae, blue-green bacteria, halo bacteria, and purple sulfur-reducing bacteria. The proportions of these organisms varies with the salinity in each of the salt ponds, which creates different pigments in the ponds, ranging from green, yellowish-green, and reddish hues, to purplish hues (Goals Project 2000). The mosaic of salt pond hues is evident in Figure 3.

5.2 Special-status Species

5.2.1 Special-status Plants

No special-status plants have been mapped on or adjacent the project site. Based upon a review of the resource databases listed in Section 4.0, 11 special-status plant species have been documented in the vicinity of the project site. Most of the plant species documented from the greater vicinity are unlikely or have no potential to occur for one or more of the following:

- Hydrologic conditions (e.g., tidal, riverine) necessary to support the special-status plant species are not present on the Project site;

- Edaphic (soil) conditions (e.g., volcanic tuff, serpentine) necessary to support the special-status plant species are not present in the Study Area;
- Topographic conditions (e.g., north-facing slope, montane) necessary to support the special-status plant species are not present on the Project site;
- Unique pH conditions (e.g., alkali scalds, acidic bogs) necessary to support the special-status plant species are not present on the Project site;
- Associated natural communities (e.g., valley and foothill grasslands) necessary to support the special-status plant species are not present on the Project site;
- The Project site is geographically isolated (e.g. below elevation, coastal environ) from the documented range of the special-status plant species;
- The historical landscape and/or habitat(s) of the Project site were not suitable habitat prior to land/type conversion (e.g., reclaimed shoreline) to support the special-status plant species;
- Land use history and contemporary management (e.g., grading, intensive grazing) has degraded the localized habitat necessary to support the special-status plant species.

Additionally, owing to the excessively disturbed and unnatural conditions found at the development site and the extremely high salt concentrations in the salt ponds, special-status plants would not likely occur on the project site. No special-status plants have been found during the site surveys conducted by M&A or WTA. Consequently, the proposed project will not result in impacts to special-status plants species.

5.2.2 Special-status Wildlife

Of the 26 special-status wildlife species documented in the vicinity of the Project site, most are excluded from the Project site based on a lack of habitat features. Features not found within the Project site that are required to support special-status wildlife species include:

- Perennial aquatic habitat (e.g. streams, rivers or ponds)
- Tidal Marsh areas
- Serpentine soils to support host plants
- Sandy beaches or alkaline flats
- Caves, mine shafts, or abandoned buildings



Photo 4. Salt marsh harvest mouse

The absence of such habitat features eliminates components critical to the survival or movement of most special-status species found in the vicinity. For instance, California red-legged frog (*Rana draytonii*) is known to occur in the vicinity; however, suitable aquatic habitat and movement corridors connecting the Project site to source populations are absent, precluding this species from existing on the Project site. Given the Project site's relative proximity to sensitive habitats on the San Francisco Bay, many species documented nearby are additionally obligates to marine or tidal marsh habitats which are not present on or in the immediate vicinity of the Project site. Thirteen (13) species are known from habitats adjacent to

and near the project site. These species are discussed below; however, many of these species are unlikely to occur on the project site.

Western snowy plover (*Charadrius alexandrinus nivosus*).
Federally Threatened, CDFW Species of Special Concern.
USFWS Bird of Conservation Concern. Unlikely.

The Pacific coast breeding population of the western snowy plover currently extends from Washington to Baja California, Mexico (USFWS 2007). Western snowy plovers breed primarily above the high tide line on coastal beaches, sand spits, dune-backed beaches, sparsely vegetated dunes, beaches at creek and river mouths, and salt pans at lagoons and estuaries. Less common nesting habitats include bluff-backed beaches, dredged material disposal sites, salt pond levees, dry salt ponds, and river bars (USFWS 2007). Nests typically occur in flat, open areas with sandy or saline substrates where vegetation and driftwood are usually sparse or absent. Nests consist of a shallow scrape or depression, sometimes lined with beach debris (e.g., small pebbles, shell fragments, plant debris, and mud chips (USFWS 2007). Nesting season extends from early March through late September. Snowy plovers winter mainly in coastal areas from southern Washington to Central America. In winter, snowy plovers are found on many of the beaches used for nesting as well as on beaches where they do not nest, in man-made salt ponds, and on estuarine sand and mud flats (USFWS 2007).



Photo 5. Western snowy plover

Western snowy plover (WSP), a subspecies of the snowy plover (*C. alexandrinus*), breeds on the Pacific coast from southern Washington to southern Baja California and inland as far as Kansas. On the Pacific coast it is resident from San Francisco Bay south, and migratory north of the Bay. WSP utilizes expanses of dry, flat sand that are above the levels of typical high tides. It also utilizes the shores and levees of salt ponds, alkaline lakes and salt flats in landlocked portions of its range (Bent 1929). Breeding habitat consists of open, bare-ground and islands that are predator free. WSP have high breeding-site fidelity, but some movement occurs between sites within and between years (Stenzel et al. 1994, Page et al. 1995, Powell et al. 1995). In addition, there is site fidelity associated with wintering areas (Page et al. 1995).

The closest CNDDDB record for western snowy plover is located south of the project site in the restored salt ponds within the CDFW's Eden Landing Ecological Reserve (CNDDDB Occurrence No. 136). Nesting has been recorded in numerous ponds, and the associated marsh habitats from 2012 to 2017. There is an additional record for western snowy plover located northwest of the project site on a man-made island within the restored tidal salt marsh within the EBRPD Hayward Regional Shoreline (CNDDDB Occurrence No. 122). This record location is on the other side of Highway 92 from the project site.

The federally listed western snowy plover is not expected to forage or nest on the project site. Mr. John Krause, CDFW's manager of the Eden Landing Ecological Reserve, knows where western snowy plovers nest in the area. He also knows our project site and the Preserve as they are immediately next to the Eden Landing Ecological Reserve. Mr. Krause states that the project site and the Preserve are unlikely to be used by western snowy plovers as they are not open enough for western snowy plovers to nest at these locations. Hence, the proposed project will not directly impact the federally listed western snowy plover; however, this species could nest in the restored ponds within the Eden Landing Ecological Reserve next

to the project site and Preserve, and are therefore within the zone of influence for the project's construction and operations.

California least tern (*Sterna antillarum brownii*). Federal Endangered, State Endangered, California Fully Protected Species. Unlikely.

The California least tern is a summer resident in California, with a current breeding distribution from the San Francisco Bay Area south to Baja California. This distribution is widely fragmented as a result of human activities. The California subspecies winters on the southern coast of Mexico and the Gulf of California. The nesting season lasts from mid-April through August, with peak activity between June and July. Least terns typically nest in loose colonies on flat sand-shell beaches, mud or gravel flats, and man-made habitats including airports, landfills, and dredge-fill sites, relatively free of plant growth (Fancher 1992). Typical colony population size is 25 pairs (USFWS 2006). Islands or isolated beaches are preferred, and nest sites are generally located in the proximity of suitable foraging habitat including coastal lagoons, estuaries, or rivers. Colony size may be linked to habitat availability, as nests may be located between 10 to 300 feet apart (USFWS 1985). Least terns forage in inshore waters for small fishes.

The closest CNDDDB record for this species is located northwest of the project site on a sandy island within the EBRPD Hayward Regional Shoreline (CNDDDB Occurrence No. 82). There is another record southwest of the project site in the salt ponds of CDFW Eden Landing Ecological Reserve (CNDDDB Occurrence No. 70).

The federally listed California least tern is not expected to forage or nest on the project site. Mr. John Krause, CDFW's manager of the Eden Landing Ecological Reserve, knows this species well and where it nests in the area. He also knows the project site and the Preserve as they are immediately next to the Eden Landing Ecological Reserve. Mr. Krause states that the project site and the Preserve are unlikely to be used by the least tern as they are not open enough for the least terns to nest at these locations. Hence, the proposed project will not directly impact the federally listed California least tern; however, this species could nest in restored salt ponds within the Eden Landing Ecological Reserve that is located next to the project site, and are therefore in the project's zone of influence for construction and operations.

California Ridgway's rail (*Rallus obsoletus obsoletus*). Federal Endangered, State Endangered, CDFW Fully Protected Species. Unlikely.

The California Ridgway's rail (CRR), formerly known as California clapper rail (*R. longirostris obsoletus*), is the resident Ridgway's/clapper rail subspecies of northern and central California. Although more widespread in the past, it is currently restricted to the San Francisco Bay estuary. The CRR occurs only within salt and brackish marshes. According to Harvey (1988), Shuford (1993) and Eddleman and Conway (1998), important CRR habitat components are: 1) well-developed tidal sloughs and secondary channels; 2) beds of cordgrass (*Spartina* spp.) in the lower marsh zone; 3) dense salt marsh vegetation for cover, nest sites, and brooding areas; 4) intertidal mudflats, gradually sloping banks of tidal channels, and cordgrass beds for foraging; 5) abundant invertebrate food resources; and 6) transitional vegetation at the marsh edge to serve as a refuge during high tides. In south and central San Francisco Bay and along the perimeter of San Pablo Bay, CRR typically inhabits salt marshes dominated by pickleweed and cordgrass. Brackish marshes supporting CRR occur along major sloughs and rivers of San Pablo Bay and along tidal sloughs of Suisun Marsh. Nesting occurs from March through July, with peak activity in late April to late May (DeGroot 1927, Harvey 1980, Harvey 1988). CRR nests, constructed of wetland vegetation and platform-shaped, are placed near the ground in clumps of dense vegetation, usually in the lower marsh zone near small tidal channels (DeGroot 1927, Evens and Page 1983, Harvey 1988).

The closest known record for California Ridgway's rail is located northwest of the project site in the tidal pickleweed marsh habitats associated with the EBRPD Hayward Regional Shoreline (CNDDDB Occurrence No. 78) north of Highway 92 (the project site is south of Highway 92). There is an additional record for California Ridgway's rail further northwest along the Hayward Shoreline of the San Francisco Bay, between Hayward Landing and Johnson Landing (CNDDDB Occurrence No. 77). Additionally, there is a third record for California Ridgway's rail south of the project site in tidal habitats in the CDFW Eden Landing Ecological Reserve (CNDDDB Occurrence No. 9).

The project site does not support tidal sloughs or dense tidal marsh habitat typically associated with California Ridgway's rail foraging and nesting habitat. Potential habitat for California Ridgway's rail is present within 700 feet of the Project Site across Highway 92 in tidal marsh habitats at Hayward Landing and Johnson Landing. Highway 92 in this area is a six lane highway approaching the San Mateo Bridge, one of the busiest bridge approaches in the Bay Area. Based on this context, potential habitat is not considered present within the Project Site or within the zone of influence for project construction and operations.

California black rail (*Laterallus jamaicensis coturniculus*). State Threatened, CDFW Fully Protected Species, USFWS Bird of Conservation Concern. Unlikely.

The California black rail is the resident black rail subspecies that occurs in California coastal salt and brackish marshes from Bodega Bay to Morro Bay, with additional populations known from freshwater marshes near or in the northern Sierra Nevada foothills (Eddleman et al. 1994, Richmond et al. 2008). According to a published analysis by Spautz et al. (2005), important habitat elements for this species within the San Francisco Bay estuary are: 1) emergent marsh dominated by pickleweed (name), marsh gumplant (*Grindelia stricta*), bulrush (*Scirpus maritimus*), rushes (*Juncus* spp.), and/or cattails (*Typha* spp.); 2) high density of vegetation below four inches in height; 3) high marsh elevation with transitional upland vegetation; 4) large total area of contiguous marsh; 5) proximity to a major water source; and, 6) isolation from disturbance. This species feeds primarily on invertebrates. Black rails are extremely secretive and very difficult to glimpse or flush; identification typically relies on voice. Nests are placed on the ground in dense wetland vegetation.

The project site does not support tidal marsh habitat typically associated with California black rail habitat. The closest known record for California black rail is located northwest of the project site in the tidal marsh habitats (CNDDDB Occurrence No. 219) north of Highway 92 (the project site is south of Highway 92). Additionally, there is another record for California black rail south of the project site in tidal habitats in the CDFW Eden Landing Ecological Reserve along Alameda Creek, where black rails were detected from 2012 to 2016 (CNDDDB Occurrence No. 306). Neither of these areas is within the anticipated zone of influence for project construction and operations.

Black skimmer (*Rynchops niger*). CDFW Species of Special Concern, USFWS Bird of Conservation Concern. Unlikely.

Black skimmer, a relative of the gulls and terns, is unique for having a lower mandible longer than the upper. It feeds on small fish by skimming its lower mandible along the surface of calm waters, principally at night. Black skimmer is resident in California, occurring primarily in the southern portion of the state; a small population exists in South San Francisco Bay. This species nests colonially on undisturbed earthen islands or levees, often with terns (Molina 2008).

The closest CNDDDB record for black skimmer is located northwest of the project site (CNDDDB Occurrence No. 3). This species was observed in 1994 nesting on an upland island in a brackish marsh, east of Johnson

Landing. This record location is on the other side of Highway 92 from the project site. This species is not known to nest on the berms or levees associated with project site or the 32-acre Preserve, or within the CDFW's Eden Landing Ecological Reserve, but it may nest near the project site.

Alameda song sparrow (*Melospiza melodia pusillula*). CDFW Species of Special Concern, USFWS Bird of Conservation Concern. Low Potential.

Alameda song sparrow, a subspecies of the common and widespread song sparrow (*M. melodia*), is an endemic resident of marsh habitat along the fringes of south and east San Francisco Bay. This subspecies prefers tidally influenced marsh, and taller shrubs such as gumplant are required for breeding to avoid nest flooding during high tides (Chan and Spautz 2008).

The project site does not support tidal marsh habitat typically associated with Alameda song sparrow habitat; however, it may nest in the shrubs onsite, or near the project site in the surrounding marshes. There are several recent CNDDDB records within 1.5 miles of the project site (CNDDDB Occurrences 4, 5, and 8).

Burrowing owl (*Athene cunicularia*). CDFW Species of Special Concern. Low Potential. The burrowing owl occurs as a year-round resident and winter visitor in much of California's lowlands, inhabiting open areas with sparse or non-existent tree or shrub canopies. Typical habitat is annual or perennial grassland, although human-modified areas such as agricultural lands and airports are also used (Poulin et al. 1993). This species is dependent on burrowing mammals to provide the burrows that are characteristically used for shelter and nesting, and in northern California is typically found in close association with California ground squirrels (*Spermophilus beecheyi*). Manmade substrates such as pipes or debris piles may also be occupied in place of burrows. Prey consists of insects and small vertebrates. Breeding typically takes place from March to July.

The nearest documented occurrence for burrowing owl is approximately 2 miles southeast of the project site from 2006 (CNDDDB Occurrence No. 946). The project site contains very few suitable burrows or burrow surrogates for this species; however, burrowing owls may use the levees surrounding the project site for wintering and nesting habitat.

San Francisco (saltmarsh) common yellowthroat (*Geothlypis trichas sinuosa*), CDFW Species of Special Concern. Unlikely. This subspecies of the common yellowthroat is found in freshwater marshes, coastal swales, riparian thickets, brackish marshes, and saltwater marshes. Their breeding range extends from Tomales Bay in the north, Carquinez Strait to the east, and Santa Cruz County to the south. This species requires thick, continuous cover such as tall grasses, tule patches, or riparian vegetation down to the water surface for foraging and prefers willows for nesting (Shuford and Gardali 2008).

The nearest documented occurrence for saltmarsh common yellowthroat is approximately 2.5 miles southeast of the project site and is from 1976 (CNDDDB Occurrence No. 7). The project site does not contain suitable nesting habitat. The salt marshes surrounding the project site may support suitable nesting habitat for saltmarsh common yellowthroat.

White-tailed kite (*Elanus leucurus*). CDFW Fully Protected Species. Low Potential. The white-tailed kite is resident in open to semi-open habitats throughout the lower elevations of California, including grasslands, savannahs, woodlands, agricultural areas and wetlands. Vegetative structure and prey availability seem to be more important habitat elements than associations with specific plants or vegetative communities (Dunk 1995). Nests are constructed mostly of twigs and placed in trees, often at habitat edges. Nest trees

are highly variable in size, structure, and immediate surroundings, ranging from shrubs to trees greater than 150 feet tall (Dunk 1995). This species preys upon a variety of small mammals, as well as other vertebrates and invertebrates.

The nearest documented occurrence for white-tailed kite is approximately 4.4 miles southeast of the project site and is from 1971 (CNDDDB Occurrence No. 4). The shrubs in the eastern portion of the project site may provide marginal nesting habitat for this species. The project site and surrounding salt marshes offer suitable foraging habitat.

Salt marsh harvest mouse (*Reithrodontomys raviventris*)(SMHM). Federal Endangered Species, State Endangered Species, CDFW Fully Protected Species. High Potential.

The SMHM is highly adapted to its marsh habitat (Fisler 1965), but reliance on the marshes of the San Francisco Estuary has made this species vulnerable as over 90% of tidal marshes have been lost since the mid-1800's (Williams and Faber 2001). Amplifying the impact of this spatial constraint is the increasing fragmentation of remaining SMHM habitat (Fisler 1961). These factors led the United States Fish and Wildlife Service to list the SMHM as endangered (FR 1970), followed soon thereafter by the State of California (CCR 1971). The species is afforded further protection by the state of California as a Fully Protected Species. Since being listed, SMHM management and recovery has been addressed in two Recovery Plans (USFWS 1984, 2013) and at least nine other restoration and management plans for the San Francisco Estuary, most of which emphasize habitat protection, enhancement, acquisition, and restoration as the primary strategies for SMHM recovery.

The SMHM is a relatively small rodent found only in and adjacent to suitable salt- and brackish-marsh habitat in the greater San Francisco Bay, San Pablo Bay, and Suisun Bay areas. This species has been divided into two subspecies: the northern SMHM (*Reithrodontomys raviventris halicoetes*), which lives in the brackish marshes of the San Pablo and Suisun Bays, and the southern SMHM (*Reithrodontomys raviventris raviventris*), which is found in the marshes of San Francisco Bay and several locations north of the Golden Gate. The Project site occurs within the range of the southern subspecies, which generally persists in smaller and more isolated populations than the northern subspecies. Most of the marshes of south San Francisco Bay in particular are narrow, strip-like marshes and thus support fewer harvest mice than those in the northern portions of the species' range (USFWS 2010, 2013).

Habitat associated with SMHM has been described as pickleweed- (*Salicornia*-) dominated marsh (Fisler 1965), though more recent studies have shown that SMHM is supported equally in pickleweed-dominated and mixed-vegetation (including native and non-native salt- and brackish-marsh species) (Sustaita et al. 2005, Sustaita et al. 2011). Known SMHM habitat in the Suisun Bay marshes is often composed of mixed salt- and brackish-marsh vegetation such as rushes, alkali heath (*Frankenia salina*), spearscale (*Atriplex triangularis*), and saltgrass (*Distichlis spicata*), with pickleweed as a relatively minor component. Furthermore, Shellhammer et al. (2010) found that SMHM inhabit brackish marshes with a developed thatch layer of vegetation, including bulrush (*Schoenoplectus* spp.), pepperweed (*Lepidium latifolium*)/bulrush, and pepperweed/spearscale marshes.

The SMHM does not burrow, and thus it is dependent on year-round vegetative cover. As such, the plant species composition is less important than the quality of cover from predators and the food sources provided by the vegetation. The SMHM prefers deep, dense vegetative cover greater than 11.8 inches (30 centimeters) in height (USFWS 1984), though there are indicators that shorter stands of vegetation (5.9 inches [15 centimeters] is the shortest commonly used) may also support an abundance of this

species (Fisler 1965; Shellhammer et al. 1982). In tidal areas, the suitability of cover and vegetation depth is also dependent on the degree to which tidal vegetation is submerged during high tide events.

Another key habitat requirement for this species is upland or tidal refuge habitat, which is used to escape high tides and storm events that flood portions of its habitat. SMHM is a good swimmer when necessary, but it feeds, nests, and seeks cover outside the water and thus requires refuge from incoming tides and floods. Tall stands of pickleweed that remain unsubmerged during high tides or floods, as well as gumplant (*Grindelia*), bulrush, natural and artificial dikes and levees, floating debris, and grasslands adjacent to the marsh edge are all potential sources of refuge. Without at least one of these forms of refuge available, the SMHM cannot persist in a wetland.

Habitat for SMHM must also provide suitable food sources, such as seeds, grass, and pickleweed. The SMHM tolerates food and water with high salinities, which may give this species a competitive advantage over other small mammal species, though high salinity is not a strict habitat requirement. The presence of grassland habitat adjacent to the marsh is not a strict requirement either, though the SMHM's seasonal use of available upland grasslands (sometimes over 300 feet from the marsh edge) suggests that they opportunistically forage and seek cover within grasslands (USFWS 2010).

The closest known CNDDDB record of salt marsh harvest mice is located just north of the project site in the EBRPD Salt Marsh Harvest Mouse Preserve in the Hayward Marsh Regional Shoreline, located north of Highway 92 (CNDDDB Occurrence No. 54) (the project site is south of Highway 92). That preserve is vegetated primarily with pickleweed. Salt marsh harvest mice are also known from pickleweed habitats south of the project site along the Mt Eden Creek channel within the CDFW's Eden Landing Ecological Reserve (CNDDDB Occurrences No. 85 and 86) but are not known to occur adjacent to the project site. They are also known further to the south of CDFW Eden Landing Ecological Reserve in the tidal salt marshes (CNDDDB Occurrence Numbers 77, 87, 89 and 90).

Given the number of records for salt marsh harvest mice in the vicinity of the project site, and the presence of marginal pickleweed habitat in the two finishing salt ponds on the project site, salt marsh harvest mice could potentially be present within the Project Site.

Salt-marsh wandering shrew (*Sorex vagrans halicoetes*), CDFW Species of Special Concern. Unlikely.

This species is found in medium high salt marshes (6-8 feet above sea level) of the south San Francisco Bay. Salt marsh wandering shrews inhabit *Salicornia* spp. marsh which is inundated daily by tides. According to Johnston and Rudd (1957), salt marsh wandering shrews prefer salt marshes that provide dense cover, an abundant source of invertebrates for food, suitable nesting and resting sites, and continuous ground moisture. Suitable middle marsh habitat frequented by this taxon is usually inundated only by high tides and is characterized by 30-60 cm high *Salicornia* spp. with driftwood and other debris resting directly on the vegetation. The surface debris provides nesting and resting sites and foraging habitat during dry periods. High salt marsh, from 2.4 to 2.7 m in elevation, provides refuge for shrews during extremely high tides. Low marsh, dominated by *Spartina* spp. and subjected to daily tidal floods, is used by this taxon as foraging habitat only during low tides (Johnston and Rudd 1957).

The closest CNDDDB record for salt marsh wandering shrew dates from 1951 in the tidal marsh habitat near Johnson Landing, northwest of the project site (CNDDDB Occurrence No. 14). The project site does not support tidal marsh habitat typically associated with salt marsh wandering shrew. Owing to an absence of tidal marsh habitat anywhere near the project site, it is most unlikely that salt marsh wandering shrew would be present within the Project Site.

Pallid bat (*Antrozous pallidus*). CDFW Species of Special Concern, WBWG High Priority. Moderate Potential.

The pallid bat is broadly distributed throughout much of western North America and typically occurs in association with open, rocky areas. Occupied habitats are highly variable and range from deserts to forests in lowland areas, and include higher-elevation forests. Roosting may occur singly or in groups of up to hundreds of individuals. Roosts must offer protection from high temperatures and are typically in rock crevices, mines, caves, or tree hollows; manmade structures are also used, including buildings (both vacant and occupied) and bridges. Pallid bats are primarily insectivorous, feeding on large prey that is usually taken on the ground but sometimes in flight (WBWG 2018).

The closest CNDDDB record for pallid bat is located 2 miles east of the project site (CNDDDB Occurrence No. 130). The old Oliver Salt Company building may provide marginal roosting habitat, hibernacula, or maternity sites.

Western mastiff bat (*Eumops perotis californicus*), CDFW Species of Special Concern, WBWG High Priority. Moderate Potential. The Western mastiff bat ranges from Central Mexico across the southwestern US. In California this species roosts at elevations up to 4,600 feet where significant rock features are present (WBWG 2020). Mastiff bat roosts are primarily located high on cliffs under exfoliating rock slabs, but have also been found in similar crevices in large boulders and buildings. This species forages in groups high above the ground in broad, open areas and is most often found in desert washes, flood plains, chaparral, oak woodland, open pine forest, grasslands, and agricultural areas (WBWG 2020).

The old Oliver Salt Company building may provide marginal roosting habitat, hibernacula, or maternity sites.

5.3 Wildlife Corridors and Native Wildlife Nursery Sites

Wildlife movement between suitable habitat areas can occur via open space areas lacking substantial barriers. The terms “landscape linkage” and “wildlife corridor” are often used when referring to these areas. The key to a functioning corridor or linkage is that it connects two larger habitat blocks, also referred to as core habitat areas (Beier 1992, Soule and Terborgh 1999). It is useful to think of a “landscape linkage” as being valuable in a regional planning context, a broad scale mapping of natural habitat that functions to join two larger habitat blocks. The term “wildlife corridor” is useful in the context of smaller, local area planning, where wildlife movement may be facilitated by specific local biological habitats or passages and/or may be restricted by barriers to movement. Above all, wildlife corridors must link two areas of core habitat and should not direct wildlife to developed areas or areas that are otherwise void of core habitat (Hilty et al. 2006).



Photo 6. Salt Pond within Preserve

The South Bay Salt Pond Restoration Project was developed by the CDFW and the U.S. Fish and Wildlife Service (USFWS), in partnership with the California Coastal Commission and the U.S. Army Corps of Engineers, among others. That restoration effort will restore and enhance wetlands in South San

Francisco Bay, while providing flood management and wildlife-oriented public access and recreation (EDAW et al. 2007). One of the goals of the South Bay Salt Pond Restoration Project is to restore a habitat mosaic to represent the historic pre-salt-pond landscape. Since the decommissioning of the salt ponds that were previously used for salt production in the South Bay, thousands of acres of salt ponds have been preserved and restored to provide habitat for listed species. Most of these ponds are currently publicly owned and managed for the benefit of fish and wildlife (EDAW et al. 2007).

One of the large salt pond complexes of the South Bay Salt Pond Restoration Project includes CDFW's Eden Landing Ecological Reserve. During Phase 1 of this Restoration Project (implemented by CDFW circa 2006 -2008) several ponds with opportune elevations were opened to tidal action. Other restored ponds within the Ecological Reserve are currently being managed as Open Water Ponds and Seasonal Managed Ponds. The Goals Project recommends increasing the acreage of self-maintaining habitats to reduce the need for intensive management. The level of habitat management should be assessed as part of any restoration and enhancement proposal (Goals Project 1999). A mix of tidal marsh and managed pond habitats will offer the optimal conditions by providing a variety of habitats for bird species, including federally listed species. Managing salt ponds with varying salinity levels also benefits a larger number of species (BCDC 2005). The proposed project would preserve 32 acres of salt ponds that are immediately north of the Eden Landing Ecological Reserve.

As described above, wildlife corridors must provide a link between two areas of suitable habitats. While the Project Site is located adjacent to Eden Landing, it is otherwise bordered by Highway 92 and developed areas in the City of Hayward. The location of the Project Site adjacent to these substantial barriers to terrestrial passage, as well as the sparse nature of vegetation present within the Project Site, limit its potential value as a wildlife corridor. The Project Site provides marginal wildlife corridor value as a stepping stone area for migratory birds, based primarily on its proximity to Eden Landing. However, this value is only marginal given the small size of the site in relation to the size of Eden Landing, and the factors related to edge disturbance from adjacent developed areas.

6.0 ANALYTICAL METHODOLOGY AND SIGNIFICANCE THRESHOLD CRITERIA

Pursuant to Appendix G, Section IV of the State CEQA Guidelines, a project would have a significant impact on biological resources if it would:

- a) Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special-status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service;
- b) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service;
- c) Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means;
- d) Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites;
- e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance; and/or,
- f) Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan.

These thresholds were utilized in completing the analysis of potential project impacts for CEQA purposes. For the purposes of this analysis, a “substantial adverse effect” is generally interpreted to mean that a potential impact could directly or indirectly affect the resiliency or presence of a local biological community or species population. Potential impacts to natural processes that support biological communities and special-status species populations that can produce similar effects are also considered potentially significant. Impacts to individuals of a species or small areas of existing biological communities may be considered less than significant if those impacts are speculative, beneficial, de minimis, and/or would not affect the resiliency of a local population.

7.0 IMPACTS AND MITIGATION EVALUATION

Using the CEQA analysis methodology outlined in Section 6.2 above, the following section describes potential significant impacts to sensitive resources within the Project site area as well as suggested mitigation measures which are expected to reduce impacts to less than significant.

7.1 Special-status Species

This section analyzes the Project's potential impacts and mitigation for special-status species in reference to the significance threshold outlined in CEQA Appendix G, Part IV (a):

Does the project have the potential to have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special-status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?

Potential impacts and mitigation for potentially significant impacts are discussed below.

Salt Marsh Harvest Mouse and Salt Marsh Wandering Shrew

The closest known CNDDDB record of salt marsh harvest mice is located just north of the project site in the EBRPD Salt Marsh Harvest Mouse Preserve in the Hayward Marsh Regional Shoreline, located north of Highway 92 (CNDDDB Occurrence No. 54) (the project site is south of Highway 92). Salt marsh harvest mice are also known from pickleweed habitats south of the project site along the Mt Eden Creek channel within the CDFW's Eden Landing Ecological Reserve (CNDDDB Occurrences No. 85 and 86). They are also known further to the south of CDFW Eden Landing Ecological Reserve in the tidal salt marshes (CNDDDB Occurrence Numbers 77, 87, 89 and 90). The closest CNDDDB record for salt marsh wandering shrew dates from 1951 in the tidal marsh habitat near Johnson Landing, northwest of the project site (CNDDDB Occurrence No. 14).

In addition to protections under FESA, SMHM is also a State Fully Protected species under California Fish and Game Code. Fully Protected species are listed in Fish and Game Code Sections 3511, 4700, 5050, and 5515, which state that CDFW is unable to authorize incidental take of such species when activities are proposed in areas inhabited by those species. Project mitigation measures have been designed to completely avoid take of these species to comply with Federal, State and local regulations.

Potential Impact BIO-1: Project construction activities could result in direct mortality and/or harassment of Federal and State Endangered SMHM individuals and special-status SMWS. Finally, the proposed project will result in impacts to marginal pickleweed habitat for these species. These impacts to SMHM and SMWS are regarded as potentially significant.

To reduce potential impacts to SMHM and SMWS to a less-than-significant level, the following measures shall be implemented:

Mitigation Measure BIO-1: Prior to ground disturbing activities adjacent to potential SMHM and SMWS habitat, exclusion barriers and/or fencing shall be installed to exclude individuals of these species from areas of active construction. The design of the exclusion barriers and fencing will be approved by a qualified biologist and shall

be installed in the presence of a qualified biological monitor. The fence will be made of a material that does not allow SMHM or SMWS to pass through, and the bottom will be buried to a depth of a minimum of 4 inches so that these species cannot crawl under the fence. All support for the exclusion fencing will be placed on the inside of the Project footprint. Additionally, removal of marsh or associated ruderal vegetation will be completed using only hand tools and in the presence of a biological monitor.

Mitigation Measure BIO-2: A qualified biological monitor will be present during wildlife exclusion fence installation and removal, and during all vegetation clearing and initial ground disturbance which take place in marsh habitats, and vegetation adjacent to marsh habitats. The monitor will have demonstrated experience in biological construction monitoring and knowledge of the biology of the special-status species that may be found in the Project site, including SMHM and SMWS. The monitor(s) will have the authority to halt construction, if necessary, if noncompliance actions occur. The biological monitor(s) will be the contact person for any employee or contractor who might inadvertently kill or injure a special-status species or anyone who finds a dead, injured, or entrapped special-status species. Following fence installation, vegetation removal in potential habitat areas, and initial ground disturbance in potential habitat areas, the biologist will train an onsite monitor to continue to document compliance. The biologist will conduct weekly site checks to provide guidance for fence maintenance, provide environmental sensitivity training, and document compliance with permit conditions.

Mitigation Measure BIO-3: The biological monitor shall provide an endangered species training program to all personnel involved in Project construction. At a minimum, the employee education program shall consist of a brief presentation by persons knowledgeable about the biology of sensitive species with potential to occur in the Project footprint, and about their legislative protection to explain concerns to contractors and their employees involved with implementation of the Project. The program shall include a description of this species and their habitat needs, any reports of occurrences in the area; an explanation of the status of these species and their protection under State and Federal legislation; and a list of measures being taken to reduce impacts to these species during construction.

Mitigation Measure BIO-4: Food-related trash items such as wrappers, cans, bottles, and food scraps will be disposed of in solid, closed containers (trash cans) and removed at the end of each work day from the investigation site to eliminate an attraction to predators of listed species.

Mitigation Measure BIO-5: If a Federal or State listed species is observed at any time during construction, work will not be initiated or will be stopped immediately until the animal leaves the vicinity of the work area of its own volition. If the animal in question does not leave the work area, work will not be reinitiated until the appropriate agency is contacted and has made a decision on how to proceed with work activities. The biological monitor will direct the contractor on how to proceed accordingly. The biological monitor or any other persons at the site will not pursue, capture, handle, or harass any species observed.

Mitigation Measure BIO-6: To compensate for impacts to 0.97 acre of waters of the US (Figure 5), the applicant proposes to purchase wetland mitigation credits at a 1:1 mitigation ratio from an approved mitigation bank with a Service Area that covers the project site. The San Francisco Bay Wetland Mitigation Bank currently has "Tidal Wetland and Other Waters Creation" credits available. In addition, this conservation bank restored 88 acres of historic baylands to full tidal influence, and enhanced and expanded essential habitat for the salt marsh harvest mouse and California Ridgway's rail to promote the recovery of these species. Accordingly, the proposed compensatory mitigation will fully mitigate for impacts to salt marsh harvest mouse habitat and salt marsh wandering shrew.

The Applicant also purchased approximately 32 acres east of the project site, on the south side of Highway 92. This 32-acre area (Preserve) contains six old salt ponds totaling 26 acres. The 32-acre Preserve will be preserved in perpetuity via recordation of a Deed Restriction, or other appropriate legal mechanism, ensuring that the salt ponds are permanently preserved as open space in perpetuity. No conservation easement or conservator endowment would be provided under this scenario.

In lieu of purchasing credits from a mitigation bank or implementing other off-site mitigation, the applicant may opt to implement a salt pond restoration plan to restore and enhance the permanently preserved salt ponds within the 32-acre Preserve. The project applicant has indicated that this opportunity could be sought out in the future, but there are no such negotiations currently taking place.

Implementation of these mitigation measures will reduce potential impacts to SMHM and SMWS to a level that is less than significant.

California least tern, Western snowy plover, and Black skimmer

The closest CNDDDB record for California least tern is located northwest of the project site on a sandy island within the EBRPD Hayward Regional Shoreline (CNDDDB Occurrence No. 82). There is another record southwest of the project site in the salt ponds of CDFW Eden Landing Ecological Reserve (CNDDDB Occurrence No. 70).

The closest CNDDDB record for western snowy plover is located south of the project site in the restored salt ponds within the CDFW's Eden Landing Ecological Reserve (CNDDDB Occurrence No. 136). Nesting has been recorded in numerous ponds, and the associated marsh habitats. There is an additional record for western snowy plover located northwest of the project site on a man-made island within the restored tidal salt marsh within the EBRPD Hayward Regional Shoreline (CNDDDB Occurrence No. 122). This record location is on the other side of Highway 92 from the project site.

The closest CNDDDB record for black skimmer is located northwest of the project site (CNDDDB Occurrence No. 3). This species was observed in 1994 nesting on an upland island in a brackish marsh, east of Johnson Landing. This record location is on the other side of Highway 92 from the project site. This species is not known to nest on the berms or levees associated with the 32-acre Preserve or within the CDFW's Eden Landing Ecological Reserve, but it may nest near the project site.

California least tern, western snowy plover, and black skimmer are not expected to forage or nest on the project site. Mr. John Krause, CDFW's manager of the Eden Landing Ecological Reserve, knows these

species well and where they nest in the area. Mr. Krause states that the project site and the Preserve are unlikely to be used by these bird species. Hence, the proposed project will not result in direct impacts to California least tern, western snowy plover and black skimmer; however, these species could nest in restored salt ponds or along levees within the Eden Landing Ecological Reserve that is located next to the project site.

Potential Impact BIO-2: There is a possibility that noise and visual impacts associated with construction of the proposed project could result in: (1) nest abandonment; (2) loss of young; (3) reduced health and vigor of eggs and/or nestlings (resulting in reduced survival rates). These potential effects could result in potentially significant impacts to California least terns, western snowy plover, and black skimmer.

To reduce potential impacts to California least terns, western snowy plover, and black skimmer to a less-than-significant level, the following measures shall be implemented:

Mitigation Measure BIO-7: Preconstruction nesting surveys will be conducted in all habitats on and adjacent to the project site, if project construction would commence between February 1 and September 1. Additional nesting surveys will be conducted if project construction activities cease for more than 14 days during this period. If a California least tern, western snowy plover, and black skimmer nest is found within 600 feet of the project site, USFWS and CDFW will be immediately notified. A minimum 600-foot protection buffer will be established if a California least tern or western snowy plover is found to be nesting near the project site. Construction buffers for other species will be established by the qualified biologist completing the survey based on observations made during the survey, and will typically range between 100 and 500 feet. Buffers will be delineated by orange construction fencing that defines the buffer where it intersects the project site. The buffer will be maintained until a qualified biologist confirms the nesting cycle is completed.

Mitigation Measure BIO-8: Access by all construction personnel into the Eden Landing Ecological Reserve will be prohibited. Upon completion of the development project a permanent fence will be installed to prevent access into the adjacent salt ponds and associated marsh habitats. In addition, signs will be posted stating that public access into the salt ponds and associated marsh is strictly prohibited owing to the sensitivity of the habitat and to ensure the continued use of this habitat by special-status and listed wildlife species.

Implementation of these mitigation measures will reduce potential impacts to California least tern, western snowy plover and black skimmer to a level that is less than significant.

Burrowing owl

The closest CNDDDB record for burrowing owl is located southeast of the project site (CNDDDB Occurrence No. 946). This species was observed in 2006, wintering in a ground squirrel burrow in sparse non-native grassland along Marina Drive in Hayward. The project site contains very few suitable burrows or burrow surrogates for this species; however, burrowing owls may use the levees surrounding the project site for wintering and nesting habitat.

Potential Impact BIO-3: Project activities including vegetation removal and ground disturbance may affect this species by causing auditory, vibratory, and/or visual disturbance of a sufficient level to cause abandonment of the site or active nests.

To reduce potential impacts to burrowing owl to a less-than-significant level, the following measures shall be implemented:

Mitigation Measure BIO-9: For the protection of burrowing owl, a pre-construction survey should be performed prior to the start of ground disturbance activities. This survey will occur regardless of the time of year, as burrowing owls may use the Project Area during the non-nesting season. The survey will be performed according to the standards set forth by the Staff report for Burrowing Owl Mitigation (CDFW 2012).

Mitigation Measure BIO-10: Occupied burrows should not be disturbed during the nesting season (February 1 through August 31) unless, after consultation with the CDFW, a qualified biologist verifies that either: (1) the birds have not begun egg-laying and incubation; or (2) that juveniles from the occupied burrows are foraging independently and capable of independent survival. If owls must be moved away from the disturbance area, passive relocation techniques should be used rather than trapping. At least 1 week should be allowed to accomplish this and allow the owls to acclimate to alternate burrows.

Other Special-Status and Common Nesting Birds

The project site does not support tidal marsh habitat typically associated with Alameda song sparrow or San Francisco common yellowthroat nesting habitat; however, these species may nest near the project site. In addition, white-tailed kite may nest on or near the project site. Common song birds (passerine birds) could also nest on the project site. All of these birds are protected under the Migratory Bird Treaty Act (50 CFR 10.13) and their eggs and young are protected under California Fish and Game Code Sections 3503, 3503.5. Impacts to these nesting bird species would be considered a potentially significant impact.

Potential Impact BIO-4: Potential impacts to these nesting bird species from the proposed project include disturbance to nesting birds and possibly death of adults and/or young. Impacts to nesting birds from the proposed project would be potentially significant.

To reduce potential impacts to nesting bird species to a less-than-significant level, the following measures shall be implemented:

Mitigation Measure BIO-11: Project activities, such as vegetation removal, grading, or initial ground-disturbance, will be conducted between September 1 and January 31 (outside of the February 1 to August 31 nesting season) to the greatest extent feasible.

If Project activities must be conducted during the nesting season, a pre-construction nesting bird survey will be conducted by a qualified biologist no more than 14 days prior to vegetation removal or initial ground disturbance. The survey will include the Project site and surrounding vicinity to identify the location and status of any nests that could potentially be affected either directly or indirectly by Project activities.

If active nests of native nesting bird species are located during the nesting bird survey, a work exclusion zone will be established around each nest by the qualified biologist. Established exclusion zones will remain in place until all young in the nest have fledged or the nest otherwise becomes inactive (e.g., due to predation). Appropriate exclusion zone sizes will be determined by a qualified biologist and will vary based on species, nest location, existing visual buffers, noise levels, and other factors. An exclusion zone radius may be as small as 50 feet for common, disturbance-adapted species, or as large as 250 feet or more for raptors. Exclusion zone size will be reduced from established levels by a qualified biologist if nest monitoring findings indicate that Project activities do not adversely impact the nest, and if a reduced exclusion zone would not adversely affect the nest.

Implementation of these mitigation measures will reduce potential impacts to nesting birds to a level that is less than significant.

Pallid bat and Western mastiff bat

The old Oliver Salt Company building may provide marginal roosting habitat, hibernacula, or maternity sites for special-status bat species. The closest CNDDDB record for pallid bat is located 2 miles east of the project site (CNDDDB Occurrence No. 130).

Potential Impact BIO-5: Potential impacts to bat species could result from building demolition associated with the proposed project. Accordingly, impacts to pallid bat and western mastiff bat are regarded as potentially significant.

To reduce potential impacts to special-status bat species to a less-than-significant level, the following measures shall be implemented:

Mitigation Measure BIO-12: To avoid impacts to roosting bats, building demolition should occur between October 1 and March 31, outside of the maternity roosting season (when female bats may have dependent young). If building demolition must occur between April 1 and September 30, a bat roost habitat assessment should be conducted by a qualified biologist. The bat roost habitat assessment would determine the likelihood of the Project site supporting roosting bats at the building removal. If the assessment identifies suitable or potentially occupied roosts within the Project site, a pre-construction bat survey should be performed no more than 14 days prior to removal using site appropriate survey methods to determine if potential roost structures are occupied.

If special-status bat species are detected during these surveys, appropriate, species and roost-specific mitigation measures will be implemented. Such measures may include postponing the removal of the building until the end of the maternity roosting season, exclusionary work buffers, or consultation with CDFW.

Implementation of these mitigation measures will reduce potential impacts to special-status bats to a level that is less than significant.

7.2 Sensitive Land Cover Types

This section addresses the question:

b) Does the Project have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service;

Sensitive natural communities within the Project site include: seasonal wetlands scattered throughout the project site and northern coastal salt marsh and associated unvegetated waters in the remnant salt ponds on the project site. The proposed project will result in impacts to seasonal wetlands and northern coastal salt marsh and associated unvegetated waters in the remnant salt ponds (Figure 5).

Potential Impact 6: Construction activities will result in the fill of 0.28 acre of seasonal wetlands and 0.69 acre of salt marsh and associated unvegetated waters in the remnant salt ponds on the project site. These impacts to sensitive natural communities are regarded as potentially significant.

Implementation of **Mitigation Measure BIO-6** will reduce potential impacts to sensitive natural communities to a less-than-significant level.

7.3 Aquatic Resources

This section analyzes the Project's potential impacts and mitigation for wetlands and other areas presumed or determined to be within the jurisdiction of the Corps or BCDC in reference to the significance threshold outlined in CEQA Appendix G, Part IV (c):

c) Does the Project have the potential to have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means;

The proposed project will result in impacts to seasonal wetlands and northern coastal salt marsh and associated unvegetated waters in the remnant salt ponds (Figure 5).

Potential Impact 7: Construction activities will result in the fill of 0.28 acre of seasonal wetlands and 0.69 acre of salt marsh and associated unvegetated waters in the remnant salt ponds on the project site. Accordingly, impacts to federally protected wetlands as defined by Section 404 of the Clean Water Act are regarded as potentially significant.

Implementation of **Mitigation Measure BIO-6** will reduce potential impacts to aquatic resources to a less-than-significant level.

7.4 Wildlife Corridors and Native Wildlife Nursery Sites

This section analyzes the Project's potential impacts and mitigation for habitat corridors and linkages in reference to the significance threshold outlined in CEQA Appendix G, Part IV (d):

d) Does the Project have the potential to interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native

resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites;

As discussed above, the Project Site provides marginal value as a stepping stone corridor for avian species. The wildlife corridor value of the Project Site is reduced by the presence of Highway 92 and adjacent developed areas. The Project Site does not provide substantial value as a wildlife corridor under existing conditions. Based on these factors, the proposed project will result in a less than significant impact to migratory corridors and habitat linkages.

7.5 Local Policies and Ordinances

This section analyzes the Project's potential impacts and mitigation based on conflicts with local policies and ordinances in reference to the significance threshold outlined in CEQA Appendix G, Part IV (e):

e) Does the Project have the potential to conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance;

On July 1, 2014, the Hayward City Council approved the Hayward 2040 General Plan and certified the Final General Plan Environmental Impact Report. The plan provides a community-based vision for the future of the Hayward community, and identifies a variety of goals, policies, and implementation programs to advance the vision. The Natural Resources Element (Part 3 of the Hayward 2040 General Plan) establishes goals and policies to protect and enhance the natural resources within the Hayward Planning Area. The goals and policies address a variety of topics, including biological resources.

Implementation of the proposed project is consistent with all of the Natural Resources Element goals and policies that are relevant to this project:

NR-1.1: Native Wildlife Habitat Protection

The proposed development will result in minor encroachment into important native wildlife habitats, and will preserve 32 acres of salt pond habitat for native wildlife species.

NR-1.2: Sensitive Habitat Protection

The proposed development will preserve habitat for State and federally designated sensitive, rare, threatened, and endangered wildlife species and their habitats.

NR-1.3: Sensitive Species Identification, Mapping, and Avoidance.

Appendix D provides a map of the Corps-confirmed waters of the United States on the project site and Appendix E provides a map of the 32-acre "Preserve" that will be preserved by the project. The applicant will prepare a *Biological Assessment* for the USFWS Section 7 consultation process.

NR-1.4 Shoreline Protection and Enhancement. The applicant has been coordinating with the Hayward Area Shoreline Planning Agency (HPA) regarding this project. The proposed project site is located outside of the Bay Conservation and Development Commission's jurisdiction.

NR-1.5 Large-Scale Natural Area Access. The applicant proposes to re-route the Bay Trail along the western edge of the project site and connect with the Bay Trail in the Eden Landing Ecological Reserve, thereby improving access to publicly owned large-scale natural areas.

NR-1.6 Migratory Bird Habitat Protection. Preservation of the 32-acre “Preserve” will preserve habitat for migratory waterfowl.

NR-1.9 Native Plant Species Protection and Promotion. Preservation of the 32-acre “Preserve” will preserve salt marsh vegetation.

The proposed project will remain consistent with the policies (applicable to all Project components), and will therefore have no impact with regard to local plan and policy consistency.

7.6 Habitat Conservation Plans

This section analyzes the Project’s potential impacts and mitigation based on conflicts with any adopted local, regional, and state habitat conservation plans in reference to the significance threshold outlined in CEQA Appendix G, Part IV (f):

f) Does the Project have the potential to conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan.

The proposed project will not conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan. No such plan exists applicable to the Project Site. No impact will occur.

8.0 REFERENCES

- Bent 1929 Bent, A.C. 1929. Life histories of North American shore birds. Part II. U.S. Natl. Mus.
- CalTrans 2010 California Department of Transportation. 2010. California Essential Habitat Connectivity Project. Available at: <https://www.wildlife.ca.gov/conservation/planning>. Accessed: October 2018.
- CCR Title 14, Section 670.5[a][6][F] California Code of Regulations Title 14, Section 670.5[a][6][F]. 1971. Natural Resources; Fish and Game Commission-Department of Fish and Game; General Regulations; Miscellaneous; Animals of California Declared To Be Endangered or Threatened, 14 California Code of Regulation § 670.5. May 28, 1971.
- CCH 2020 Consortium of California Herbaria. 2020. Data provided by the participants of the Consortium of California Herbaria. Available at: <http://ucjeps.berkeley.edu/consortium>. Accessed: June 2020.
- CDFG 1994 California Department of Fish and Game. 1994. A Field Guide to Lake and Streambed Alteration Agreements, Sections 1600-1607. Environmental Service Division, California Department of Fish and Game, Sacramento, CA.
- CDFG 2010 California Department of Fish and Game. 2010. List of Vegetation Alliances and Associations. Vegetation Classification and Mapping Program, California Department of Fish and Game, Sacramento, CA. September 2010.
- CDFW 2020 California Department of Fish and Wildlife. 2020. California Natural Diversity Database, Wildlife and Habitat Data Analysis Branch. Sacramento, CA. Accessed: June 2020.
- CNPS 2020a California Native Plant Society. 2020. Online Inventory of Rare, Threatened, and Endangered Plants of California. Available at: <http://www.rareplants.cnps.org/>. Accessed: June 2020.
- CNPS 2020b California Native Plant Society. 2020. A Manual of California Vegetation Online. Available at: <http://vegetation.cnps.org/>. Accessed October 2020.
- Corps 2008 U.S. Army Corps of Engineers. 2008. Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Arid West Region (Version 2.0). U.S. Army Corps of Engineers, Engineer Research and Development Center, Vicksburg, MS. September 28, 2008.

- DeGroot 1927 DeGroot, D.S. 1927. The California clapper rail: its nesting habits, enemies and habitat. *Condor* 29(6): 259-270.
- Dunk 1995 Dunk, JR. 1995. White-tailed Kite (*Elanus leucurus*), The Birds of North America Online (A Poole, Ed.). Ithaca: Cornell Lab of Ornithology; Retrieved from the Birds of North America Online: <http://bna.birds.cornell.edu/bna/species/178>.
- eBird 2020 eBird. 2020. eBird: An online database of bird distribution and abundance [web application]. eBird, Ithaca, New York. Available at: <http://www.ebird.org>. Accessed: June 2020.
- Eddleman et al. 1994 Eddleman, W.R., R.E. Flores and M. Legare. 1994. Black Rail (*Laterallus jamaicensis*), The Birds of North America Online (A. Poole, Ed.). Ithaca: Cornell Lab of Ornithology; Retrieved from the Birds of North America Online: <http://bna.birds.cornell.edu/bna/species/123>.
- Eddleman and Conway 1998 Eddleman, W. R and C. J. Conway. 1998. Clapper Rail (*Rallus longirostris*). In: The Birds of North America, No. 340. A. Poole and F. Gill, eds. The Academy of Natural Sciences, Philadelphia, and the American Ornithologists' Union, Washington, D.C.
- Environmental Laboratory 1987 Environmental Laboratory. 1987. Corps of Engineers Wetlands Delineation Manual. Department of the Army, Waterways Experiment Station, Vicksburg, Mississippi 39180-0631.
- Evens and Page 1983 Evens, J. and G. Page. 1983. The ecology of rail populations at Corte Madera Ecological Preserve with recommendations for management. Report prepared for the Marin Audubon Society. 62 pp.
- Fancher, J.M. 1992 Population status and trends of the California least tern. Transactions of the Western Section of the Wildlife Society, No. 28. 7 pp.
- Fisler 1961 Fisler GF. 1961. Speciation and Ecology of Salt-marsh Harvest Mice (*Reithrodontomys*) of the San Francisco Bay Area [dissertation]. [Berkeley (CA)]: University of California, Berkeley.
- Fisler 1965 Fisler, GF. 1965. Adaptations and speciation in harvest mice of the marshes of San Francisco Bay. University of California Publications in Zoology 77: 1-108.
- FR 1970 Federal Register. 1970. Endangered and threatened wildlife. October 13, 1970. Conservation of Endangered Species and Other Fish or Wildlife; United States List of Endangered Native Fish and Wildlife. Fed Regist [cited 2016 Dec 1];50(17.11):16047–16047

- Google Earth 2020 Google Earth. 2020. Hayward area: 37.6233°, -122.1279°. Image dates: 1993-2018. Accessed: June 2020.
- Harvey 1980 Harvey, T. E. 1980. A breeding season survey of the California clapper rail (*Rallus longirostns obsoletus*) in South San Francisco Bay. San Francisco Bay National Wildlife Refuge, Newark, California.
- Harvey 1988 Harvey, T. E. 1988. Breeding biology of the California clapper rail in South San Francisco Bay. Transactions of the Western Section of the Wildlife Society 24: 98-104.
- Holland 1986 Holland, R. 1986. Preliminary Descriptions of the Terrestrial Natural Communities of California. California Department of Fish and Game, Sacramento, CA. 156 pp.
- Johnston and Rudd 1957 Johnston, R.F. and R.L. Rudd. 1957. Breeding of the salt marsh shrew. J. Mammalogy 38:157-163.
- Molina, K.C. 2008 Black Skimmer (*Rynchops niger*). In: Shuford , W. D. and Gardali, T., eds. California Bird Species of Special Concern: A ranked assessment of species, subspecies, and distinct populations of birds of immediate conservation concern in California. Studies of Western Birds 1. Western Field Ornithologists, Camarillo, California, and California Department of Fish and Game, Sacramento.
- NatureServe 2018 NatureServe. 2018. NatureServe Explorer: NatureServe Conservation Status. Available at: <http://www.natureserve.org/explorer/ranking#relationship>. Accessed: October 2018.
- Origer 2016 Tom Origer and Associates. 2016. Oliver Brothers Salt Works Project, Hayward, Alameda County Letter Report.
- Page et al. 1995 Page, G.W., J.C. Warriner and P.W.C. Paton. 1995. Snowy Plover (*Charadrius alexandrinus*). In: The Birds of North America, No. 154 (A. Poole and F. Gill, eds.). The Academy of Natural Sciences, Philadelphia, PA, and the American Ornithologists Union, Washington D.C.
- Powell et al. 1995 Powell, A. N., C. L. Collier, and B. Peterson 1995. The Status of western snowy plovers (*Charadrius alexandrinus nivosus*) in San Diego County, 1995. Report to U.S. Fish and Wildlife Service, Portland OR, and CA DFG, Sacramento, CA.
- Poulin et al. 2011 Poulin, Ray, L. D. Todd, E. A. Haug, B. A. Millsap and M. S. Martell. 2011. Burrowing Owl (*Athene cunicularia*), The Birds of North America Online (A.

Poole, Ed.). Ithaca: Cornell Lab of Ornithology; Retrieved from the Birds of North America Online:
<http://bna.birds.cornell.edu/bna/species/061doi:10.2173/bna.61>

- Richmond et al. 2008 Richmond, O.M., J. Tecklin, and S.R. Beissinger. 2008. Distribution of California Black Rails in the Sierra Nevada Foothills. *J. of Field Ornithology* 79(4): 381-390.
- Robinson-Nilsen et al. 2009 Robinson-Nilsen, C., Demers, J., and C. Strong. 2009. Western Snowy Plover Numbers, Nesting Success, Fledging Success and Avian Predator Surveys in the San Francisco Bay, 2009. Prepared for San Francisco Bay Bird Observatory and U.S. Fish and Wildlife Service. November 2009.
- Sawyer et al. 2009 Sawyer, J.O., T. Keeler-Wolf, and J.M. Evens. 2009. *A Manual of California Vegetation*, 2nd Edition. California Native Plant Society in collaboration with California Department of Fish and Game. Sacramento, CA. 1300 pp.
- SFEI 2020 San Francisco Estuary Institute. 2020. California Aquatic Resource Inventory. Available at: <http://www.sfei.org/cari#sthash.Mzz93W9i.dpbs>. Accessed: June 2020.
- Shellhammer et al. 1982 Shellhammer, H.S., Jackson, R., Davilla, W., Gilroy, A.M., Harvey, H.T., and Simons, L. 1982. Habitat Preferences of Salt Marsh Harvest Mice (*Reithrontomys raviventris*). *The Wasmann Journal of Biology*. Vol: 40(1-2). pp. 102-144.
- Shellhammer et al. 2010 Shellhammer, HS, R Duke, and M Orland. 2010. Use of brackish marshes in the south San Francisco Bay by salt marsh harvest mice. *California Department of Fish and Game*. 96(4): 256-259.
- Shuford 1993 Shuford, W. D. 1993. *The Marin County Breeding Bird Atlas: A Distributional and Natural History of Coastal California Birds*. Bushtit Books, Bolinas, CA.
- Shuford and Gardali 2008 Shuford, W.D. and T. Gardali (eds.). 2008. *California Bird Species of Special Concern: A ranked assessment of species, subspecies, and distinct populations of birds of immediate conservation concern in California*. *Studies of Western Birds 1*. Western Field Ornithologists, Camarillo, California, and California Department of Fish and Game, Sacramento.
- Spautz et al. 2005 Spautz, H., N. Nur, and D. Stralberg. 2005. California Black Rail (*Laterallus jamaicensis coturniculus*) Distribution and Abundance in Relation to Habitat and Landscape Features in the San Francisco Bay Estuary. USDA Forest Service Gen. Tech. Rep. PSW-GTR-191: 465-468.
- Stebbins 2003 Stebbins, R.C. 2003. *A Field Guide to Western Reptiles and Amphibians*, Third Edition. Houghton Mifflin Company, Boston, MA and New York, NY.

- Stenzel et al. 1994 Stenzel, L. E., J. C. Warriner, J. S. Warriner, K. S. Wilson, F. C. Bidstrup, and G. W. Page 1994. Long-distance breeding dispersal of snowy plovers in western North America. *Journal of Animal Ecology* 63: 887-902.
- Sustaita et al. 2005 Sustaita, D, L Barthman-Thompson, P Quickert, L Patterson, and S Estrella. 2005. Annual Salt Marsh Harvest Mouse Demography and Habitat Use in Suisun Marsh Conservation Areas. Presentation at the CALFED Science Conference.
- Sustaita et al. 2011 Sustaita, D, PF Quickert, L Patterson, L Barthman-Thompson, S Estrella. 2011. Salt Marsh Harvest Mouse Demography and Habitat Use in the Suisun Marsh, California. *The Journal of Wildlife Management* 75(6): 1498-1507.
- Thomson et al. 2016 Thomson, R.C., A.N. Wright, and H.B. Shaffer. 2016. California Amphibian and Reptile Species of Special Concern. Co-published by the California Department of Fish and Wildlife and University of California Press. Oakland, California.
- USDA SES 1981 U.S. Department of Agriculture, Soil Conservation Service. 1981. Soil Survey of Alameda County, California, Western Part. In cooperation with the University of California Agricultural Experiment Station.
- USFWS 1984 Salt marsh harvest mouse and California clapper rail recovery plan. Portland, Oregon.
- USFWS 1985 Revised Recovery Plan California Least Tern, *Sterna antillarum brownii*. United States Fish and Wildlife Service, Portland, Oregon 112 pp.
- USFWS 2006 San Diego Bay National Wildlife Refuge Sweetwater Marsh and South San Diego Bay Units, Final Comprehensive Conservation Plan and Environmental Impact Statement.
- USFWS 2007 Recovery Plan for the Pacific Coast Population of the Western Snowy Plover (*Charadrius alexandrinus nivosus*). Sacramento, CA.
- USFWS 2010 Salt marsh harvest mouse (*Reithrodontomys raviventris*) 5-Year Review: Summary and Evaluation. Sacramento, California. 49 pp. February 16.
- USFWS 2013 Recovery Plan for Tidal Marsh Ecosystems of Northern and Central California. Sacramento, California. xviii + 605 pp.
- USFWS 2020a U.S. Fish and Wildlife Service. 2020. National Wetlands Inventory. Available at: <http://www.fws.gov/wetlands/index.html>. Accessed: June 2020.

USFWS 2020b U.S. Fish and Wildlife Service. 2020. List of Federal Endangered and Threatened Species that Occur in Alameda County, California. Available at: <https://ecos.fws.gov/ipac/>. Accessed: June 2020.

USGS 2020 U.S. Geological Survey. 2020. Redwood Point, California 7.5-minute quadrangle topographic map.

WBWG 2020 Western Bat Working Group. 2020. Species Accounts. Available at: http://www.wbwg.org/speciesinfo/species_accounts/species_accounts.html. Accessed: June 2020.

Williams and Faber 2001 Williams P, Faber P. 2001. Salt marsh restoration experience in San Francisco Bay. *Journal of Coastal Research*. 23:203–211.

APPENDIX A – FIGURES

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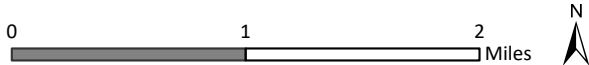


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Sources: National Geographic, WRA | Prepared By: pkobylarz, 6/30/2020

Figure 1. Project Area Location

U-Haul Point Eden Project
Hayward, California





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Sources: USDA NAIP Imagery 2018, WRA | Prepared By: pkobylarz, 6/30/2020

Figure 2. Aerial Photograph of the Project Site

U-Haul Point Eden Project
Hayward, California

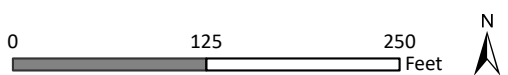


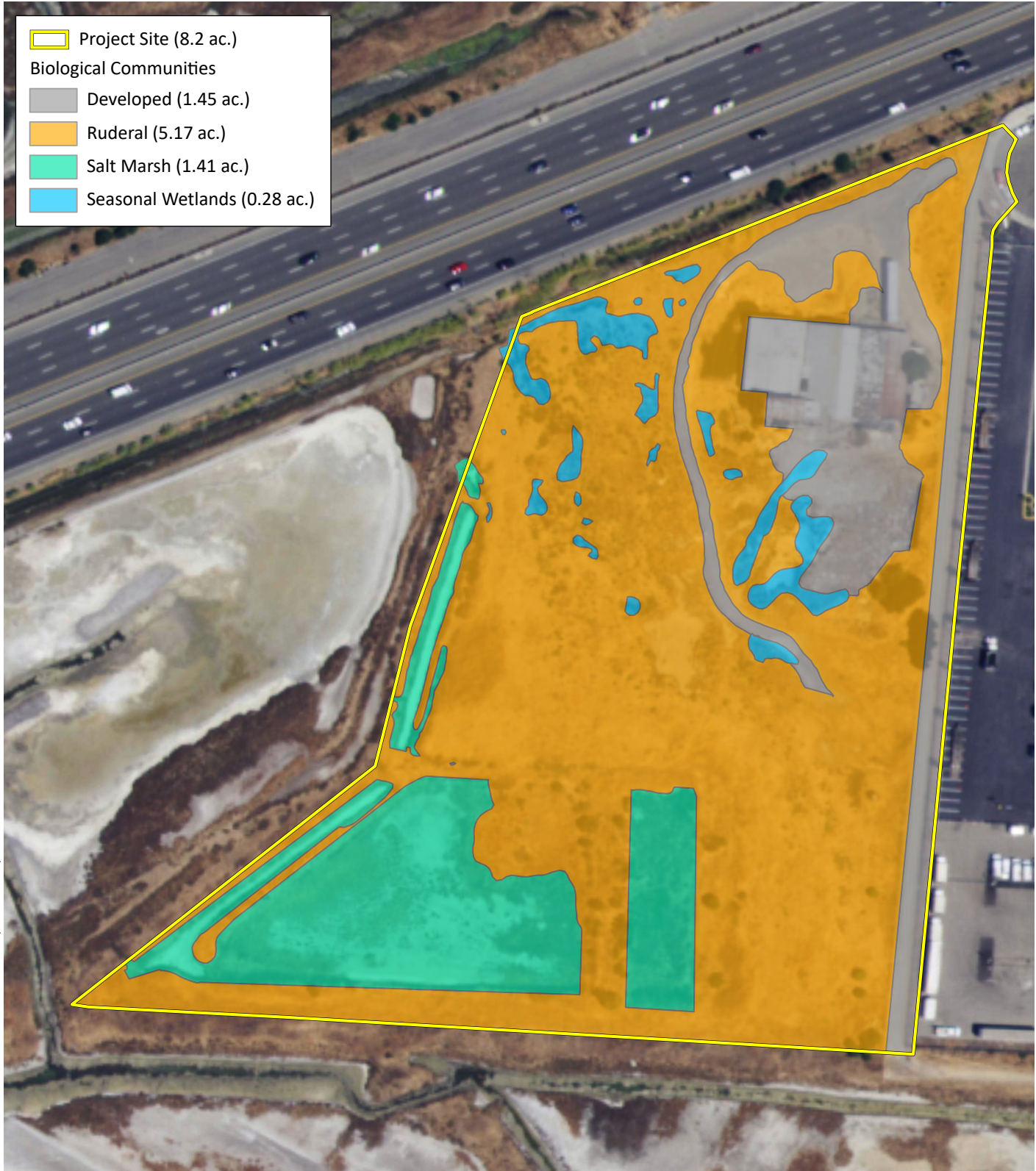


Figure 3. Aerial Photograph of the Preserve

U-Haul Point Eden Project
Hayward, California

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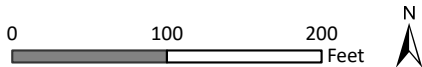


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Sources: CARI, USGS SURRGO, USDA NAIP Imagery 2018, WRA | Prepared By: pkobylarz, 6/30/2020

Figure 4. Natural Communities in the Project Site

U-Haul Point Eden Project
Hayward, California



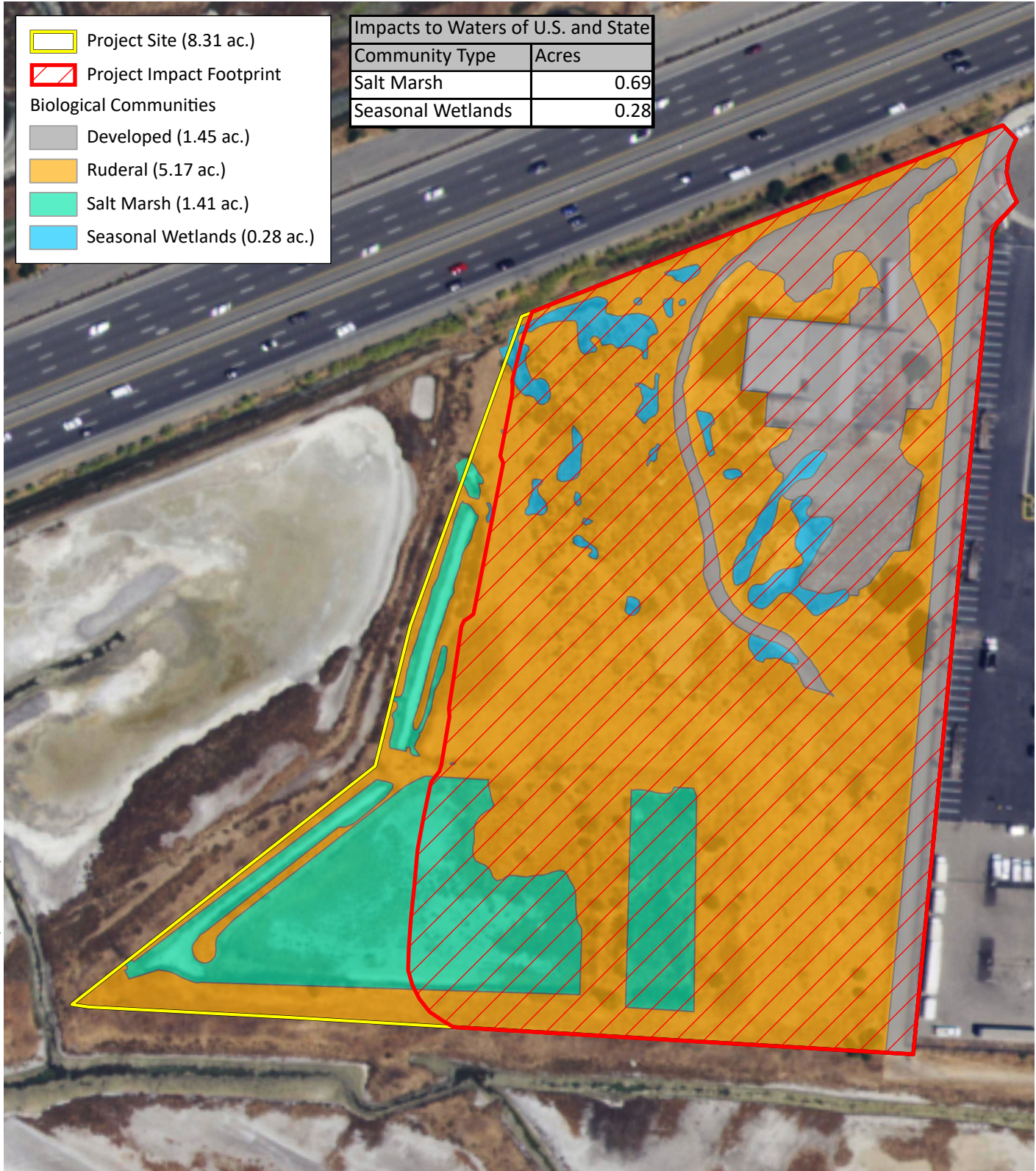
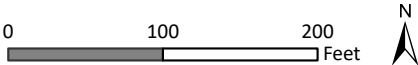


Figure 5. Impacts to Waters of U.S. and State

U-Haul Point Eden Project
 Hayward, California



APPENDIX B – SPECIES OBSERVED IN AND AROUND THE PROJECT SITE AREA

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Appendix B-1. Plant species observed in the Project Area.

Plant Species					
Scientific Name	Common Name	Origin	Form	Cal-IPC Ranking*	Wetland Status (Lichvar et al. 2016)⁺
<i>Acacia melanoxylon</i>	Blackwood acacia	non-native (invasive)	tree	Limited	-
<i>Atriplex prostrata</i>	Fat-hen	non-native	annual herb	-	FACW
<i>Avena barbata</i>	Slim oat	non-native (invasive)	annual, perennial grass	Moderate	-
<i>Baccharis glutinosa</i>	Saltmarsh baccharis	native	perennial herb	-	FACW
<i>Baccharis pilularis</i> subsp. <i>consanguinea</i>	Coyote brush	native	shrub	-	-
<i>Brassica nigra</i>	Black mustard	non-native (invasive)	annual herb	Moderate	-
<i>Bromus diandrus</i>	Ripgut brome	non-native (invasive)	annual grass	Moderate	-
<i>Bromus hordeaceus</i>	Soft chess	non-native (invasive)	annual grass	Limited	FACU
<i>Carduus pycnocephalus</i> subsp. <i>pycnocephalus</i>	Italian thistle	non-native	annual herb	-	-
<i>Carpobrotus edulis</i>	Iceplant	non-native (invasive)	perennial herb	High	-
<i>Cortaderia</i> sp.	Pampas grass	non-native (invasive)	perennial grass	High	FACU
<i>Centranthus ruber</i>	Red valerian	non-native	annual or perennial herb	-	-
<i>Centromadia pungens</i>	Common spikeweed	native	annual herb	-	FAC
<i>Chenopodium murale</i>	Nettle-leaf goosefoot	non-native	annual herb	-	FACU

Plant Species					
Scientific Name	Common Name	Origin	Form	Cal-IPC Ranking*	Wetland Status (Lichvar et al. 2016) ⁺
<i>Chenopodium</i> sp.	Goosefoot	non-native	annual herb	-	-
<i>Convolvulus arvensis</i>	Pinched bindweed	non-native	perennial herb or vine	-	-
<i>Cotula australis</i>	Australian brass-buttons	non-native	annual herb	-	FAC
<i>Cotula coronopifolia</i>	Brass-buttons	non-native (invasive)	perennial herb	Limited	OBL
<i>Cynodon dactylon</i>	Bermuda grass	non-native (invasive)	perennial grass	Moderate	FACU
<i>Cyperus eragrostis</i>	Tall cyperus	native	perennial grasslike herb	-	FACW
<i>Distichlis spicata</i>	Salt grass	native	perennial grass	-	FAC
<i>Dittrichia graveolens</i>	Stinkwort	non-native (invasive)	annual herb	Moderate	-
<i>Erodium botrys</i>	Broad-leaf filaree	non-native	annual herb	-	FACU
<i>Erodium moschatum</i>	White-stemmed filaree	non-native	annual herb	-	-
<i>Festuca bromoides</i>	Brome fescue	non-native	annual grass	-	FACU
<i>Festuca perennis</i>	Italian ryegrass	non-native (invasive)	annual or perennial grass	Moderate	FAC
<i>Foeniculum vulgare</i>	Fennel	non-native (invasive)	perennial herb	High	-
<i>Frankenia salina</i>	Alkali heath	native	perennial herb	-	FACW

Plant Species					
Scientific Name	Common Name	Origin	Form	Cal-IPC Ranking*	Wetland Status (Lichvar et al. 2016) [†]
<i>Geranium dissectum</i>	Wild geranium	non-native (invasive)	annual herb	Limited	-
<i>Geranium molle</i>	Crane's bill geranium	non-native	annual or perennial herb	-	-
<i>Helminthotheca echioides</i>	Bristly ox-tongue	non-native	annual or perennial herb	Limited	FAC
<i>Heteromeles arbutifolia</i>	Toyon	native	shrub	-	-
<i>Hirschfeldia incana</i>	Mustard	non-native (invasive)	perennial herb	Moderate	-
<i>Hordeum marinum</i>	Seaside barley	non-native	annual grass	-	FAC
<i>Hordeum marinum</i> subsp. <i>gussoneanum</i>	Barley	non-native (invasive)	annual grass	Moderate	FAC
<i>Hypochaeris radicata</i>	Rough cat's ear	non-native (invasive)	perennial herb	Moderate	FACU
<i>Jaumea carnosa</i>	Fleshy jaumea	native	perennial herb	-	OBL
<i>Lactuca virosa</i>	Bitter lettuce	non-native	perennial herb	-	-
<i>Lotus corniculatus</i>	Birdfoot trefoil	non-native	perennial herb	-	FAC
<i>Lythrum hyssopifolia</i>	Hyssop loosestrife	non-native (invasive)	annual or perennial herb	Limited	OBL
<i>Malva parviflora</i>	Cheeseweed	non-native	annual herb	-	-
<i>Medicago polymorpha</i>	Bur clover	non-native (invasive)	annual herb	Limited	FACU

Plant Species					
Scientific Name	Common Name	Origin	Form	Cal-IPC Ranking*	Wetland Status (Lichvar et al. 2016) [†]
<i>Melilotus albus</i>	White sweetclover	non-native	annual or biennial herb	-	-
<i>Mesembryanthemum nodiflorum</i>	Slender-leaved iceplant	non-native	annual herb	Limited	FACU
<i>Oxalis pes-caprae</i>	Bermuda buttercup	non-native (invasive)	perennial herb	Moderate	-
<i>Plantago coronopus</i>	Buckhorn plantain	non-native	annual herb	-	FAC
<i>Polypogon monspeliensis</i>	Annual beard grass	non-native (invasive)	annual grass	Limited	FACW
<i>Pseudognaphalium luteoalbum</i>	Everlasting cudweed	non-native	annual herb	-	FAC
<i>Rumex crispus</i>	Curly dock	non-native (invasive)	perennial herb	Limited	FAC
<i>Raphanus raphanistrum</i>	Jointed charlock	non-native	annual or perennial herb	-	-
<i>Raphanus sativus</i>	Wild radish	non-native (invasive)	annual or biennial herb	Limited	-
<i>Salicornia pacifica</i>	Pickleweed	native	perennial herb	-	OBL
<i>Salsola tragus</i>	Russian thistle	non-native (invasive)	annual herb	Limited	FACU
<i>Spergularia rubra</i>	Ruby sand-spurry	non-native	annual or perennial herb	-	FAC
<i>Stellaria media</i>	Chickweed	non-native	annual herb	-	FACU
<i>Stipa miliacea</i>	Smilo grass	non-native (invasive)	perennial grass	Limited	

Plant Species					
Scientific Name	Common Name	Origin	Form	Cal-IPC Ranking*	Wetland Status (Lichvar et al. 2016)⁺
<i>Vicia sativa</i>	Spring vetch	non-native	annual herb or vine	-	FACU

Appendix B-2. Wildlife species observed in the Project Area.

Wildlife Species	
Scientific Name	Common Name
<i>Anas platyrhynchos</i>	Mallard
<i>Anthus rubescens</i>	American pipit
<i>Ardea alba</i>	Great egret
<i>Branta canadensis</i>	Canada goose
<i>Bucephala albeola</i>	Bufflehead
<i>Calidris mauri</i>	Western sandpiper
<i>Cathartes aura</i>	Turkey vulture
<i>Charadrius vociferus</i>	Killdeer
<i>Columba livia</i>	Rock pigeon
<i>Corvus brachyrhynchos</i>	American crow
<i>Corvus corax</i>	Common raven
<i>Didelphis virginiana</i>	Virginia opossum
<i>Egretta thula</i>	Snowy egret
<i>Haemorhous mexicanus</i>	House finch
<i>Himantopus mexicanus</i>	Black-necked stilt
<i>Larus californicus</i>	California gull
<i>Larus occidentalis</i>	Western gull
<i>Lepus californicus</i>	Black-tailed jackrabbit

Wildlife Species	
Scientific Name	Common Name
<i>Melospiza melodia</i>	Song sparrow
<i>Molothrus ater</i>	Brown-headed cowbird
<i>Pelecanus erythrorhynchos</i>	American white pelican
<i>Pipilo crissalis</i>	California towhee
<i>Procyon lotor</i>	Raccoon
<i>Sayornis nigricans</i>	Black phoebe
<i>Setophaga coronata</i>	Yellow-rumped warbler
<i>Spatula clypeata</i>	Northern shoveler
<i>Stelgidopteryx serripennis</i>	Northern rough-winged swallow
<i>Sturnus vulgaris</i>	European starling
<i>Tringa melanoleuca</i>	Greater yellowlegs
<i>Tringa semipalmata</i>	Willet
<i>Urocyon cinereoargenteus</i>	Gray fox
<i>Vulpes vulpes</i>	Red fox
<i>Zonotrichia leucophrys</i>	White-crowned sparrow

* California Invasive Plant Council (Cal-IPC). 2020. California Invasive Plant Inventory Database. California Invasive Plant Council, Berkeley, CA. Online at: <http://www.cal-ipc.org/paf/>; most recently accessed: March 2020

+ National Plant List of Plant Species that Occur in Wetlands, California – Arid West (Lichvar et al. 2016)

APPENDIX C – SPECIAL-STATUS SPECIES POTENTIAL TABLE

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SPECIES	STATUS	HABITAT REQUIREMENTS	POTENTIAL TO OCCUR IN THE PROJECT SITE	RESULTS AND RECOMMENDATIONS
<i>Plants</i>				
Alkali milkvetch <i>Astragalus tener</i> var. <i>tener</i>	Rank 1B.2	Low ground, alkali flats, and flooded lands; in annual grassland or in playas or vernal pools. 0-170 m.	No Potential. The project site is highly disturbed and the salt ponds are too saline to provide suitable habitat. No vernal pools on project site.	No further actions are recommended.
Congdon's tarplant <i>Centromadia parryi</i> ssp. <i>congdonii</i>	Rank 1B.1	Valley and foothill grassland (alkaline). Elevation ranges from 0 to 755 feet (0 to 230 meters). Blooms May-Oct (Nov).	No Potential. Suitable habitat not present within Project site. Project site does not include valley and foothill grassland habitat.	No further actions are recommended.
Salt-marsh birds-beak <i>Chloropyron maritimum</i> ssp. <i>maritimum</i>	FE, SE, Rank 1B.2	Limited to the higher zones of salt marsh habitat. 0-10 m.	No Potential. The project site is highly disturbed; marginal pickleweed and salt ponds do not provide suitable habitat.	No further actions are recommended.
Diablo helianthella <i>Helianthella castanea</i>	Rank 1B.2	Usually in chaparral/oak woodland interface in rocky, azonal soils. Often in partial shade. 45-1070 m.	No Potential. The project site is highly disturbed; marginal pickleweed and salt ponds do not provide suitable habitat.	No further actions are recommended.
Santa Cruz tarplant <i>Holocarpha macradenia</i>	FT, ST, Rank 1B.1	Light, sandy soil or sandy clay; often with nonnatives. 10-275 m.	No Potential. The project site is highly disturbed; marginal pickleweed and salt ponds do not provide suitable habitat.	No further actions are recommended.
Contra Costa goldfields <i>Lasthenia conjugens</i>	FE, Rank 1B.1	Cismontane woodland, playas (alkaline), valley and foothill grassland, vernal pools. Elevation ranges from 0 to 1540 feet (0 to 470 meters). Blooms Mar-Jun.	No Potential. The project site does not contain vernal pools.	No further actions are recommended.
Pincushion navarretia <i>Navarretia myersii</i> ssp. <i>myersii</i>	Rank 1B.1	Clay soils within non-native grassland. 45-100 m.	No Potential. The project site does not have vernal pools.	No further actions are recommended.
hairless popcornflower <i>Plagiobothrys glaber</i>	Rank 1A	Coastal salt marshes and alkaline meadows. 5-125 m.	No Potential. The project site is highly disturbed; marginal pickleweed and	No further actions are recommended.

				salt ponds do not provide suitable habitat.	
chaparral ragwort <i>Senecio aphanactis</i>	Rank 2B.2	Drying alkaline flats. 20-855 m.		No Potential. The project site is highly disturbed; marginal pickleweed and salt ponds do not provide suitable habitat.	No further actions are recommended.
Most beautiful jewelflower <i>Streptanthus albidus</i> ssp. <i>peramoenus</i>	Rank 1B.2	Serpentine outcrops, on ridges and slopes. 90-1040 m.		No Potential. The project site is highly disturbed; marginal pickleweed and salt ponds do not provide suitable habitat.	No further actions are recommended.
California seablite <i>Suaeda californica</i>	FE, Rank 1B.1	Margins of coastal salt marshes. 0-5 m.		No Potential. The project site is highly disturbed; marginal pickleweed and salt ponds do not provide suitable habitat.	No further actions are recommended.
Mammals					
hoary bat <i>Lasiurus cinereus</i>	WBWG Medium	Prefers open habitats or habitat mosaics, with access to trees for cover and open areas or habitat edges for feeding. Roosts in dense foliage of medium to large trees. Feeds primarily on moths. Requires standing water to drink.		No Potential. The project site does not contain trees for roosting.	No further actions are recommended.
pallid bat <i>Antrozous pallidus</i>	SSC, WBWG High	Found in a variety of habitats ranging from grasslands to mixed forests, favoring open and dry, rocky areas. Roost sites include crevices in rock outcrops and cliffs, caves, mines, and also hollow trees and various manmade structures such as bridges, barns, and buildings (including occupied buildings). Roosts must protect bats from high temperatures.		Moderate Potential. The nearest occurrence for this species is approximately 2 miles east of the project site in Hayward. One old building onsite may provide roosting habitat for pallid bat.	Perform building demolition outside of maternity roosting season, or conduct pre-construction roost habitat assessment. See Section 7.1.

		Very sensitive to disturbance of roosting sites.		
salt-marsh harvest mouse <i>Reithrodontomys raviventris</i>	FE, SE, CFP	Endemic to emergent salt and brackish wetlands of the San Francisco Bay Estuary. Pickleweed marshes are primary habitat; also occurs in various other wetland communities with dense vegetation. Does not burrow, builds loosely organized nests. Requires higher areas for flood escape.	High Potential. The closest known occurrence for salt-marsh harvest mouse is approximately 150 feet north of the project site on the East Bay Regional Park District Hayward Recreation Shoreline. Suitable pickleweed habitat for this species is present within the project site and Preserve.	Recommendations to avoid take of this species include installation of exclusion fencing, biological monitoring, and site BMPs. See Section 7.1.
salt-marsh wandering shrew <i>Sorex vagrans halicoetes</i>	SSC	Salt marshes of the south arm of San Francisco Bay. Medium high marsh 6 to 8 feet above sea level where abundant driftwood is scattered among <i>Salicornia</i> .	Unlikely. The project site and salt ponds are not subject to tidal influence.	Recommendations to avoid impacts to SMHM will also protect this species.
western mastiff bat <i>Eumops perotis</i>	SSC, WBWG High	Found in a wide variety of open, arid and semi-arid habitats. Distribution appears to be tied to large rock structures which provide suitable roosting sites, including cliff crevices and cracks in boulders.	Moderate Potential. One old building onsite may provide roosting habitat for pallid bat.	Perform building demolition outside of maternity roosting season, or conduct pre-construction roost habitat assessment. See Section 7.1.
Birds				
Alameda song sparrow <i>Melospiza melodia pusillula</i>	SSC	Year-round resident of salt marshes bordering the south arm of San Francisco Bay. Inhabits primarily pickleweed marshes; nests placed in marsh vegetation, typically shrubs such as gumplant.	Low Potential. The nearest occurrence for this species is approximately 500 feet north of the project site on the East Bay Regional Park District Hayward Recreation Shoreline.	Vegetation removal and initial ground disturbance should occur outside of nesting season, or conduct pre-construction surveys and avoid any active nests.

				See Section 7.1.
bank swallow <i>Riparia riparia</i>	ST	Summer resident in riparian and other lowland habitats near rivers, lakes and the ocean in northern California. Nests colonially in excavated burrows on vertical cliffs and bank cuts (natural and manmade) with fine-textured soils. Historical nesting range in southern and central areas of California has been eliminated by habitat loss. Currently known to breed in Siskiyou, Shasta, and Lassen Cos., portions of the north coast, and along Sacramento River from Shasta Co. south to Yolo Co.	No Potential. No suitable vertical cliffs or cut-banks for nesting were observed within the project site. This species may occasionally forage in the project site.	No further actions are recommended.
black-crowned night heron <i>Nycticorax nycticorax</i>	none (breeding sites protected by CDFW)	Year-round resident. Nests colonially, usually in trees but also in patches of emergent vegetation. Rookery sites are often on islands and usually located adjacent to foraging areas: margins of lakes and bays.	No Potential. The project site does not support suitable nesting habitat.	No further actions are recommended.
black skimmer <i>Rynchops niger</i>	SSC	Found primarily in southern California; South San Francisco Bay has a small resident population. Nests colonially on gravel bars, low islets, and sandy beaches	Unlikely. The nearest occurrence for this species is located approximately 0.5 mile north of the project site, east of Johnson Landing.	Preconstruction surveys will be conducted within 600 feet of the Project site. See Section 7.1.
Western burrowing owl <i>Athene cunicularia hypugaea</i>	SSC	Year-round resident and winter visitor. Occurs in open, dry grasslands and scrub habitats with low-growing vegetation,	Low Potential. The nearest occurrence for this species is located approximately 2 miles southeast of the project site. Few suitable	Preconstruction surveys will be conducted within 600 feet of the Project site. See Section 7.1.

		perches and abundant mammal burrows. Preys upon insects and small vertebrates. Nests and roosts in old mammal burrows, most commonly those of ground squirrels.	burrows were observed within the project site.	
California black rail <i>Laterallus jamaicensis coturniculus</i>	ST, CFP	Year-round resident in marshes (saline to freshwater) with dense vegetation within four inches of the ground. Prefers larger, undisturbed marshes that have an extensive upper zone and are close to a major water source. Extremely secretive and cryptic.	Unlikely. The project site and salt ponds are not subject to tidal influence.	No further actions are recommended.
California least tern <i>Sternula antillarum browni</i>	FE, SE, CFP	Summer resident along the coast from San Francisco Bay south to northern Baja California; inland breeding also very rarely occurs. Nests colonially on barren or sparsely vegetated areas with sandy or gravelly substrates near water, including beaches, islands, and gravel bars. In San Francisco Bay, has also nested on salt pond margins.	Unlikely. The nearest occurrence for this species is approximately 0.7 mile north of the project site at the East Bay Regional Park District Hayward Recreation Shoreline.	Preconstruction surveys will be conducted within 600 feet of the Project site. See Section 7.1.
California Ridgway's (clapper) rail <i>Rallus obsoletus obsoletus</i>	FE, SE, CFP	Year-round resident in tidal marshes of the San Francisco Bay estuary. Requires tidal sloughs and intertidal mud flats for foraging, and dense marsh vegetation for nesting and cover. Typical habitat features abundant growth of cordgrass and pickleweed. Feeds primarily on molluscs and crustaceans.	Unlikely. The project site and salt ponds are not subject to tidal influence.	No further actions are recommended.

northern harrier <i>Circus hudsonius (cyaneus)</i>	SSC	Year-round resident and winter visitor. Found in open habitats including grasslands, prairies, marshes and agricultural areas. Nests on the ground in dense vegetation, typically near water or otherwise moist areas. Preys on small vertebrates.	No Potential. The project site and levees around salt ponds do not provide suitable nesting habitat.	No further actions are recommended.
San Francisco common yellowthroat <i>Geothlypis trichas sinuosa</i>	SSC	Resident of the San Francisco Bay region, in fresh and salt water marshes. Requires thick, continuous cover down to water surface for foraging; tall grasses, tule patches, willows for nesting.	Unlikely. The seasonal wetlands within the project site do not contain water perennially and the emergent vegetation within these features is short and not dense. The nearest documented occurrence is approximately 2 miles from the project site.	No further actions are recommended.
tricolored blackbird <i>Agelaius tricolor</i>	ST, SSC	Nearly endemic to California, where it is most numerous in the Central Valley and vicinity. Highly colonial, nesting in dense aggregations over or near freshwater in emergent growth or riparian thickets. Also uses flooded agricultural fields. Abundant insect prey near breeding areas essential.	No Potential. The project site does not include suitable emergent growth near freshwater or riparian thickets. The nearest documented occurrence is approximately 5 miles southeast of the project site.	No further actions are recommended.
western snowy plover <i>Charadrius alexandrinus nivosus</i>	FT, SSC	Federal listing applies only to the Pacific coastal population. Year-round resident and winter visitor. Occurs on sandy beaches, salt pond levees, and the shores of large alkali lakes. Nests on the ground, requiring sandy, gravelly or friable soils.	Unlikely. The closest documented occurrence is south of the project site in the Eden Landing Reserve.	Preconstruction surveys will be conducted within 600 feet of the Project site. See Section 7.1.
white-tailed kite		Year-round resident in coastal	Low Potential. The	Preconstruction

<i>Elanus leucurus</i>	CFP	and valley lowlands with scattered trees and large shrubs, including grasslands, marshes and agricultural areas. Nests in trees, of which the type and setting are highly variable. Preys on small mammals and other vertebrates.	project site does contain marginal nesting habitat for nesting for this species. White-tailed kites may occasionally forage within the project site	surveys will be conducted within 600 feet of the Project site. See Section 7.1.
yellow rail <i>Coturnicops noveboracensis</i>	SSC	Summer resident in eastern Sierra Nevada in Mono County, breeding in shallow freshwater marshes and wet meadows with dense vegetation. Also a rare winter visitor along the coast and other portions of the state. Extremely cryptic.	No Potential. The project site is outside of the nesting range for this species, therefore there is no potential for nesting for yellow rail. Yellow rail may occasionally winter near the project site.	No further actions are recommended.
Reptiles and Amphibians				
California tiger salamander <i>Ambystoma californiense</i>	FT, ST	Occurs in grasslands, oak savannah, and open woodlands with a mosaic of vernal pools or similar seasonal wetlands. Requires vernal pools or similarly inundated waters for breeding and larvae. Adults are fossorial utilizing small mammal burrows for estivation.	No Potential. No suitable habitat for this species is present within the project site.	No further actions are recommended.
Alameda whipsnake <i>Masticophis lateralis euryxanthus</i>	FT, ST	Inhabits chaparral and foothill-hardwood habitats in the eastern Bay Area. Prefers south-facing slopes and ravines with rock outcroppings where shrubs form a vegetative mosaic with oak trees and grasses and small mammal burrows provide basking and refuge.	No Potential. No suitable habitat for this species was observed within the project site.	No further actions are recommended.
California giant salamander <i>Dicamptodon ensatus</i>	SSC	Occurs in the north-central Coast Ranges. Moist coniferous and mixed forests are typical	No Potential. No suitable habitat for this species is present within the	No further actions are recommended.

		habitat; also uses woodland and chaparral. Adults are terrestrial and fossorial, breeding in cold, permanent or semi-permanent streams. Larvae usually remain aquatic for over a year.	project site.	
Pacific (western) pond turtle <i>Emys marmorata</i>	SSC	A thoroughly aquatic turtle of ponds, marshes, rivers, streams and irrigation ditches with aquatic vegetation. Require basking sites such as partially submerged logs, vegetation mats, or open mud banks, and suitable upland habitat (sandy banks or grassy open fields) for egg-laying.	No Potential. No suitable habitat for this species is present within the project site.	No further actions are recommended.
foothill yellow-legged frog <i>Rana boylei</i>	SC, SSC	Found in or adjacent to rocky streams in a variety of habitats. Prefers partly-shaded, shallow streams and riffles with a rocky substrate; requires at least some cobble-sized substrate for egg-laying. Needs at least 15 weeks to attain metamorphosis. Feeds on both aquatic and terrestrial invertebrates.	No Potential. No suitable habitat for this species is present within the project site.	No further actions are recommended.

FISH				
longfin smelt <i>Spirinchus thaleichthys</i>	FC, ST, SSC, RP	Euryhaline, nektonic and anadromous. Found in open waters of estuaries, mostly in middle or bottom of water column. Prefer salinities of 15 to 30 ppt, but can be found in completely freshwater to almost pure seawater.	No Potential. The Project site and salt ponds are not hydrologically connected to the San Francisco Bay.	No further actions are recommended.
steelhead - central CA coast DPS <i>Oncorhynchus mykiss irideus</i>	FT	Occurs from the Russian River south to Soquel Creek and Pajaro River. Also in San Francisco and San Pablo Bay Basins. Adults migrate upstream to spawn in cool, clear, well-oxygenated streams. Juveniles remain in fresh water for 1 or more years before migrating downstream to the ocean.	No Potential. The Project site and salt ponds are not hydrologically connected to the San Francisco Bay.	No further actions are recommended.
Russian River tule perch <i>Hysteroecarpus traski pomu</i>	SSC	Occurs in low elevation streams of the Russian River system. Requires clear, flowing water with abundant riparian cover and deep (>3 feet) pools.	No Potential. The Project site and salt ponds are not hydrologically connected to the San Francisco Bay.	No further actions are recommended.
Invertebrates				
Crotch bumblebee <i>Bombus crotchii</i>	SC	Range largely restricted to California, favoring grassland and scrub habitats. Typical of bumble bees, nests are usually constructed underground.	No Potential. No suitable habitat for this species is present within the project site.	No further actions are recommended.
monarch butterfly <i>Danaus plexippus</i>	SSI	Winter roost sites extend along the coast from northern Mendocino to Baja California, Mexico. Roosts located in wind-protected tree groves (eucalyptus, Monterey pine, Monterey cypress), with nectar and water sources nearby.	No Potential. No suitable habitat for roosting for this species is present within the project site. Monarch butterflies may occasionally fly through the project site.	No further actions are recommended.

western bumble bee <i>Bombus occidentalis</i>	SC	Formerly common throughout much of western North America; populations from southern British Columbia to central California have nearly disappeared (Xerces 2015). Occurs in a wide variety of habitat types. Nests are constructed annually in pre-existing cavities, usually on the ground (e.g. mammal burrows). Many plant species are visited and pollinated.	No Potential. The project site is outside of the current range for this species.	No further actions are recommended.
California freshwater shrimp <i>Syncaris pacificus</i>	FE, SE	Endemic to Marin, Napa, and Sonoma counties. Found in low elevation, low gradient streams where riparian cover is moderate to heavy. Shallow pools away from main stream flow. Winter: undercut banks with exposed roots. Summer: leafy branches touching water.	No Potential. The project site is outside of the current range for this species.	No further actions are recommended.

APPENDIX D – PRELIMINARY JURISDICTIONAL DETERMINATION MAP OF THE POINT EDEN PROJECT SITE

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- Potential Jurisdictional Wetlands (77,664 Sq. Ft., 1.69 Acre)
- Old Wash Station (548 Sq. Ft., 0.013 Acre)
- Data Points
- Monitoring Well
- Water Control Structure
- Project Site (~7.9 Acres)

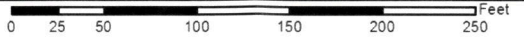
Please note that while M&A can estimate Corps regulated areas, only the Corps can confirm the extent of area falling under their jurisdiction. Thus, it is most important to have a confirmed Map from the Corps which can be relied upon for project planning purposes.

Potential Wetlands #	Sq. Ft.	Acres	Potential Wetlands #	Sq. Ft.	Acres	Potential Wetlands #	Sq. Ft.	Acres
W 1	3,967	0.091	W 11	55	0.001	W 21	623	0.014
W 2	37	0.001	W 12	35	0.001	W 22	4,390	0.101
W 3	284	0.007	W 13	175	0.004	W 23	7	0.000
W 4	114	0.0026	W 14	172	0.0039	W 24	45,256	1.0389
W 5	27	0.001	W 15	499	0.011	W 25	11,323	0.260
W 6	14	0.000	W 16	98	0.002			
W 7	540	0.012	W 17	333	0.008			
W 8	47	0.001	W 18	118	0.003			
W 9	348	0.008	W 19	1,752	0.040			
W 10	581	0.013	W 20	2,869	0.066			



Monk & Associates
 Environmental Consultants
 1136 Saranap Avenue, Suite Q
 Walnut Creek, California 94595
 (925) 947-4867

Attachment B Sheet 1. Draft Wetland Delineation Map
 4150 Point Eden Way Project Site
 Hayward, California



Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AEX, Getmapping, Aerogrid, IGN, IGP, swisstopo, and the GIS User Community

US Army Corps of Engineers
 San Francisco District
 Regulatory Division

Preliminary Jurisdictional Determination
 Pursuant to Clean Water Act Section 404

4150 Point Eden Way
 (APNs 461-85-19 and 461-85-20-2)
 Hayward, Alameda County, California

Study Area Boundary (7.8 acres)
 Wetlands (1.69 acres)

File No: 2003-27978 S Date: January 25, 2016

Scale: 1 inch = 100 feet
 Aerial Photograph Source: ESRI
 Map Preparation Date: September 2, 2015

APPENDIX E – DELINEATION MAP OF THE 32-ACRE “PRESERVE”

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- Control Point
- Data Points
- Wetlands (41,455 Sq. Ft., 0.95 Acre)
- Open Water Salt Ponds (Other Waters) (26.14 Acres)
- Barren Mudflat (Other Waters) (137,062 Sq. Ft., 3.2 Acres)
- Ditch 1 (Other Waters) (24,792 Sq. Ft., 0.57 Acre)
- Limits of Delineation (32.6 Acres)

Wetland #	Sq. Ft.	Acres	Wetland #	Sq. Ft.	Acres	Wetland #	Sq. Ft.	Acres
W 1	3,393	0.078	W 8	2,093	0.048	W 14	128	0.003
W 2	601	0.014	W 9	7,622	0.175	W 15	4,254	0.098
W 3	2,488	0.057	W 10	348	0.008	W 16	375	0.009
W 4	395	0.009	W 11	3,182	0.073	W 17	763	0.018
W 5	3,749	0.086	W 12	507	0.012	W 18	1,547	0.036
W 6	7,149	0.164	W 13	548	0.013	W 19	51	0.001
W 7	2,262	0.052						

Other Waters #	Sq. Ft.	Acres	Barren Mud Flat #	Sq. Ft.	Acres	Pond #	Sq. Ft.	Acres
OW 1	14,935	0.343	B 1	4,208	0.097	Pond A	39,801	0.914
OW 2	7,389	0.170	B 2	126,378	2.901	Pond B	308,465	7.081
OW 3	2,468	0.057	B 3	2,049	0.047	Pond C	315,438	7.241
			B 4	513	0.012	Pond D	25,629	0.588
			B 5	3,914	0.090	Pond E	273,405	6.277
						Pond F	175,942	4.039

Note: M&A acknowledges that while M&A maps areas it finds to be potential waters of the United States, only the Corps can determine the actual acreages of "Waters of the U.S."

