FINAL ENVIRONMENTAL IMPACT REPORT
EDEN LANDING ECOLOGICAL RESERVE
(BAUMBERG TRACT)
RESTORATION AND
MANAGEMENT PLAN

SCH #99032078

Prepared By:

LSA Associates, Inc.

under contract to:
Resource Management International, Inc. (RMI)

Prepared for:

California Department of Fish and Game
Central Coast Region
P. O. Box 47
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7329 Silverado Trail
Napa, CA 94558

Under contract to The Wildlife Conservation Board

March 2000

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August 1999

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EXECUTIVE SUMMARY

Project Description

The Draft Environmental Impact Report, contained herein, evaluates the potential environmental impacts resulting from the proposed restoration and management of the Eden Landing Ecological Reserve (Baumberg Tract). Located in the southwestern portion of the City of Hayward, the Eden Landing Ecological Reserve consists of approximately 835 acres of inactive salt production ponds, diked salt marsh, seasonal/ruderal wetlands, and portions of Mt. Eden Creek. The site was formerly part of a network of salt harvesting operations known as the Baumberg Tract that extended along the East Bay shoreline. Since salt production ceased in 1972, the site has been undeveloped and provided seasonal feeding, roosting, and nesting habitat for a wide variety of shorebirds and waterfowl. The reserve area also includes existing State Lands within Mt. Eden Creek and the tidal marshes outboard of Cargill's active salt production ponds and a 5.3-acre CalTrans parcel.

The purchase and restoration of the site represents a major commitment by the Wildlife Conservation Board (WCB) and the California Department of Fish and Game (CDFG) to the restoration and recovery of a healthy San Francisco Bay ecosystem. Specific objectives of the proposed Restoration and Management Plan for the Eden Landing Ecological Reserve are to:

- Restore full tidal action and establish salt marsh on 570 acres of abandoned salt ponds (515 acres), removed levees (25 acres), and existing diked marsh and active salt ponds (30 acres, cut off segment of Mt. Eden Creek and the recreated North Creek channel).
- Provide water control features for enhancement of salt panne/snowy plover habitat on 126 acres of former salt ponds.
- Maintain 95 acres of existing seasonal wetlands and related uses.

Tidal restoration is proposed to occur in a large block encompassing the central and southern portions of the tract (northern crystallizer pond complex 8B to 13B, the pickle pond complex 7B, 7C, 17B, and 17C, and southern crystallizer pond complex 2B to 6B). Three ponds in northwestern portion of the site (14B, 15B, and 16B)would be retained and managed to promote snowy plover, shorebird, and associated species salt panne habitat. Seasonal wetlands would be retained in their current conditions in ponds 1B and 20B on the eastern edge of the reserve. These two areas may be enhanced or used for tidal restoration in the future. Implementation of the project will result in the creation of approximately 27 acres of wetland as a result of removal of non-essential roads, dikes, and levees.

Public access would be provided along a trail alignment located on the northern and eastern boundary of the reserve. The trail, to be funded and constructed by the East Bay Regional Park District, would connect to a pedestrian overpass that is expected to be constructed by CalTrans as part of the Highway 92 widening project. Other access points include Eden Landing Road and the proposed residential development on the Oliver Trust West parcel to the east of the Eden

Landing Ecological Reserve.

The plan also provides the mitigation commitments for the:

- Restoration of 350 acres of tidal salt marsh habitat for the salt marsh harvest mouse and California clapper rail in partial fulfillment of the City of San Jose's mitigation requirements for continuation of wastewater discharges into San Francisco Bay.

- Creation of 17.5 acres of new jurisdictional wetlands, including a minimum of 12.6 acres of salt marsh harvest mouse habitat as mitigation for the construction of the Dixon Landing Road interchange on I-880 for the Cities of Milpitas and Fremont and CalTrans.

Measures and procedures are also described to allow for the continued operations and maintenance of existing public and private facilities within the reserve boundaries and the proposed restoration and management areas. These facilities include access and brine transfer facilities for Cargill Salt Corporation's adjacent operations, the East Bay Dischargers Authority (EBDA) wastewater treatment pipeline, and two Pacific Gas and Electric Company high voltage transmission lines.

Environmental Impacts and Mitigation Measures

As defined in Section 15382 of the California Environmental Quality Act (CEQA) Guidelines, an environmentally significant impact "means a substantial, or potentially substantial, adverse change in any of the physical conditions within the area affected by the project including land, air, water, minerals, flora, fauna, ambient noise, and objects of historic or aesthetic significance. Both potentially significant and less than significant environmental impacts associated with the proposed project are analyzed within the body of this document.

Measures to minimize potential environmental effects resulting from the establishment of the proposed Ecological Reserve have been incorporated into the project. These measures are consistent with Wildlife Conservation Board's and the Department of Fish and Game's commitment to ensuring that possible environmental impacts to the community are addressed form the onset as part of the development process.

Potential impacts and recommended mitigation measures associated with the proposed project are summarized in Table S-1. Each impact is assigned a number (e.g., for the Biological Resources section, B1, B2, etc.) Mitigation measures in the table are listed to correspond with the impact (e.g., for impact B1, applicable mitigation measures would be numbered B1.1, B1.2, etc.). The residual significance of potential impacts after mitigation measure implementation is also identified.

Alternatives

In accordance with the CEQA Guidelines, alternatives must be evaluated that could reduce at least one significant impact from the proposed project. The Draft EIR evaluates a "no-project" alternative and three on-site alternatives and compares the environmental impacts associated with each of these alternatives with those of the proposed project. The alternatives include the following:

- *Alternative I:* This alternative would retain and manage snowy plover habitat in the lower half of pond 16B where the majority of recent snowy plover nesting activity had been centered. The plan also includes restoring snowy plover habitat on pond 17B which had historically (mid 1980s) provided the primary habitat area on the site. Tidal marsh restoration would be massed across the northern tier of former crystallizer and bittern ponds and in the major portion of the southern crystallizers. A corridor of tidal marsh west of the snowy plover habitat in pond 17B would connect the two primary tidal restoration blocks. Seasonal wetland habitat would be located in the Perry property (pond 20B) and the portions of ponds 2B, 3B, and 6B east of the EBDA easement

- *Alternative II:* This alternative would mass all of the tidal restoration to the west of the EBDA easement to provide a large contiguous block of tidal habitat and which would be the closest to the tidal sources along Mt. Eden Creek on the west and North Creek to the south. Existing snowy plover or panne habitat would be recreated and managed in a broad area east of the EBDA alignment.

- *Alternative III:* This is a hybrid alternative which preserve larger areas of existing snowy plover habitat and shorebird habitat as in Alternative II, while providing a large mass of contiguous tidal marsh as with Alternative III.

- *Alternative IV, No Project:* No change from existing conditions would occur.

Based upon a review of the possible environmental impacts resulting from the proposed project and alternatives, Alternative IV, the No Project Alternative, would have the least potential to significantly adversely impact the existing physical environment as there would be no change in current management or configuration of the site. The No Project alternative, however, would not achieve the objectives for the purchase of the property (tidal marsh restoration) and would not provide long term beneficial impacts associated with the restoration of wetlands and endangered species habitat. As required by the CEQA Guidelines, when the no-project alternative is found to have the least adverse environmental impacts, CEQA requires that an "environmentally superior alternative" be determined from remaining development alternatives. The "environmentally superior alternative" is the proposed project, with one alternative channel alignment, to reduce loss of existing habitat for the endangered salt marsh harvest mouse.

Table S-1 - Summary of Potential Impacts and Mitigation Measures

The following impacts and mitigation measures are summarized from the following section of this Draft Supplemental EIR. Please refer to the specific section for details of both impacts and mitigation measures.

Potential Impacts	Pre-Mitigation Significance	Mitigation Measures	Residual Significant Impact
HYDROLOGY, DRAINAGE, AND WATER QUALITY			
W-1:Absorption Rates and Drainage Patterns: The project will not change absorption rates since the basic character of the land a open space devoted to wetland habitat will not be changed. Drainage patterns will be substantially, but beneficially changed as a result of the project.	LTS	W-1: No mitigation measure would be necessary.	LTS
W-2:Exposure of Adjacent Properties or People to Flooding: The exposure of people or adjacent properties will not be increased. The existing site levees are designed for or maintained to provide flood protection for adjacent properties; however, the existing main levees on the perimeter of the tidal restoration areas will be retained and maintained to provide the current level of flood protection. These main levees are sufficient to contain the expected normal high tides within the tidal restoration area. No change in management is proposed for Pond 20B, the old Perry Property on the eastern edge of the reserve; therefore, no impacts to adjacent properties are anticipated.	LTS	W-2a: CDFG shall retain and maintain the existing main perimeter levees which hydrologically separate the restoration and management area from adjacent properties. This measure has been incorporated into the proposed restoration and management plan as part of the project description. W-2b: There should be no change in water management in pond 20B (the Perry Parcel) until hydrologic studies are conducted and measures are implemented to protect the adjacent Weber Oliver parcels from flooding or increased soil moisture/shallow groundwater levels.	LTS
W-3: Water Quality/Salinity: The reintroduction of tidal action to the site would begin to dissolve salts contained within the substrates in the former salt production ponds on the site. as a result of the leeching and release of salts within the pond substrates, salinity levels in the substrate would decline or rise to levels essentially in balance with the salinity of tidal water.	LTS	W-3: No mitigation measure would be necessary.	LTS
W-4: Groundwater: Restoration of the site to tidal action will not adversely affect groundwater resources, and may have some positive, long term beneficial impact by lowering groundwater salinity to levels comparable to natural conditions.	LTS	W-4: No mitigation measure would be necessary.	LTS

Potential Impacts	Pre-Mitigation Significance	Mitigation Measures	Residual Significant Impact
BIOLOGICAL RESOURCES			
B-1: Conversion of Seasonally Flooded Habitats to Perennial Marsh: Tidal restoration of previously seasonally flooded ponds would alter the conditions that make the areas attractive to some species of water birds.	LTS	B-1: No mitigation measure would be necessary, as changes in habitat conditions are not anticipated to adversely impact water bird populations in the area, and would have a significant, long term positive effect on tidal marsh dependent species such as the salt marsh harvest mouse, salt marsh wandering shrew, and California clapper rail.	LTS
B-2: Panne-Dependent Species: The proposed management measures will provide more consistent flood-up dates (using bay water rather than relying on rainfall), structures to better control water levels to desired depths, and the ability to draw-down water levels to expose nesting substrates at appropriate times of the year. These conditions are designed to maintain and/or improve that habitat conditions for these species.	LTS	B-2: No mitigation measure would be necessary.	LTS
B-3: Fish: The restoration of tidal action to the site will open up large areas to use by fish. At low tide, fish, potentially including salmonids such as steelhead and chinook, could become stranded in backwater areas and subject to predation, dehydration, or suffocation.	LTS	B-3: No mitigation measure would be necessary, as the proposed implementation plan includes excavation of a tidal drainage network wherein channels are expected to retain standing water even at low tides, and should provide sufficient habitat and cover for fish to move in and out of the restored areas, regardless of tidal cycle.	LTS

Potential Impacts	Pre-Mitigation Significance	Mitigation Measures	Residual Significant Impact
B-4: Take (harm or harass) Listed Animal Species: Construction associated with the proposed restoration project would potentially result in the direct mortality of special status species and/or temporary disturbance impacts to snowy plover and California clapper rail breeding habitat on the project site.	S	Construction for implementation of the Eden Landing Ecological Reserve Restoration and Management Plan would be timed to avoid impact to critical resources. For channel excavation within the existing marsh in the lower and upper Mt. Eden Creek channel segments, fabric (silt fence) or heavy gage plastic fences will be erected along the edges of the excavation areas. These constructions areas shall be trapped and all salt marsh harvest mice and special status species shall be removed prior to construction in order to prevent take of the salt marsh harvest mouse. The exclusion fences shall be maintained in working condition through completion of the work. Additionally, no construction work/channel excavation shall occur within 700 feet of clapper rail nesting habitat during the nesting season between March 15 and August 1, unless prior monitoring studies indicate no clapper rails nesting activity. This timing constraint is limited to the lower 1,000 feet of the Mt. Eden Creek channel. Qualified biological monitors knowledgeable of the restoration and management plan goals and objectives and familiar with salt marsh harvest mouse, clapper rail, and snowy plover biology and habitat requirements shall be utilized to oversee construction activities.	LTS

Potential Impacts	Pre-Mitigation Significance	Mitigation Measures	Residual Significant Impact
B-5: Loss of Habitat for the Salt Marsh Harvest Mouse: Excavation in the existing Mt. Eden Creek channel would result in the loss of approximately 4.8 acres of pickleweed-dominated habitat for the salt marsh harvest mouse.	S	B-5: Measures are incorporated into the project implementation (see Mitigation Measure B-4 above) to relocate salt marsh harvest mice and other native small mammal species from construction areas. This short term, minor reduction in available habitat for channel construction would be offset by the long term establishment of tidal marsh habitat in the restoration area.	LTS
UTILITIES AND SERVICE SYSTEMS			
C-1: Mosquito Abatement: Although tidal restoration is generally considered beneficial and is expected to reduce current mosquito abatement requirements, poorly drained backwater areas or panne ponds which retain standing water for extended periods of time would potentially create breeding habitat and mosquito hatches.	LTS	C-1: Project design shall incorporate applicable control methods. provide adequate access to backwater areas, and minimize backwater ponding and poor drainage to maximize mosquito abatement on the project site. The CDFG will continue to cooperate with Alameda County Mosquito Abatement District to allow access and implement appropriate control measures.	LTS

Potential Impacts	Pre-Mitigation Significance	Mitigation Measures	Residual Significant Impact
C-2: Implementation of the proposed project could affect costs and the ability of service providers to access existing facilities on site for the purposes of operations, maintenance, and emergency repair.	S	C-2a: In order not to unreasonably restrict access or significantly increase potential repair costs over the remainder of the EBDA easement while achieving the desired tidal restoration, a broad low berm will be constructed over EBDA's easement. Equipment use of the berm would only be for emergency situations or scheduled and permitted repair of leaks in the pipeline. This berm could not be used for regular maintenance or inspections. The berm is proposed to be supra-tidal, i.e., above the normal high tide range. The berm would also have periodic low point/breaks in order to provide water flow to both sides of the berm. The top of the berm would be designed to an elevation suitable for high marsh community establishment (MHHW plus 0.5 feet), but not of an elevation that would create upland conditions. The berm will allow for emergency equipment access without the need for significant de-watering of adjacent wetlands. If necessary, channel breaks could be filled to allow for emergency access. C-2b: The following measures are incorporated into the project description and should be formalized in an operational agreement with the two entities to mitigate potential effects on EBDA and PG&E facilities: • Normal Maintenance/Inspection • Emergency Situations • Repair Activities • Protection Measures/Conditions	LTS
C-3: Effect on ACFCD Pump Station and Outfall: Construction for and restoration of tidal conditions in Mt. Eden Creek and the remainder of the restoration area could adversely affect the operation of the ACFCD pump station, force main, and outfall. Restoration of tidal action may also affect the depth of water in Mt. Eden Creek at the outfall, which may impact operation of the pumps and produce siltation at the outfall.	S	C-3: The presence of the ACFCD force main and outfall should be identified on any construction plans and noted that these facilities must not be altered or disturbed without prior permission from ACFCD.	LTS

- Public Services
- Biological Resources
- Cultural Resources
- Recreation

In accordance with CEQA Guidelines, the DEIR, contained herein, will be available for public review for a 45-day period, during which, comments on its content, accuracy, and completeness may be submitted by federal, State, County, and other local agencies, public interest groups, and members of the public at-large. A public hearing may be scheduled during the 45-day review period. The Lead Agency for the project will provide prior notice of the hearing. Oral comments may be presented at this hearing. Following the close of the public comment period, Responses to Comments will be prepared to provide responses to written and verbal comments received during the DEIR review period. As applicable and needed, DEIR text changes and clarifications will also be included. A mitigation, monitoring, and reporting program, as required under the CEQA Guidelines, will be prepared to ensure that mitigation measures adopted from the EIR will be implemented and verified as part of development of the proposed project.

The combined DEIR and the Responses to Comments will comprise the Final EIR to be considered by the CDFG for certification under CEQA.

Copies of the DEIR are available for review at the following locations:

Department of Fish and Game

Region 3 Headquarters
7329 Silverado Trail
Napa, CA 94588
(707) 944-5500

City of Hayward Main Library
835 "C" Street
Hayward, CA
(510) 293-8685

Hayward Regional Shoreline Interpretive Center
4901 Breakwater Road
Hayward, CA
(510) 881-6751

Documents, reports, maps, and other materials, cited in the Supplemental EIR are hereby incorporated by reference and are available for review at the Department of Fish and Game in Napa.

1.2 Purpose of the EIR

The EIR is intended as an objective informational document to be used by the lead agency and responsible agencies in considering the approval and implementation of the Eden Landing Ecological Reserve Restoration and Management Plan. The purpose of the EIR is to identify significant impacts of the proposed project on the physical environment, to determine the extent to which these impacts could be reduced or avoided, and to identify and evaluate feasible alternatives to the project. When the analysis from the EIR indicates that a project could cause significant impacts on the physical environment, the CDFG, as the lead agency, and responsible agencies that have authority over the project are required to take one or more of the following

actions:

- require changes or alterations in the project that avoid or substantially lessen the significant impacts;
- approve one of the alternatives rather than the proposed project;
- find, in writing, that specific economic, social, and other considerations make infeasible the mitigation measures or project alternatives identified in the EIR (leading to a "statement of overriding considerations").

Mitigation measures, recommended to lessen potentially significant environmental impacts as part of the DEIR analysis and subsequently approved by the Lead Agency as part of the project, are subject to a monitoring program. The intent of the monitoring program is to ensure that the recommended mitigation measures will actually be implemented and verified.

1.3 Organization and Content of the Draft EIR

The chapters of the Draft EIR are organized as follows:

EXECUTIVE SUMMARY

The Executive Summary includes a brief description of the proposed project, explanation of environmental impacts, mitigation measures, level of significance, and the alternatives to the project.

1.0. INTRODUCTION

The Introduction describes the environmental review process, intended purposes of the EIR, and organization of the document.

2.0 PROJECT DESCRIPTION

This chapter includes a discussion of the project location, objectives, project description, conformance with plans and policies, and applicable regulatory and permitting requirements.

3.0 ENVIRONMENTAL SETTING, IMPACTS ANALYSIS, AND MITIGATION MEASURES

This chapter is organized into the following sections:

3.1 Hydrology and Water Quality
3.2 Biological Resources
3.3 Utilities and Service Systems
3.4 Cultural Resources
3.5 Recreation

In each topical area, the following information/sections are presented:

- *Setting.* The setting describes the existing environmental conditions on and, as appropriate, adjacent to the proposed project site.

- *Criteria for Determining Significance.* Criteria used to determine the threshold of significance of an impact.

- *Impact Analysis.* Impacts are assigned a number and each impact resulting from the proposed project is described. The level of significance of the impact is determined by assessing the impact relative to the significance criteria.

- *Mitigation Measures.* This subsection identifies mitigation measures to reduce significant impacts resulting from the implementation of the proposed project. The discussion of mitigation measures will also identify any significant impacts that could be caused by mitigation. Each mitigation measure is assigned the same impact number, followed by a number for each mitigation for that impact (e.g., mitigation measures for Impact BIO-1 are identified as BIO-1a, 1b, etc.) To correlate the applicable mitigation(s) measures to the impact.

- *Level of Significance After Mitigation.* This subsection determines the significance of an impact based upon the assumption that identified mitigation measures are implemented.

4.0 ALTERNATIVES TO THE PROPOSED PROJECT

The alternatives chapter includes a summary of the purposes of alternatives evaluation under the CEQA Guidelines. The process of defining the project and its evolutions are described along with the determination of alternatives. Using the same resource topics as the proposed project, the potential physical environmental impacts of the No-Project Alternative and the three habitat configuration alternatives are discussed as mandated by CEQA Guidelines. The "Environmentally Superior Alternative" is identified.

5.0 TOPICAL ISSUES AND IMPACT OVERVIEW

This chapter provides a summary overview of impacts resulting from the project, evaluates growth-inducing impacts, describes irreversible changes, and addresses other topics required under the CEQA Guidelines.

6.0. PREPARERS OF THE EIR

A list of the environmental consulting firms and staff that prepared the EIR.

7.0 PERSONS CONTACTED

A list of individuals who were contacted for information relevant to the preparation of the EIR.

8.0 REFERENCES

A list of references used in the preparation of the EIR.

APPENDICES

The appendices include copies of the Notice of Preparation and Initial Study, comment letters received during the 30-day review period.

2.0 PROJECT DESCRIPTION

2.1 Regional Location

The City of Hayward, California is located in the southern portion of Alameda County, within the San Francisco Bay Area. Portions of the City, including the project area, are situated immediately adjacent to San Francisco Bay. These areas comprise the Hayward City Shoreline Area, a segment of the East Bay shoreline. Adjacent cities include the City of Fremont and City of Union City to the south, the City of Pleasanton to the east, and the City of San Lorenzo to the north. Regional access to the City of Hayward is provided via Interstate 880 (Nimitz Freeway) and Interstate 580. Access to the City Shoreline Area is provided via State Highway 92. Figure 1 depicts the regional location.

2.2 Project Location and Site Description

The Eden Landing Ecological Reserve is located in the southwestern portion of Hayward, California along the East Bay shoreline south of Highway 92 and west of the Southern Pacific Railroad (See Figure 2, Project Vicinity). The Eden Landing Ecological Reserve is bounded on the north by business and commercial development, and on the east by the community of Baumberg, a modest residential area, and two properties known as the Oliver and Weber Tracts. To the south and west, the site is surrounded by active salt production ponds owned by the Cargill - Salt Division and several hundred acres of tidal salt marsh, known as the Whale's Tail Marsh, fronting San Francisco Bay. The tract is connected to San Francisco Bay via the Mt. Eden Slough which is largely blocked by siltation and an open brine distribution canal which is used to transport brine taken in from the Bay into Cargill's ponds 10 and 11 through the reserve to existing Cargill salt production ponds south and west of the reserve. Figure 2 also provides locations for place names and pond identification numbers referred to in the DEIR.

The Eden Landing Ecological Reserve consists of approximately 835 acres of inactive salt production ponds, diked salt marsh, seasonal/ruderal wetlands, and portions of Mt. Eden Creek. The site was formerly part of a network of salt harvesting operations that extended along the East Bay shoreline. Since salt production ceased in 1972, the site has been undeveloped and provided seasonal feeding, roosting, and nesting habitat for a wide variety of shorebirds and waterfowl. The restoration and management area also includes existing State Lands within Mt. Eden Creek and the tidal marshes outboard of Cargill's active salt production ponds and a 5.3-acre CalTrans parcel. Figure 3 depicts the existing conditions on the project site.

2.3 Site History

The Eden Landing Ecological Reserve was originally part of a vast system of tidal salt marshes, sloughs, and mudflats which bordered San Francisco Bay and provided food and habitat for a wide variety of waterfowl and other wildlife. Throughout the 1800's, the bulk of the tidal marshland throughout the Bay area, including the Eden Landing Ecological Reserve, was diked off from the bay in order to provide pasture land for cattle. In the late 1800's, the Baumberg Tract was converted into ponds for salt harvesting and production, which continued until 1972.

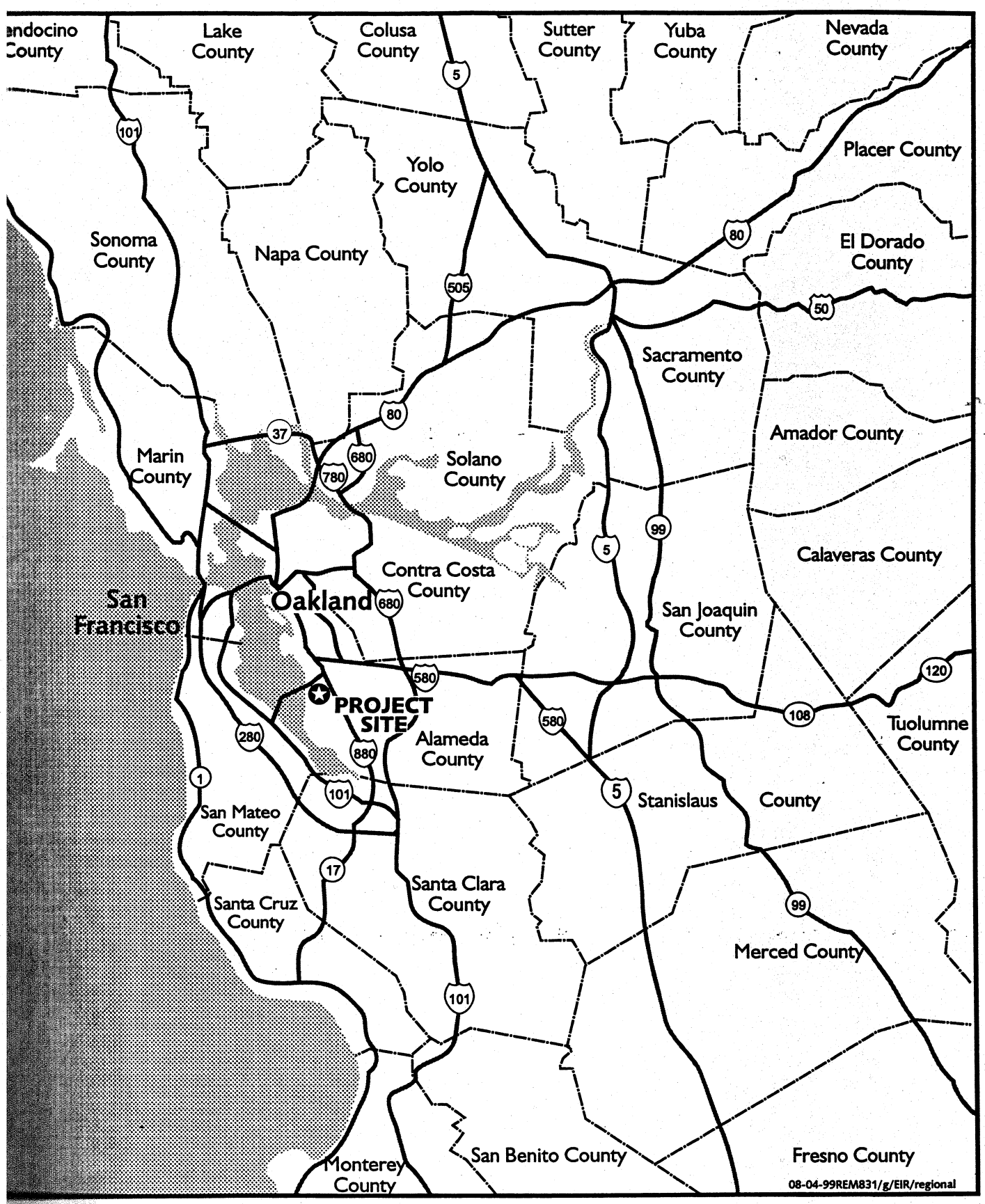


Figure 1. Eden Landing Ecological Reserve Regional Site Location Map

N

Scale in miles

0 20

EDEN LANDING ECOLOGICAL RESERVE
RESTORATION AND MANAGEMENT PLAN

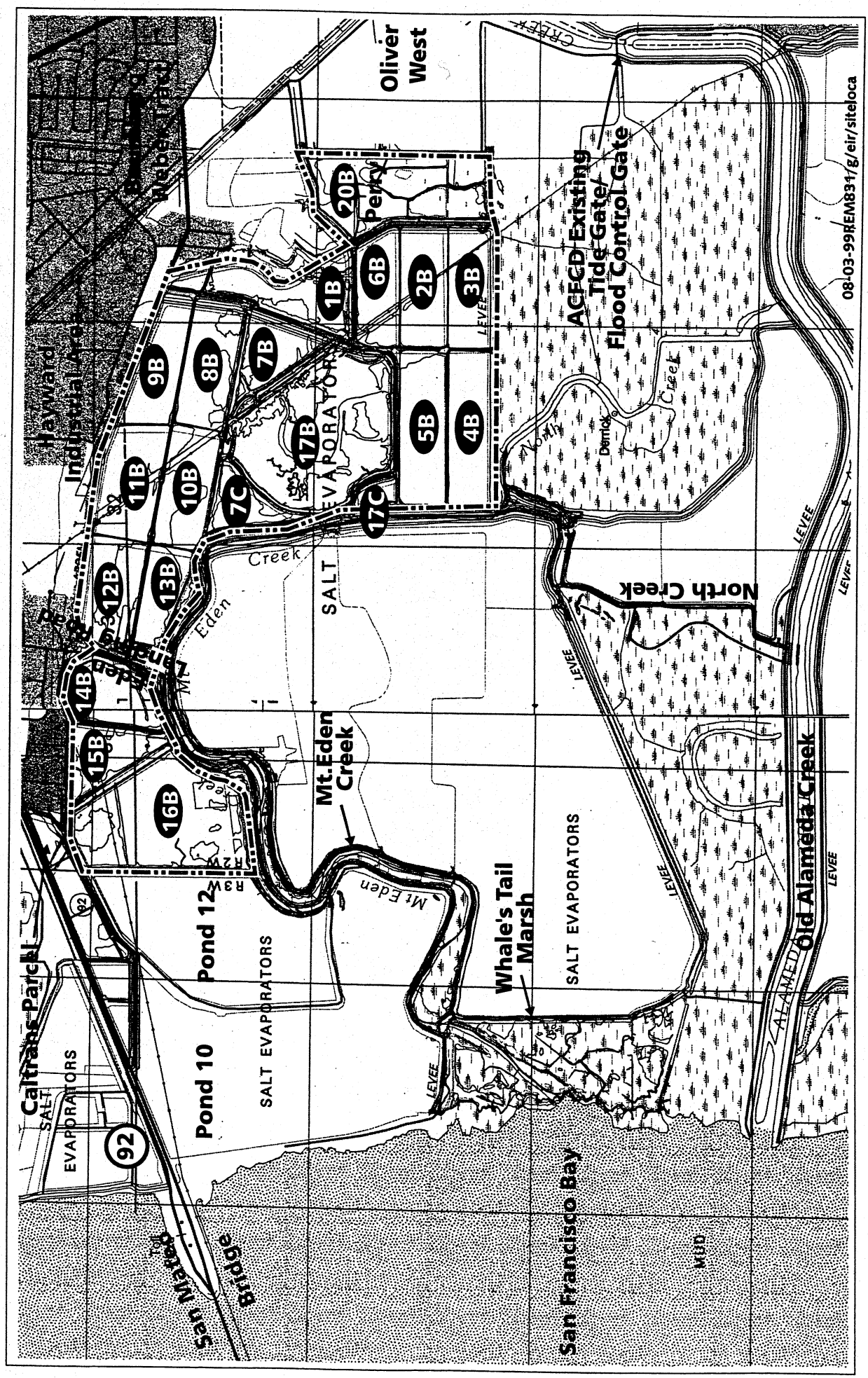


Figure 2. Site Location and Place Names

N

Scale in feet

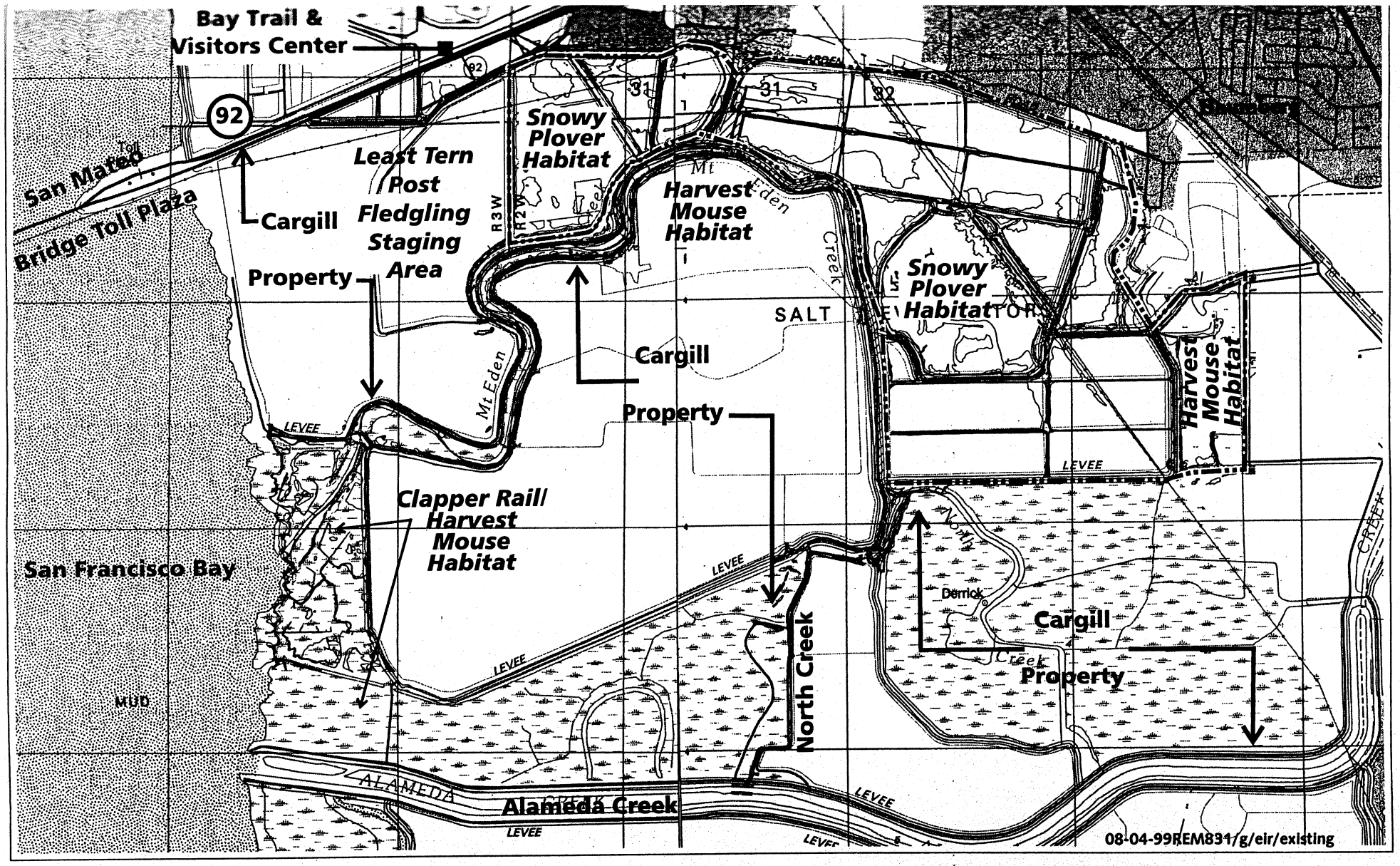


Figure 3. Existing Conditions

N

Scale in feet

0 2000

EDEN LANDING ECOLOGICAL RESERVE
RESTORATION AND MANAGEMENT PLAN

The site currently consists of 20 former salt production ponds separated by a system of man-made levees. Most of the ponds are interconnected by a network of culverts, ditches, and other water control structures typically used in salt harvesting operations.

The Oliver and Weber tracts and an 58-acre area known as the Perry Gun Club (Pond 20B), located east of and adjacent to the Eden Landing Ecological Reserve salt production ponds (Figure 2), were historically used for agricultural, some salt production and later recreational purposes. During the latter part of the 19th century and the majority of the 20th century, recreational duck hunting clubs were located on these properties. Ponds were created and seasonally flooded in order to attract water birds. During the early 1980's duck hunting operations on the Weber and Perry properties ceased; however, the ponds and associated levees remain. During the same period, the Oliver property was converted back to agricultural land used for the production of hay. The property is currently used for the production of ornamental gladioli and has recently been approved by the City of Hayward for residential development. The Perry property was acquired by the WCB and is part of the reserve.

In the 1980's, the reserve property was proposed for development by the Shorelands Corporation. The development proposal, involving construction of horse racing facilities and a business/commercial center, was abandoned in 1990 due, in part, to environmental concerns relating to impacts to wetlands, seasonal ponding habitat for migratory water birds, the endangered salt marsh harvest mouse and California clapper rail, and the western snowy plover. In 1984 portions of the site, including Mt. Eden Creek and the adjacent salt ponds, were identified and designated by the United States Fish & Wildlife Service (FWS) as essential habitat for the recovery of the endangered California clapper rail and salt marsh harvest mouse (U.S. Fish and Wildlife Service 1984). In addition, the area was included in the City of Hayward's recent effort to develop a "South of Route 92" specific planning process. The Baumberg Tract was removed from the planning area when it was acquired by the WCB for the Department of Fish and Game.

2.4 Project Objectives

The purchase and restoration of the Baumberg Tract, renamed the Eden Landing Ecological Reserve, represents a major commitment by the WCB and the California Department of Fish and Game (CDFG) to the restoration and recovery of a healthy San Francisco Bay ecosystem. The major goals of the Restoration and Management Plan for the Eden Landing Ecological Reserve are to:

- Restore tidal influence in order to re-establish approximately 500 to 600 acres of tidal marsh and immediately adjacent upland habitat;
- Restore and enhance approximately 200 to 300 acres of seasonal wetlands and immediately adjacent upland habitat; and
- Provide public access, including continuation of the Bay Trail through the site, in a manner that is compatible with wildlife objectives.

2.5 Project Characteristics

The proposed restoration and management plan for the Eden Landing Ecological Reserve is depicted on Figure 4. Specific objectives of the proposed Restoration and Management Plan for the Eden Landing Ecological Reserve are to:

- Restore full tidal action and establish salt marsh on 570 acres of abandoned salt ponds (515 acres), removed levees (25 acres), and existing diked marsh and active salt ponds (30 acres, cut off segment of Mt. Eden Creek and the recreated North Creek channel).

- Provide water control features for enhancement of salt panne/snowy plover habitat on 126 acres of former salt ponds.

- Maintain 95 acres of existing seasonal wetlands and related uses.

Tidal restoration is proposed to occur in a large block encompassing the northern crystallizer pond complex (8B to 13B), the pickle pond complex (7B, 7C, 17B, and 17C), and southern crystallizer pond complex (2B to 6B). Ponds 14B, 15B, and 16B in the northwestern portion of the site would be retained and managed to promote snowy plover, shorebird, and associated species panne habitat. Seasonal wetlands would be retained in their current conditions in ponds 1B and 20B on the eastern edge of the reserve. These two areas may enhanced or used for tidal restoration in the future. Implementation of the project will result in the creation of approximately 27 acres of wetland as a result of removal of non-essential roads, dikes, and levees.

Public access would be provided along a trail alignment located along the northern and eastern boundary of the reserve. The trail, to be funded and constructed by the East Bay Regional Park District, would connect to a pedestrian overpass that is expected to be constructed by CalTrans as part of the Highway 92 widening project. Other access points include Eden Landing Road and the proposed residential development on the Oliver Trust West parcel to the east of the Eden Landing Ecological Reserve.

The plan also satisfies the mitigation commitments for the:

- Restoration of 350 acres of tidal salt marsh habitat for the salt marsh harvest mouse and California clapper rail in partial fulfillment of the City of San Jose's mitigation requirements for continuation of wastewater discharges into San Francisco Bay.

- Creation of 17.5 acres of new jurisdictional wetlands, including a minimum of 12.6 acres of salt marsh harvest mouse habitat as mitigation for the construction of the Dixon Landing Road interchange on I-880 for the Cities of Milpitas and Fremont and CalTrans.

Measure and procedures are also described to allow for the continued operations and maintenance of existing public and private facilities within the reserve boundaries and the proposed restoration and management areas. These facilities include access and brine transfer facilities for Cargill Salt Corporation's adjacent operations, the East Bay Dischargers Authority (EBDA) wastewater treatment pipeline, and two Pacific Gas and Electric Company high voltage

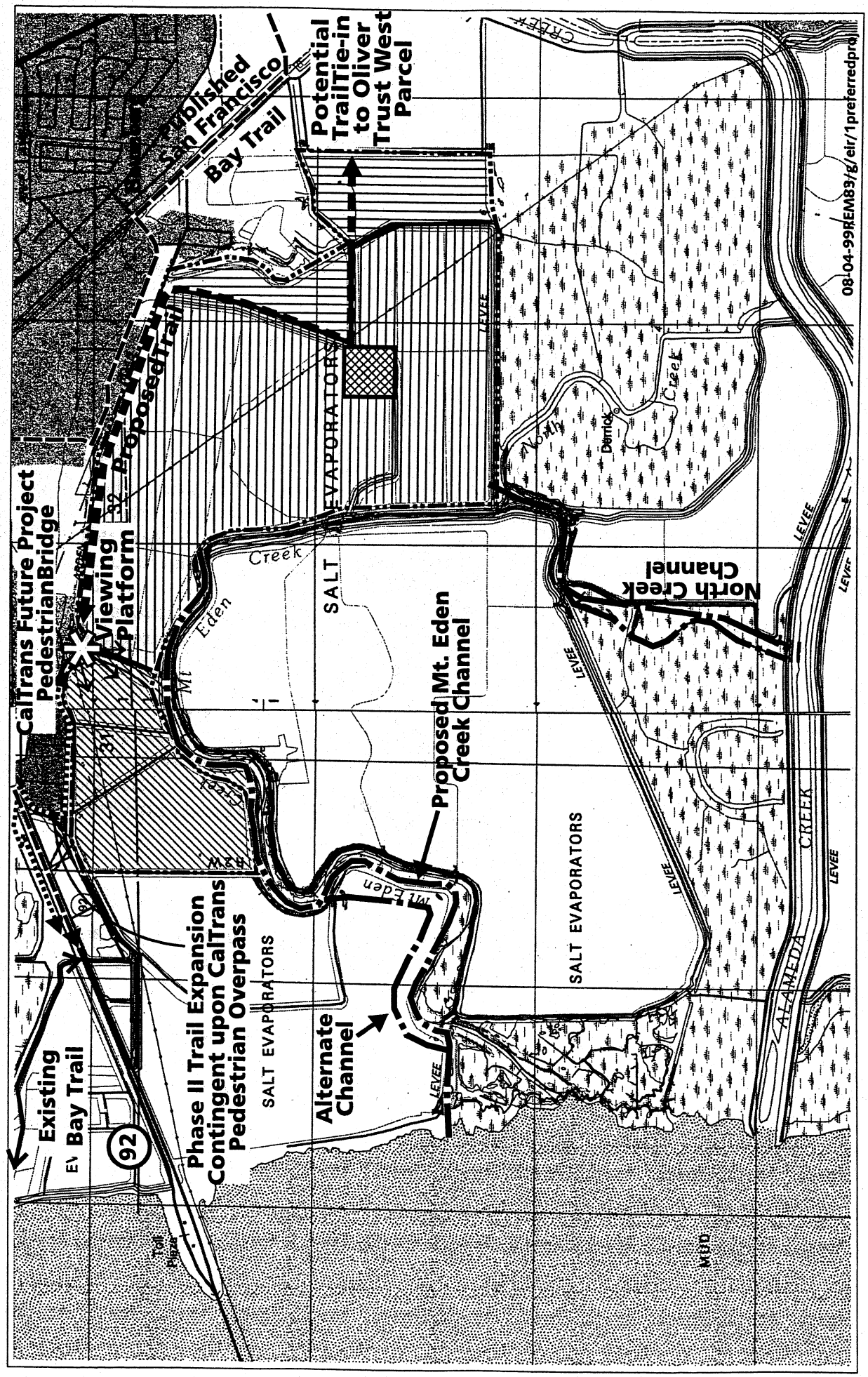


Figure 4. Preferred Project

transmission lines.

Specific project components/actions are described below. More detailed descriptions of the design considerations and background information is presented the Restoration and Management Plan (RMI et al. 1999).

2.5.1 Tidal Restoration

A passive marsh development model will govern the design of the tidal restoration for the Eden Landing Ecological Reserve. This model assumes that natural sedimentation derived from the on-site exchange of tide waters with South San Francisco Bay will gradually accrete the existing pond and establish site elevations conducive to salt marsh establishment. Initially, much of the restoration area will become open water habitat and mudflat. Vegetation should begin to establish within the first one to two years in the northern (ponds 8B to 13B) and central ponds (7C, 7B, and 17B) as these areas are generally within or close to suitable elevations for cordgrass and pickleweed establishment. The southern ponds (2B to 6B) are much lower in elevation. However, given the projected rates of sedimentation (0.4 to 0.5 ft./yr.), marsh plain elevations, even in these lowest areas, should approach levels that allow for establishment of salt marsh vegetation in 3-5 years. The first colonizer to the restored areas will be cordgrass, which tolerates longer periods of inundation, followed by pickleweed, salt grass and grindelia, which tolerate progressively shorter periods of inundation.

The salt marsh restoration area will be divided into two distinct marsh units with separate tidal sources. This will be accomplished by providing a drainage divide between the northern, Mt. Eden Creek hydrologic unit and the southern, North Creek hydrologic unit. The existing levee separating Cell 8B from 7B will be retained and raised to provide access to the EBDA to an existing access port for the pipeline. The existing broad levee currently separating Cells 7C and 17B, currently in the range of 6+ feet in elevation, will be lowered to approximately 3.5 feet. This elevation is above the anticipated MHHW (estimated to be 2.7 feet based on tidal damping effects) and will be sufficient to provide an adequate drainage divide between the two hydrologic units for normal tidal conditions while developing high/transitional marsh characteristics. Some tidal exchange between the units is acceptable. At the southern juncture of this lowered levee with the existing slough channel (southern tip of Cell 7C), an earthen barrier will be constructed across the channel, creating a tidal drainage divide between the Mt. Eden and new North Creek tidal sloughs. Another short section of the divide will also need to be constructed at the juncture of this levee and the Cells 8B/7B levee.

The Mt. Eden Slough system will act as the local tide water conveyance channel for the 212-acre northern tidal restoration area, incorporating Cells 7C and 8B-13B, as well as fringe marsh along the main slough channel. The new North Creek channel will drain the 310-acre southern tidal restoration area, comprising Cells 1Ba, 2B-7B and 17C, and additional 30 acres along the new channel.

The widened channel for Mt. Eden Slough will be excavated outboard of the salt pond levee on the north side of the old slough alignment, except over the lower approximately 1,200 ft., where the slough will turn due west coincident with an existing spur channel. The new channel will also be directed into the existing brine ditch channel for approximately 3,600 feet between the western edge of pond 16B and the western edge of Pond 14B. CDFG is also working with

Cargill to evaluate an alternative alignment that would relocate the existing Pond 10 levee to the north and construct the new channel along the borrow ditch within the pond. This alternative would avoid disruption and loss of 3.8 acres of existing salt marsh harvest mouse habitat in the Mt. Eden Creek channel, but would increase construction costs. These increased costs would include construction of 4,300 feet of new levee and removal of 5,000 feet of the existing levee.

The new North Creek channel will extend from the drainage divide southward along a newly established alignment. This will require excavation of a new channel and construction of perimeter levees to segregate circulating tidal waters from the remaining Cargill salt ponds to the east and west. Figures 5 and 6 provide a more detailed plan view the tidal drainage for the main portions of Mt. Eden Creek and North Creek tidal restoration units, respectively.

Specifically, the plan for tidal marsh restoration will include the following actions:

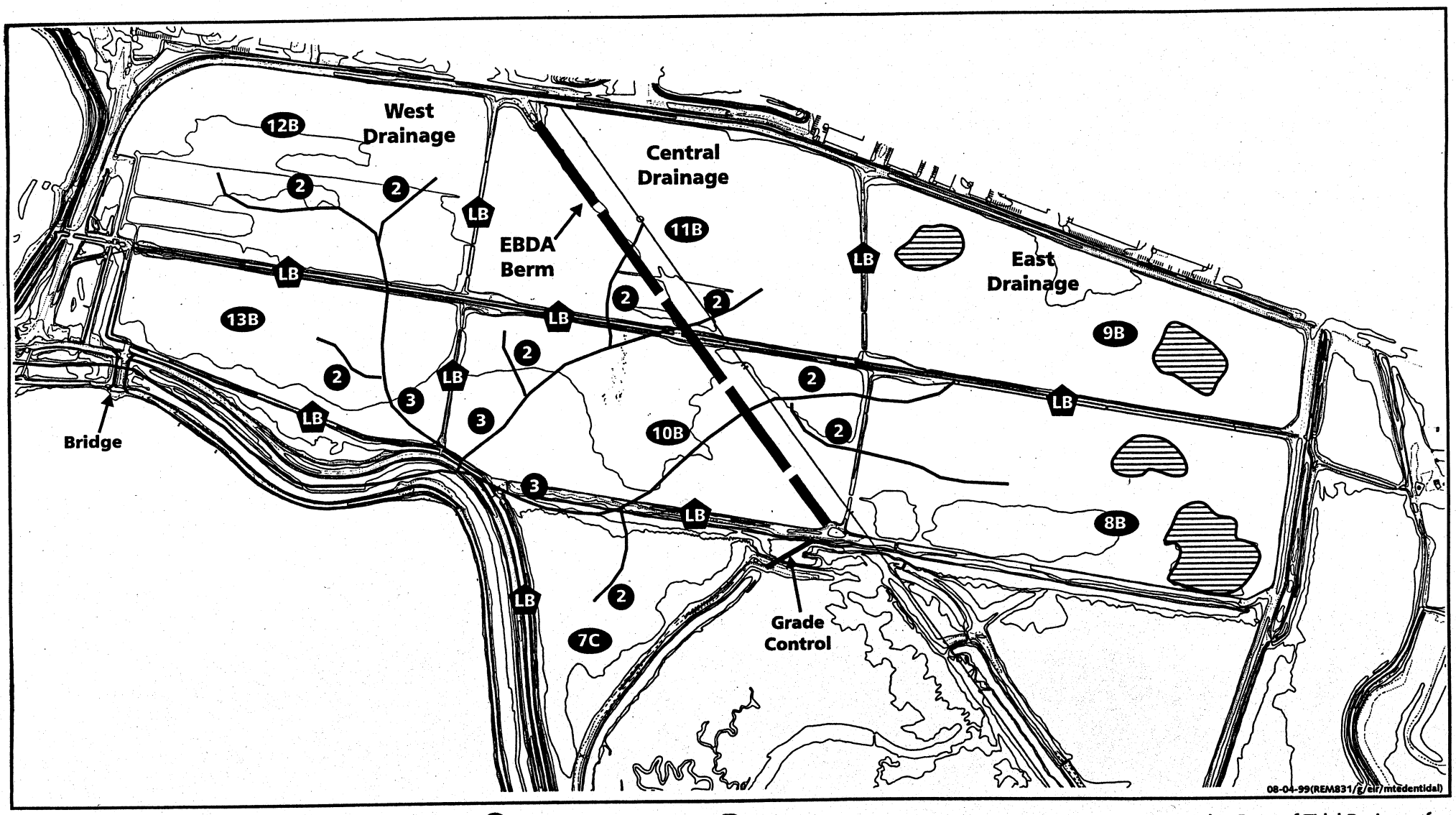
1. Eliminate the interior levees that currently partition pond cells, with the exception of the principal tidal watershed divide (e.g. levee extending from southern tip of Cell 7C to the southeastern corner of Cell 8B). The interior levees will be lowered to within 0.5 to 1.0 foot of the adjacent grade. Excess material will be spread out and bulkheads, headworks and other hard materials should be removed. Higher levees may interfere with channel development and basically result in rectangular sub-drainage units.

2. Remove the existing levee that parallels Mt. Eden Slough (Cell 13B, south to tidal drainage divide). Fill material will be removed to 0.5 below adjacent existing grades.

3. Retain existing perimeter levees around the boundaries of the restoration areas to protect surrounding areas from uncontrolled tidal flooding, including the retained seasonal wetland cells at the eastern end of the project area.

4. Excavate interior channels to promote efficient tidal drainage and access of sediment-laden tidal waters throughout the restoration areas; a third-order drainage system will be created within the northern restoration area and a fourth-order system within the southern restoration area; second-order and higher channels will be excavated, first-order channels will be allowed to develop naturally with site accretion. All excavated channels will be of a box-cut design and excavated material will be side-cast along alternating sides of the channels. Mounds created by the side-cast material shall be no more than 0.5-foot above the adjoining ground and no more than 40 feet in length.

5. Use excess material from interior levee removal and interior channel excavation to create a low berm over the EBDA easement. The berm will be constructed to an initial elevation of 4.5 feet to allow for settlement to 3.5 to 4 feet. The purposes of the berm is to allow for emergency access along the pipeline in the case of a rupture or leak while allowing the easement to develop transitional marsh characteristics. Gaps in the berm will be provided to allow tidal flow east and west of the easement. Section 5.5 provides additional information on EBDA easement and berm.



3 Slough Channel Order

7C Restoration Cell Identifier

LB Remove Levee

Constructed Panne Ponds

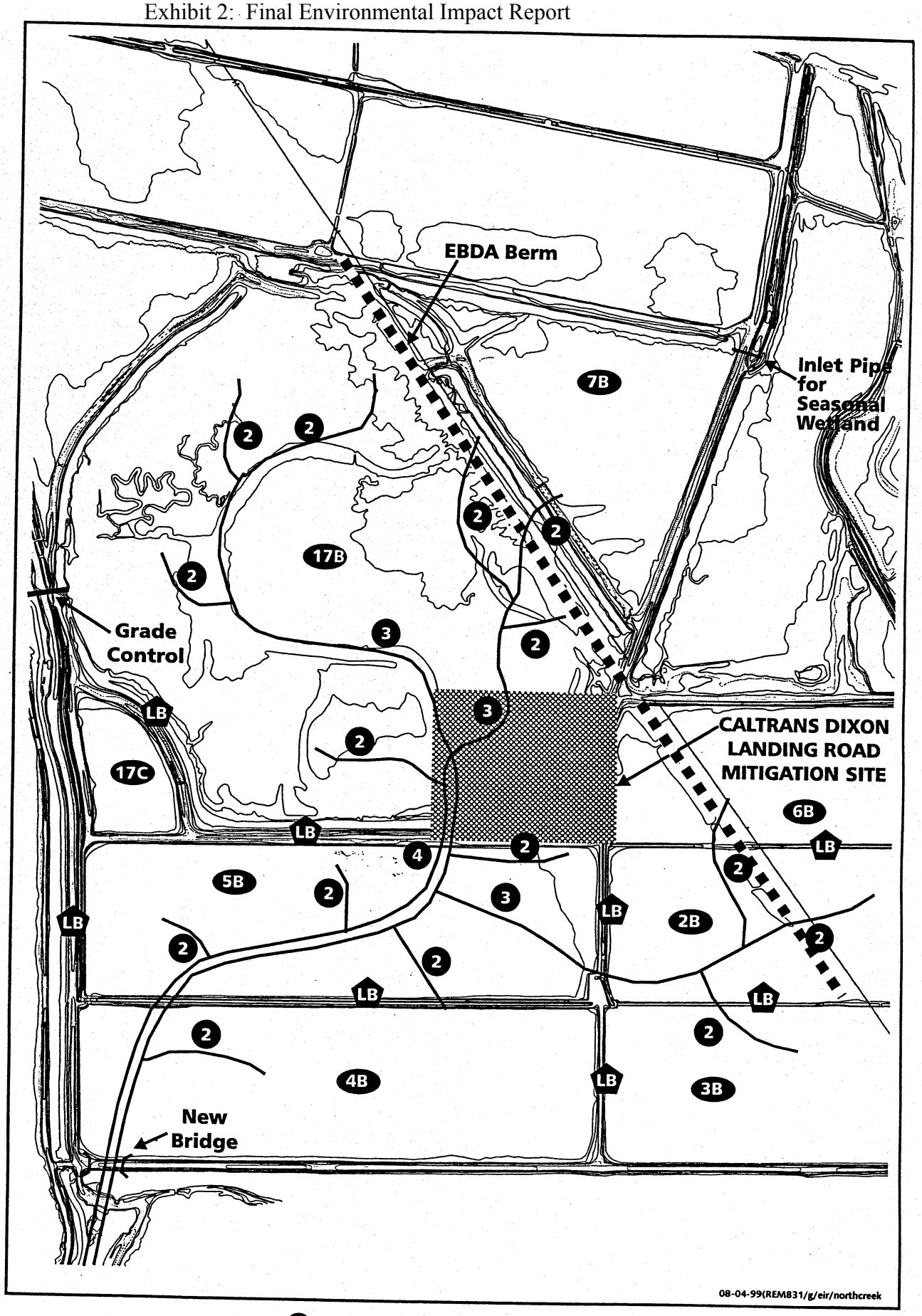
N

Scale in feet

0 500

Figure 5. Plan Form of Tidal Drainage for Mt. Eden Slough Restoration Area

EDEN LANDING ECOLOGICAL RESERVE
RESTORATION AND MANAGEMENT PLAN



N

Scale in feet

0 400

3 Slough Channel Order

7C Restoration Cell Identifier

LB Removed Levee

Figure 6. Plan Form of Tidal Drainage for North Creek Slough Restoration Area

EDEN LANDING ECOLOGICAL RESERVE
RESTORATION AND MANAGEMENT PLAN

6. Breach the perimeter levees at two locations, one for each of the restoration areas. Breaches will be sized to allow for full drainage of tidal waters with each tide cycle and will be reinforced against erosional forces. The breach for the Mt. Eden channel will be 40 feet and the North Creek channel breach will be 80 feet in width.

7. Excavate Mt. Eden Slough from the re-aligned Bay outlet to the tidal watershed divide. This channel will have an average width of 31 feet and a channel invert elevation of -3.7 feet. Remove both existing downstream culvert and upstream, in-channel cut-off wall that currently obstruct tidal flows. Approximately 101,000 cubic yards of material will be excavated/dredged to create the channel.

8. Dredge a new North Creek channel from the southeast corner of Cell 4B south to Old Alameda Creek. This channel will have an average width if 55 feet and a channel invert depth of -5.7 feet.

9. Establishment of the North Creek channel will require construction of a new levee to separate the tidal channel from adjacent active salt ponds. The new levee will be approximately 12 in top width and 63 feet at the base and will require an estimated 53,500 cubic yards of fill. This fill material will be dredged from the channel alignment.

10. Relocate/extend existing Cargill siphons where required to maintain desired cross-slough salt pond connections.

11. Create panne ponding habitat for waterbirds in peripheral, higher elevation areas of the tidal restoration area of Cells 8B and 9B where potential tidal inundation under average condition is expected to be limited. These ponds will be excavated slightly and low wide berms will be constructed. The ponds are designed to flood occasionally at extreme high tides and with rain water, yet not be subject to regular tidal exchange.

Excavated material from the lower Mt. Eden Creek channel will be used to cap the existing levee along the north bank of the creek. Excess material will be placed in the existing borrow ditches in Cargill's adjacent evaporator ponds. Under the alternative alignment under discussion with Cargill for the lower 4,600 feet of channel, an estimated 70,875 cubic yards of dredged material from the salt pond will be used to build a new levee separating the slough from the adjacent salt pond. Other material excavated from roads will be used to reinforce and raise retained levees and access routes and construct the berm over the EBDA easement. Material from some of the narrower, interior dikes may be bladed and spread out in place.

Material from excavated interior, lower order channels will be side-cast along alternating sides of the channels. All side cast material will be spread to within 0.5 feet of the surrounding elevations. The levees for the North Creek channel will be constructed from material dredged from the channel. Any excess material will be disposed of along the base of the retained levees along the ponds 4B, 3B, 2B, and 6B to create broader marsh and transitional habitat areas and minimize levee erosion.

2.5.2 Salt Panne/Snowy Plover Management Area

Ponds 16B, 15B, 14B, and the CalTrans' triangle would be managed to promote snowy plover habitat (Figure 7). The total area of these ponds is approximately 126 acres. Although these three ponds have supported significant snowy plover nesting activity over the last several years, production/brood survival is very low. The primary stressors or causes which appear to contribute to the low production are:

- high predation of chicks; key predators include raven, red fox, feral cat, rat, and loggerhead shrike, and
- limited shallow water/feeding habitat for chicks.

The proposed management plan provides measures to increase the extent and quality of shallow water feeding habitat through the nesting season. Management of these ponds, as discussed in previous sections, also includes measures to maintain salt concentrations at levels that will preclude significant vegetation establishment within the ponds.

This area will be managed as two separate, but interconnected units. Each unit will have separate water control structures so the units can be independently filled and drained. One unit would consist of Cell 16B, 15B, and the Caltrans parcel. The other unit is 14B. The units are based on differences/similarities in average elevation. Cell 14B has elevations in the average range of 3.5 to 3.9 feet. Cells 14B and 15B are somewhat lower in elevation. Cell16B elevations generally range form 3.1 to 3.3 while much of Cell15B is in the range of 2.7 to 2.8 feet. Pond 16B will be managed as a nesting flat with perimeter moat and dead end channels. Pond unit 14B/15B will be managed as a nesting habitat (Cell 14B) with an adjacent shallow water foraging habitat (Cell 14B) through the nesting season.

To facilitate management flexibility within the cells, levee modifications and water control system features are proposed to satisfy three design objectives:

- create and maintain a perimeter moat to limit ground-based predators and unauthorized human access,
- allow for seasonal adjustment of internal moat/pond water levels to meet habitat requirements (e.g. breeding and feeding); interior feeding pond (15B) depths not to exceed 0.3 feet, and
- allow for controlled, seasonal flooding of the panne areas to replenish and maintain elevated soil salinities.

In addition to levee modifications and installation of hydraulic structures, site manipulations will also include the construction of two islands in Cell 15B. The crests of these islands will be graded to an elevation of 3.7 ft. NGVD, roughly equal to the average elevation in Cell 14B. The islands will function as additional nesting and roosting sites, while allowing for adjustable levels of ponding over the remainder of the cell.

Figure 7 depicts the proposed elements of the hydrologic design for the salt panne/plover management area. Levee modifications will include the following:

- Cell 14B Perimeter Levees (E,N,S) - These levees will be lowered to "historical" levels, which would average approximately 7.0 feet NGVD. The western levee, bordering on Cell 15B, would be lowered to 5.0 feet NGVD and maintained to allow independent management of water levels in Cell 14B and Cells 15B/16B, which are 0.7-0.9 ft. lower in elevation.

- Cell 15B/16B Levee- This levee is in poor condition and will be left as in its current condition and will not be maintained.

- Cell 16B/CalTrans Parcel Levee- A 30-foot wide cut will be constructed between the CalTrans parcel and Cell 16B to provide at-grade travel corridor for plover chicks and channel connection between the two area. This cut will be bridged to provide maintenance access.

- Cell 16B Levees (S,W)- The western levee will be maintained in its present condition to segregate the management area from the adjacent salt ponds. To meet the water management objectives, including provision of interior ponding depths not exceeding 0.3 feet. The southern levee will be raised and reinforced to provide the primary access route for Cargill and operations/maintenance of this management area.

A system of gated culverts and weirs is proposed to manipulate ponding depths and inundated area within the salt panne/plover management areas. Periodic circulation and exchange of tidal waters within the management cells will occur via a linked network of perimeter channels (I. e. moats) and smaller internal channels, extending outward from a primary settling basin-located at the southwestern corner of Cell 16B. The settling basin will be excavated and maintained to promote clarification of the fine sediments that are carried in with tide waters. The approximate extent of the basin is depicted in Figure 7. Provision for siltation in the basin will reduce the sedimentation rates in the interior perimeter moat and circulation channels, and will reduce the areal extent of dredging impacts following the initial construction period.

The settling basin will receive Mt. Eden tidal inflows via twin 36-inch plastic culverts, fitted with slide or screw gates installed on the outboard side of the culverts in the southern levee of Cell 16B. Culvert invert elevations will be set at -1.0 ft. NGVD, roughly two and half feet above the projected bottom of the dredged Mt. Eden cross-section (-3.7 feet) and approximately two feet above the bottom of the stilling basin. The interior of one the culverts would be fitted with flashboard weir to control water levels and allow for periodic input of tide water at high tide (the gate would be left partially opened), and drainage of excess water. The gates could also be opened as needed at low tide to drain interior waters or at high tide to flood the area.

A secondary intake, a 12-inch PVC pipe with a screw gate will be installed in the eastern levee of Cell 14B (Figure 7). The pipe will have an invert elevation of 3.0 feet and is designed to allow for inflow into the eastern, higher elevation area during extreme high tides.

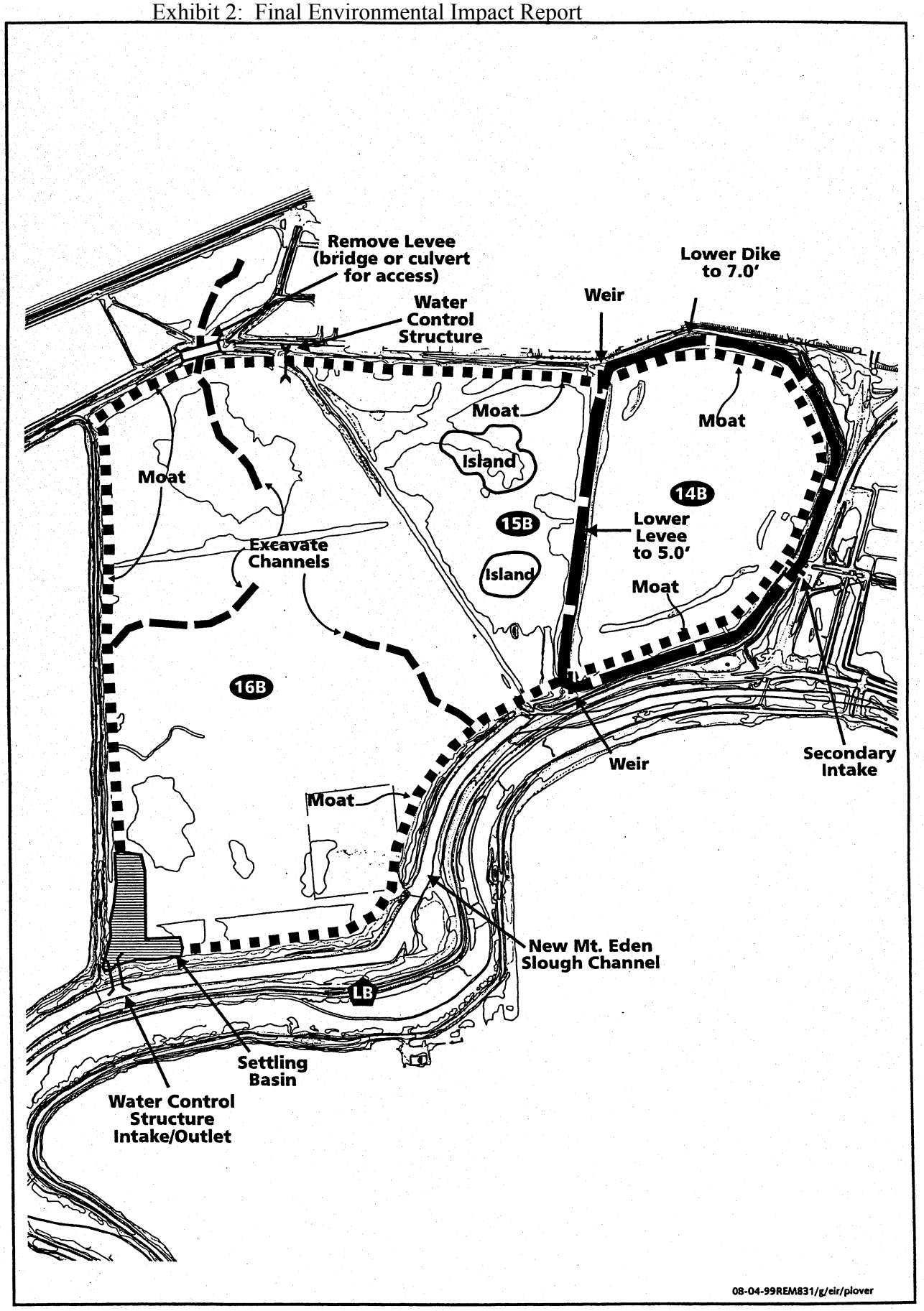


Figure 7. Plan Form for
Snowy Plover Management Area

N

Scale in feet

0 400

7C Restoration Cell Identifier

LB Remove Levee

EDEN LANDING ECOLOGICAL RESERVE
RESTORATION AND MANAGEMENT PLAN

The need for draining and/or replenishment of tidal water will be determined based on water quality, the need to maintain adequate foraging habitat, mosquito abatement considerations, and the season of year.

A moat channel will be excavated along the outer perimeter of the management cells, as shown in Figure 7. A single thread of channel will suffice to create a predator barrier around Cells 14B, 15B and 16B. The moat channel will be constructed at level grades, with invert elevations of -0.5 ft. NGVD. This will provide maximum channel depths of 3.0 to 4.0 ft. in the cells without inundation of the salt pannes. These depths are prescribed to discourage predator and unauthorized human access into the management area.

All moat channels will be excavated to bottom widths of 5.0 to 6.0 ft., with side slopes of 5:1 and 2:1 on the panne and levee sides, respectively. Excavated channel material will be used in the construction of the two nesting islands in Cell 15B. Surplus spoils will be utilized in levee repair and/or construction elsewhere in the project area.

Two weirs will be installed across the north and south moat channels at the levee separating the Cell 15B/16B unit form Cell 14B. These weirs will function to independently regulate water levels in Cell 14B. The weirs will be constructed of grouted rock (crest and embankment slopes) and will be fitted with flashboard assemblies to adjust water depths to desired.

To assist in site determinations of water depths and water surface elevations, staff gages will be installed in the moat channels, adjacent to each gated culvert location within the management area. All gages will be surveyed and tied-in to permanent benchmarks established within the project area.

The initial water management program will involve:

- Draw down water in at least one cell at the beginning of the nesting season (April 1) to provide nesting substrate. In dry years, nesting substrate will become available sooner.

- Maintain water in moats and feeding habitat (Cell 15B and interior channels) through the nesting season (September 15).

- Shallow flood the entire area (all three ponds) to a depth of approximately 10 cm in pond 16B and pond 14B to create shorebird feeding and roosting habitat and to add salt back into the system (pond 15B will be slightly deeper because of lower elevations). Allow water to evaporate after initial flooding. Fall flooding would occur on September 20 if the area is not being monitored for plovers. If monitors determine plover nesting activity in the area has been completed, earlier flooding can occur in order to increase evaporation/salt production.

- Allow area to pond rainwater or re-flood to 10 cm depth after November 1 to provide feeding and roosting habitat for shorebirds. Maintain shallow ponding until March 15, then allow a gradual draw-down through mid to late April.

The water management regime may be modified in the future based on monitoring results of snowy plovers nesting activity, shorebird use, and salinity measurements.

2.5.3 Seasonal Wetlands

Ponds 1B and 20B will be retained and managed as seasonal wetlands. No change in the existing management regime is proposed for pond 20B at this time. Pond 20B currently supports significant pickleweed and other herbaceous wetland growth and may serve as a source population for salt marsh harvest mice to colonize the restored marshes within the main reserve area. Elevations in this marsh are currently subsided (approximately 0.2 feet NGVD). Full tidal restoration would eliminate the existing pickleweed cover and associated habitat values. Elevations are also too low for muted tidal flow; the pond is unlikely to drain adequately at low tide without expensive pumping or installation of numerous outlets. Pond 20B may be added to the restored tidal area at some point in the future or combined with other possible wetland enhancement plans for the adjacent properties to Weber parcels once land use issues for these areas are resolved.

Cell 1B will be managed to provide open shallow-ponded habitat for shorebirds. A 12-inch diameter PVC culvert will be installed between Cell 1B and the restored marsh in Cell 7B. The pipe will have an invert elevation of 2.0 feet and will be equipped with a flashboard weir. The flashboards will be set to allow periodic tidal flow into Cell 1B to maintain desired water levels and increase salinity to discourage vegetation establishment.

2.5.4 Utilities and Public Services

The establishment of the Eden Landing Ecological Reserve and implementation of the restoration and management plan will create and significantly expand endangered species habitat in the reserve and within the EBDA and PG&E utility easements. Although many repair and maintenance activities within these easements are currently encumbered by the need to comply with Section 404 and state and federal endangered species regulations (the majority of the existing easements currently lie within Section 404 jurisdiction and provide habitat for one or more listed species), the restoration plan incorporates measures to avoid increasing operation and maintenance costs and/or regulatory burdens on EBDA and PG&E.

The proposed restoration plan retains existing dikes and roadways that provide direct access to EBDA's existing wastewater line access portals and the PG&E boardwalk. In order not to unreasonably restrict access or significantly increase potential repair costs over the remainder of the EBDA easement while achieving the desired tidal restoration, a broad, low berm will be constructed over EBDA's easement. Equipment use of the berm would only be for emergency situations or scheduled and permitted repair of leaks in the pipeline. This berm could not be used for regular maintenance or inspections. The berm is proposed to be supra-tidal, i.e., above the normal high tide range. The berm would also have periodic low point/breaks in order to provide waterflow to both sides of the berm.

The top of the berm would be designed to within an elevation suitable for high marsh community establishment (MHHW plus 0.5 feet), but not an elevation that would create upland conditions. This is necessary to minimize creating upland habitats and upland travel corridors for red fox and other undesirable, introduced species. Side slopes will be mild at 10:1 to facilitate the movement of small mammals and provide a gradual transition for marsh vegetation. A similar type of berm was incorporated into the Roberts Landing (San Leandro) tidal marsh restoration project in San Leandro for emergency access and has worked well for that purpose.

The management plan also incorporates procedures that would address routine maintenance and emergency repair procedures in relation to EBDA and PG&E facilities on the reserve. Implementation of these procedures are designed to be incorporated into the permits, including the Corps permit and Section 7 consultation and Biological Opinion for the implementation of the Eden Landing Ecological Reserve Restoration and Management Plan. This approach would allow EBDA and PG&E to perform routine maintenance and emergency repairs with a minimum of regulatory delay as long as applicable protection measures for threatened and endangered species are followed and restoration requirements are implemented once the repairs are completed. The types of activities considered and required protection measures are discussed below.

Normal Maintenance/Inspection

- Regular inspection and maintenance to access portals (EBDA) and transmission line towers via existing roads and boardwalks.

Emergency Situations

- Pipeline leak or rupture; downed conductor or tower collapse.

Repair Activities

- Equipment access.
- Temporary fill/blockage of cuts in the berm/tidal channels within the easement necessary to provide equipment access, contain the spill, and/or prevent tidal leakage or flow into the break.
- Excavation of trench/work area, back-filling.
- Fill associated with the temporary storage of excavated material.
- Pipeline and transmission line footing replacement/repair.
- Discharge of water from the work area..

Protection Measures/Conditions

- Non-emergency repairs shall be coordinated with FWS and CDFG; timing and approval shall be subject to FWS and DFG approval.
- Repair activities should be scheduled to occur between August 31 and February 1 to avoid potential disturbance to clapper rail nesting activity in restored marsh areas and February 1 to September 15 in the snowy plover management area.
- For non-emergency repairs in and adjacent to restored tidal marshes, fabric or heavy gage plastic fences shall be erected around work areas and along access routes. Areas within

these exclusion zones shall be trapped and all salt marsh harvest mice and special status species shall be removed prior to construction. Exclusion fences shall be maintained in working condition through completion of the work.

- For emergency access notification to the FWS and DFG within 12 hours.
- Repair work should be completed as soon as feasible; a schedule and plan for repair and restoration shall be submitted to DFG and FWS within 5 working days of the emergency.
- Overnight/out-of-use equipment parking and materials storage will be confined to existing dikes/upland locations; specific locations to be approved by DFG in cooperation with EBDA and PG&E.
- All disturbed areas shall be returned to pre-existing grades immediately after repairs are completed all compacted soils shall be lightly worked with a disk, tines on an excavator bucket, or other suitable device to reduce compaction.*
- All excavated material shall be placed on mats, thick plastic sheeting, or tarps; all excavated material shall be replaced, any excess material shall be off-hauled.*
- The top 6 inches of marsh shall be excavated and stored separately from the deeper materials; the top layer shall be replaced following repairs to facilitate revegetation.*
- All equipment working in wetlands (off the retained dikes) shall be required to work from mats or otherwise have approved, low pressure tracks.*
- Normal house-keeping and water quality protection measures will need to be employed*
- Compliance with other relevant standard terms and conditions of applicable Corps and Regional Water Quality Control Board permits and regulations.*

* *indicates standard, required measures for Corps nationwide permits relative to utility line work, maintenance activities, and other covered activities.*

2.5.5 Facilities Relocation

Cargill's existing brine distribution system will be altered with implementation of the restoration and management plan. Portions of the existing brine ditch within the reserve will be incorporated into the main tidal channel for Mt. Eden Creek. This will require relocation of the pump house and power line from its current location immediately west of pond 17C. A siphon will also need to be installed under Mt. Eden Creek to transfer water from the intake ponds north of the creek to the evaporators south of the channel. Cargill's existing access to the intakes and ponds north of the creek will also be re-routed along the north and west sides of the snowy plover management area. A second siphon will also be required under the new North Creek channel in order to provide water flow between the evaporators east and west of the channel. A new intake will also be constructed near the confluence of the North Creek and Old Alameda Creek channels.

Access to Cargill's operations south of reserve will be retained through the existing route through the extension of Eden Landing Road. An existing earthen fill/culverted crossing of Mt. Eden Creek will be replaced by a railroad car bridge. Existing levee roads along the north and east bank of Mt. Eden Creek will be removed as part of the tidal restoration. Existing access along the southern boundary of the reserve (ponds 3B and 4B) will also be maintained. A railroad car bridge will be installed to span the new North Creek channel.

The levee breach at Old Alameda Creek for the North Creek channel will be relatively wide, a minimum of 100 feet (see Section 5.2.3). Spanning this breach would require an expensive bridge structure, likely with a pile driven support pillar in the middle of the channel. Pending negotiations and approval from Cargill and ACFCD, a new bridge would not be constructed at this location. Alternative access to areas west of North Creek would be provided through the existing roads along the southern boundary of the reserve and the new North Creek levee. If this access alternative is not acceptable to Cargill and ACFCD, a new bridge would be constructed.

Figure 8 depicts the locations of these relocated facilities and access.

2.5.6 Public Access

Public access will be provided along a trail which will provide an important link in the San Francisco Bay Trail. The trail alignment is located along the northern and eastern boundary of the reserve (Figures 9 and 10). The trail, to be funded and constructed by the East Bay Regional Park District, is expected to be 12 feet in width, with a 4 to 6 inches of paving material such as crushed aggregate, gravel, or decomposed granite. The primary trail head/staging area and parking are would be off Eden Landing Road. At this point, parking would be provided and a raised viewing platform/mound would be constructed to allow views across the reserve and out toward the bay. The primary trail route would proceed eastward along the existing road and levee across the northern edge of the reserve. The trail would follow the existing main levee access road along the western edge of Cell 1B.

The trail alignment from this point depends on potential tie-ins to off-site projects. As currently planned the trail would head eastward across pond 20B along an existing road to tie into the proposed trail from the adjacent Oliver Trust West Parcel residential development. If this development is not constructed, the trail would continue to the southeast corner of the reserve and terminate at that point until future trial connections to the south are identified and completed.

The trail may also proceed westward from Eden Landing, across the northern levees of ponds 14B, 15B, and 16B. This trail segment would connect to a pedestrian overpass of Highway 92 which is expected to be constructed by CalTrans as part of the Highway 92 widening project (Figure 9).

A fence will be constructed along the trail route to minimize human and pet access off the trail and into the restored marsh and management areas. The fence will be a hog-wire mesh with treated peeler core posts set on 8-foot centers. The fence will be set low to mid-slope on the trail levees (Figure 10).

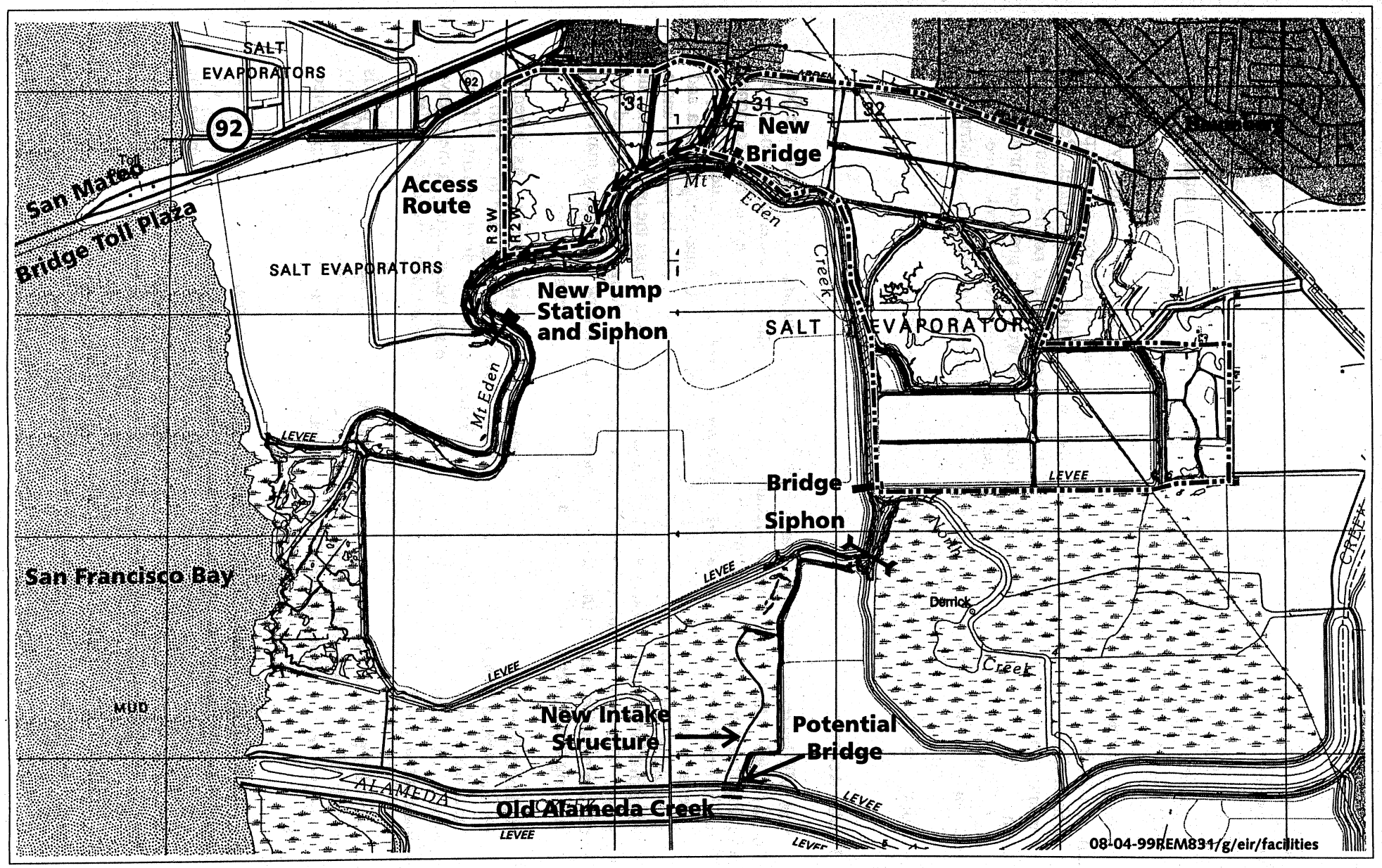


Figure 8. Facilities Relocation

N

Scale in feet

0 2000

EDEN LANDING ECOLOGICAL RESERVE
RESTORATION AND MANAGEMENT PLAN

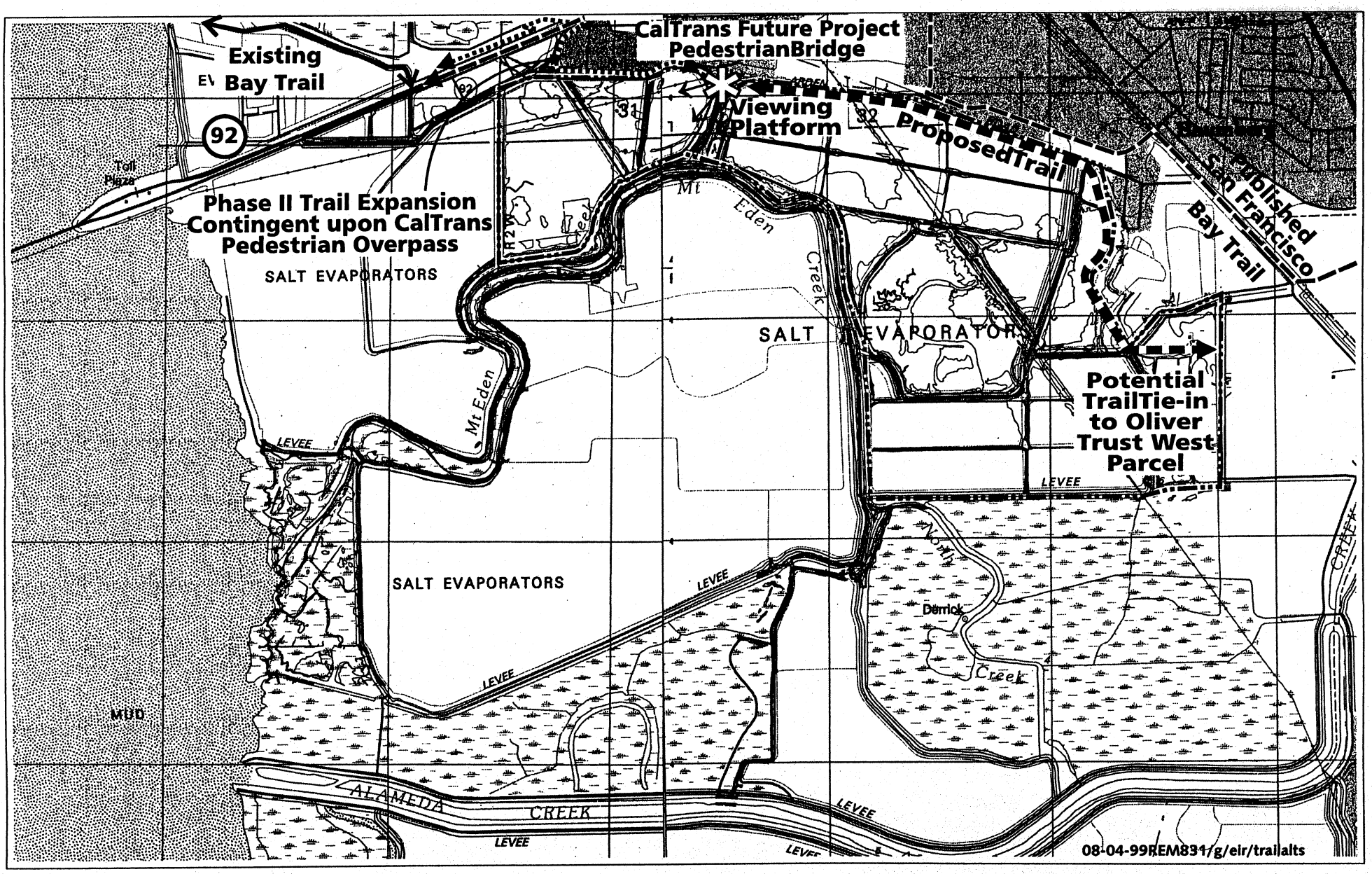


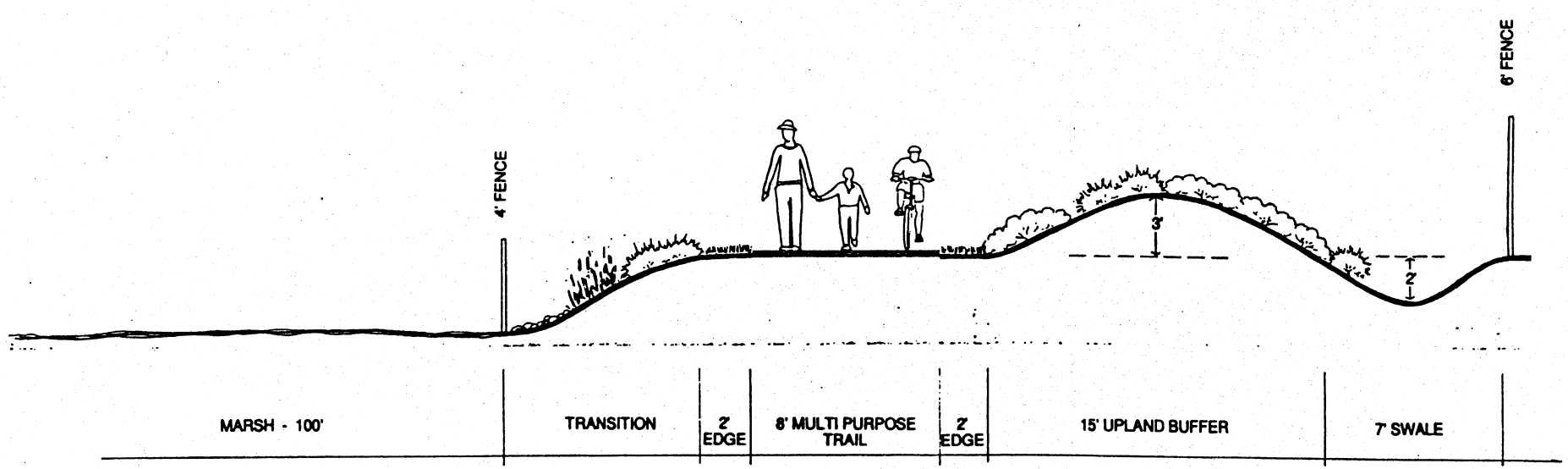
Figure 9. Bay Trail Alternatives

N

Scale in feet

0 2000

EDEN LANDING ECOLOGICAL RESERVE
RESTORATION AND MANAGEMENT PLAN



08-04-99REM831/g/eir/trailxsec

Figure 10. Typical Trail Cross-section

Landscape planting along the trail will be limited to native, non-invasive shrubs, sub-shrubs, and herbaceous species compatible with the bayside environments. No shrubs will be planted within 1,000 feet of the snowy plover management area in order to limit potential nesting substrates for avian predators of snowy plovers such as the loggerhead shrike. All plantings, if any, will be funded, completed, and maintained by the East Bay Regional Park District (EBRP). Interpretive signs describing the rules and regulations for the reserve, natural history, cultural history, and restoration and management objectives will also be provided.

2.5.7 Construction Period Resource Protection Measures

Construction for implementation of the Eden Landing Ecological Reserve Restoration and Management Plan will be timed to avoid impact to critical resources. Construction activities in the snowy plover management area will occur between September 20 and February 1 after and prior to the snowy plover nesting season. Earlier start dates may be allowed if monitoring demonstrates that snowy plover nesting is completed and the young are capable of flight.

For channel excavation within the existing marsh in the lower and upper Mt. Eden Creek channel segments, fabric (silt fence) or heavy gage plastic fences will be erected along the edges of the excavation areas. These construction areas shall be trapped and all salt marsh harvest mice and special status species shall be removed prior to construction in order to prevent take of the salt marsh harvest mouse. The exclusion fences shall be maintained in working condition through completion of the work. Additionally, no construction work/channel excavation shall occur within 700 feet of clapper rail nesting habitat during the nesting season between February 1 and August 31, unless prior monitoring studies indicate no clapper rails nesting activity. This timing constraint is limited to the lower 1,000 feet of the Mt. Eden Creek channel.

Qualified biological monitors knowledgeable of the restoration and management plan goals and objectives and familiar with salt marsh harvest mouse, clapper rail, and snowy plover biology and habitat requirements shall be utilized to oversee construction activities. The monitors responsibilities shall include:

- Remain present on the site during all excavation and other construction work in or adjacent to occupied habitats for the listed species.
- Stake or fence areas to be avoided by construction equipment.
- Retain authority to control or halt construction activity that is not consistent with the approved construction plans and any amendments.
- Notify the Department of Fish and Game, U.S. Fish and Wildlife Service, U.S. Army Corps of Engineers, and Regional Water Quality Control Board of any unanticipated damage to protected habitat areas, erosion or water quality problems in excess of permit requirements, or dead or injured listed species.

2.5.8 Exotic Species and Predator Management

CDFG will also implement an exotic species and non-native species predator management plan for the reserve. The presence of feral and exotic animals, particularly feral cats and red fox, have been demonstrated to have a significant negative impact on native wildlife populations. In the San Francisco Bay Area, red fox are considered to be a primary cause of a dramatic decline in population levels of the endangered California clapper rail. The San Francisco Bay National Wildlife Refuge in cooperation with CDFG and EBRPD has initiated a control program for red fox and other exotic animals. This program has proven to be successful, with clapper rail populations showing increases from 25 to 75 percent following initiation of the program (Espersen 1993). Ravens have also been documented as a significant predator of snowy plover on the Eden Landing Ecological Reserve. Applicable control measures to minimize raven nesting habitat in the general area and removal of problem birds will also be conducted. A control program for red fox and other feral animals similar to the Refuge's will be initiated for the Eden Landing Ecological Reserve.

Several species of non-native cordgrass (*Spartina alterniflora, S. densiflora, S.patens*) have become established in San Francisco Bay and are considered a potential threat to the bay ecosystem, biological diversity and habitat for species such as the clapper rail and salt marsh harvest mouse. Newly restored marshes around the Bay may also be subject to rapid invasion and dominance by these and other aggressive exotic plant species. The tidal restoration area will be regularly monitored to assess establishment of these and other undesirable exotic plant species. Applicable control measures will be implemented to remove and control the establishment of exotics within the reserve. Control measures could include hand pulling, covering with black plastic, and selective use of herbicides.

Only herbicides approved for use around wetlands will be allowed and no spraying will be allowed if winds exceed 4 miles per hour, and all other label instructions are followed. Spraying will be conducted only by licensed applicators and equipment will be limited to hand-held or backpack sprayers or wick-type applicators. A biological monitor familiar with identification of the target species will also accompany herbicide applicators to prevent impacts to non-target vegetation.

2.6 Applicable Plans and Policies

Following is a brief discussion of plans, policies, and permits that must or should be considered as part of the decision-making process and entitlements for the implementation of the proposed project. A more extensive evaluation of actual conformance with plans, policies, and permitting requirements has been included in Chapter 3 of this document.

2.6.1 City of Hayward

The City of Hayward General Plan describes land use designations and specifies guidelines and policies that are relevant to implementation of the proposed project. General Plan elements with particular relevance to the proposed restoration and management plan are the Open Space, Parks and Recreation, Conservation, Safety, and Land Use elements.

2.6.2 Hayward Area Shoreline Planning Agency (HASPA)

The Hayward Area Shoreline Planning Agency was formed in 1970 to establish planning guidelines for the Hayward Shoreline. HASPA was established under the provision of an intergovernmental, joint exercise of powers agreement between the City of Hayward, East Bay Regional Parks District, Hayward Area Recreation and Park District, Hayward Unified School District, and San Lorenzo Unified School District. HASPA serves as an advisory agency in all planning matters pertaining to the shoreline. The HASPA recommended policies adopted by the City of Hayward as part of its planning program, together with the HASPA Planning Program, constitute the Shoreline Area Plan. Several policies contained within the Plan encourage the preservation of tidal flats and salt ponds which serve as habitat for migratory waterfowl. "Conversion to marsh or other ecological use" is slated as the first priority for shoreline land uses in areas where salt production is no longer required.

2.6.3 San Francisco Bay Conservation and Development Commission (BCDC)

The San Francisco Bay Conservation and Development Commission (BCDC) serves as the enforcement agency for implementation of the San Francisco Bay Plan. In accordance with California Government Code Section 66610, areas of jurisdiction of the BCDC include "salt ponds and other managed wetlands." BCDC's definition of "salt ponds" includes all former crystallizers, pickle, wash and bittern ponds, together with their surrounding levees. Areas such as those which constitute the project site, which are diked off from the Bay and used as salt ponds and managed wetlands, are considered important to the Bay Area in that they provide wildlife habitat and climate and air quality benefits. As required by Government Code Section 66632(a), the project proponent would secure a permit from the BCDC.

2.6.4 East Bay Regional Park District (EBRPD)

The East Bay Regional Park District (EBRPD) acquires, develops and maintains regional parkland in the East Bay in perpetuity for public use. For purposes of the proposed project, the EBRPD would provide a location for public access and continuation of the Bay Trail in a manner compatible with wildlife and wetland ecosystem objectives.

2.6.5 U.S. Army Corps of Engineers (Corps)

The U.S. Army Corps of Engineers (Corps) regulates the dredging/excavation within navigable waters and placement of dredged or fill material into wetlands and other waters of the United States under the authority of Section 10 of the Rivers and Harbors Act and Section 404 of the Clean Waters Act, respectively. Most of the site is subject to Corps jurisdiction under Section 10 and/or Section 404. Implementation of the restoration and management plan will require applicable permits from the Corps.

2.6.6 Regional Water Quality Control Board (RWQCB)

According to the water quality standards of the RWQCB, any construction activities that would result in the disturbance of five acres or more require a "General Construction Activity Storm Water Permit" consistent with Section 401 (National Pollutant Discharge Elimination System" permit) of the Federal Clean Water Act. By obtaining the General Construction Activity Storm

Water Permit, the project would comply with RWQCB requirements. The RWQCB will also need to certify that the proposed discharge of dredged or fill material will not violate State Water Quality Standards under Section 401 of the Federal Clean Water Act.

2.6.7 California Department of Fish and Game (CDFG)

The California Department of Fish and Game (CDFG) has responsibility and policies for protecting sensitive plant and animal species in the State of California, including threatened and endangered species. The proposed project would comply with CDFG requirements by following protocol, guidelines, and policies for protecting or mitigating for the loss of any threatened ro endangered species, candidate species, and species of concern.

2.6.8 U.S. Fish and Wildlife Service (FWS)

The U.S. Fish and Wildlife Service (FWS) has jurisdiction and policies for federally threatened and endangered plants and animals or potentially impacted species, and consultation responsibility with the Army Corps of Engineers for wetlands fill permits, as applicable, involving such species. The proposed project would comply with FWS requirements by meeting protocols, policies, and guidelines to avoid or minimize the loss of threatened/endangered species, candidate species, and species of concern and/or mitigate for their loss, as applicable. The project is also designed, in large part, to fulfill components of the federal Recovery Plan for the Salt Marsh Harvest and California Clapper Rail (FWS 1984).

3.0 ENVIRONMENTAL SETTING, IMPACTS, AND MITIGATION MEASURES

This chapter contains an analysis of each issue that has been identified in the preliminary environmental review (i.e. Initial Study found in Appendix B of this document) as requiring further analysis for the proposed Eden Landing Ecological Reserve.

Under CEQA, a significant effect if defined as a substantial, or potentially substantial, adverse change in the environment. The guidelines implementing CEQA direct that this determination be based on scientific and factual data. Each impact and mitigation measure section of this chapter includes a summary of the criteria of significance. These criteria have been developed using the CEQA Guidelines, the standards and thresholds established by the Department of Fish and Game, and the professional judgement of the authors of this EIR.

The following environmental issues are addressed in this chapter:

3.1 Water (Hydrology and Water Quality)
3.2 Biological Resources
3.3 Utilities and Service Systems
3.4 Cultural Resources
3.5 Recreation

Preliminary analysis determined that the proposed project would not result in significant impacts related to aesthetics, agricultural resources, air quality, geology and soils, land use and planning, hazards, mineral resources, noise, population/housing, public services, and transportation/traffic. Subsequently, these issues are not examined in this chapter of the EIR, but are briefly discussed in Chapter V, Topical Issues and Impact Overview.

The following analysis constitutes the major portion of the Draft EIR.

3.1 Water

3.1.1 Setting

The proposed Eden Landing Ecological Reserve (the restoration area) consists of approximately 835 acres of inactive salt production ponds, diked marshes, seasonal ruderal wetlands, and portions of Mt. Eden Creek. To the south and west, the site is surrounded by active salt production ponds and several hundred acres of tidal salt marsh, known as Whale's Tail Marsh, fronting San Francisco Bay. The site is connected to San Francisco Bay via the Mt. Eden Slough, which is largely blocked by siltation and an open brine distribution canal.

The primary sources of surface water for the majority of the project site (the old salt ponds) is direct rainfall. Under current management of the site, rainfall is allowed to accumulate and evaporate on site and the extent, depth, and duration of ponding is directly related to regional rainfall conditions.

Along the northern perimeter of the restoration area, north of Arden Road, the land use is primarily industrial park. The historical Mt. Eden Creek channel drained portions of these

northern perimeter lands. In its current condition, the remnant Mt. Eden Creek channel consists of a tidal slough, extending northeast from the Bay confluence to just east of the end of Eden Landing Road. At this juncture, eastward tidal circulation is restricted by an in-channel cut-off structure, consequently the majority of the project site is not subject to tidal influence.

Other channels bordering the restoration area were created during construction of salt pond levees and are used as water sources for periodic flooding of the ponds. Cargill Salt maintains a hydraulic siphon that serves the active salt ponds to the south and west of the restoration area. Gated culverts linking the ponds with Mt. Eden Creek also assist in regulating pond water levels. One deteriorated culvert of questionable utility currently fords the Slough approximately two-thirds of a mile upstream of the Bay confluence. The culvert is bounded by a low berm which severely restricts tidal exchange to the upper reaches of the slough.

Tidal Influence

To the south of the restoration area, lies Old Alameda Creek, a regional tributary to the south central portion of San Francisco Bay. Old Alameda Creek was channelized in the late 1950s to reduce regional flooding and drains a large urbanized area of Hayward and the foothills to the east. Tidal influence terminates at a tide gate facility operated by the Alameda County Flood Control District (ACFCD) directly southeast of the southeastern corner of the restoration area.

Tides in San Francisco Bay are diurnal, exhibiting two high and two low tides during each tide cycle. The nearest NOAA tide station for which all tidal reference elevations and NGVD conversions are available is at the east end of the San Mateo Bridge, located approximately one mile north of the Mt. Eden Slough outlet. Tidal reference elevations for this station are listed in Table 1.

Table 1
NOAA Tidal Reference Elevations for MLLW and NGVD Datums
San Mateo Bridge, East End

	MLLW Elevation, ft.	NGVD Elevation, ft.
Mean Higher High Water (MHHW)	7.68	3.98
Mean High Water (MHW)	7.07	3.37
Mean Tide Level (MTL)	4.12	0.42
National Geodetic Vertical Datum- 1929 (NGVD)	3.70	0.00
Mean Low Water (MLW)	1.18	-2.52
Mean Lower Low Water (MLLW)	0.00	-3.70

Field tide monitoring and tidal reckoning of the tide cycle was conducted as part of the studies for the restoration and management plan preparation (Clearwater Hydrology 1999). The studies included an assessment of the potential attenuation or dampening of the high tides as the flow moves up the restored sloughs into the main restoration areas. The studies compared the tides at the proposed mouth of the restored Mt. Eden Creek (and which are represented by the tide levels at the east end of the San Mateo Bridge) and near the ACFCD tide control structure on Old

Alameda Creek. The tide control structure is a similar distance up Old Alameda Creek from the bay as the distances between the bay and the central portions of the proposed restoration areas via the restored sloughs and was considered to provide a reasonable model for tidal attenuation for the restoration areas. Measured high tide departures were 1.3 feet for the Higher High Water (HHW - the higher of the two daily high tides) and 0.4 feet for the High Water (HW, the lower of the two daily high tides). Application of these measured values yield an estimated attenuated MHHW of 2.7 feet within the main restoration areas.

Flood Control

The ACFCD currently manages urban stormwater runoff and flooding in the industrial park area to the north via a pump station which evacuates excess stormwater into Mt. Eden Slough. The ACFCD also maintains a tide gate and flood control channel in Old Alameda Creek (Figure 2).

Since early in the present decade, the District has applied for permits to repeat the dredging operations on Old Alameda Creek, but has to date been unsuccessful in obtaining permits from the resource agencies. Inspection of channel cross-section survey data from 1983 (pre- and post-dredging), 1989 and 1997 indicated that dredging has been restricted to the upper portion of the tidal reach. Downstream of this upper sub-reach, extending roughly 8,500 ft. downstream from the tidal control structure, the Alameda Creek channel possesses enough tidal capacity and tidal prism to maintain an adequate cross-section without dredging. (Frank Codd, ACFCD 1998)

The levees and dikes on the reserve have been constructed for the purposes of salt production (containing and managing brine) and are not part of or maintained by ACFCD for flood control purposes. Development on adjacent properties is required to be at elevations above the predicted 100-year flood event.

Salinity Levels

As the former site of a salt harvesting operation, the project site contains a bittern storage area. A byproduct of the salt making process, bittern is the solution that remains after sodium chloride, the primary salt in the majority of the former salt production ponds, has precipitated. The substance is a highly concentrated solution containing magnesium, potassium, bromine, and sulfate. When discharged undiluted into the aquatic environment, bittern can be acutely toxic to aquatic organisms due to its high biological oxygen demand. The San Francisco Bay Basin Water Quality Control Plan (RWQCB, 1995) provides narrative objective criteria for salinity. The criteria requires that "controllable water quality factors shall not increase total dissolved solids or salinity of waters of the state so as to adversely affect beneficial uses, particularly fish migration and estuarine habitat."

Over the past several years, Cargill Salt has reincorporated the bittern pond into the salt making process in order to raise depressed levels of salinity in its concentrator ponds due to the above average rainfall. The bittern pond is currently used by shorebirds for foraging and by snowy plovers for nesting.

3.1.2 Significance Criteria

Implementation of the proposed project would result in significant hydrology and water quality impacts if any of the following occur:

- Substantial changes in existing absorption rates, drainage patterns, or the rate and amount of surface runoff.
- Results in the need for new or expanded stormwater drainage facilities.
- Substantial alteration to present groundwater quality, quantity or altered direction or rate of groundwater flow, or a reduction of groundwater use for public water facilities.
- Changes in the amount of surface water, or in currents or course of water movements.
- Exposure of people to water-related hazards such as flooding or discharge to surface water.

3.1.3 Impacts and Mitigation Measures

The proposed project would involve restoring tidal influence to approximately 570 acres of inactive and active salt ponds and non-tidal portions of Mt. Eden Creek by dredging from the bay edge upstream to Eden Landing Road, and by restoring the North Creek channel to connect to the Old Alameda Creek Flood Control Channel.

The project will re-introduce tidal influence to historic tidal marsh habitat and increase the surface area of San Francisco Bay by 570 acres and will increase the initial average surface tidal prism an estimated 436 acre-feet (95 acre-feet in the Mt. Eden Creek restoration unit and 341 acre-feet in the North Creek restoration unit). The reintroduction of tidal influence and the removal of non-essential interior dikes and levees will substantially increase the amount surface water and currents and course of water movements. The project will also increase sediment deposition and erosion (channel formation) on the site. These are considered to be positive impacts and are objectives of the restoration project.

Less Than Significant Adverse Impacts

Impact W-1: Adsorption Rates and Drainage Patterns. The project will not change absorption rates since the basic character of the land as open space devoted to wetland habitat will not be changed. Drainage patterns will be substantially, but beneficially changed as a result of the project. Water on the site is currently retained onsite. Under the proposed restoration plan, the historic drainage channels and patterns into North Creek and Mt. Eden Creek will be reestablished. The current primary discharge into Mt Eden Creek is offsite storm water which is discharged from the ACFCD's Eden Landing Pump Station through a 48-inch diameter force main into the creek. Drainage from the site will improve with increased tidal influence, which should improve drainage from surrounding developed areas. The increased tidal prism and scour will deepen and widen the Mt. Eden Creek and in the Old Alameda Creek flood control channels. This should increase outflow capacities of both channels. The existing storm drain outfall on the site into Mt. Eden Creek will be protected.

Impact W-2: Exposure of Adjacent Properties or People to Flooding. The exposure of people or adjacent properties will not be increased. The existing site levees are not designed for or maintained to provide flood protection for adjacent properties. Because these levees are not

maintained by ACFCD, flood control requirements assumes these levees do not exist and adjacent properties/lands are required to meet FEMA flood protection requirements. However, the existing main levees on the perimeter of the tidal restoration area will be retained and maintained to provide the current level of flood protection. These main levees are generally in excess of 6 feet in elevation and are sufficient to contain the expected normal high tides within the tidal restoration area.

No change in management is proposed for Pond 20B, the old Perry Property on the eastern edge of the reserve. This parcel abuts two adjoining private properties, the Weber and Oliver parcels. Both of the adjoining parcels are at similar elevations and the three properties are not currently separated by any significant dikes or other water control features. These three parcels are also separated from the tidal restoration area by a retained main levee which is of suitable size and height to prevent flooding of these areas. Because there will be no change in current water management for Pond 20B, no impacts to adjacent properties are anticipated.

Mitigation W-2a. CDFG shall retain and maintain the existing main perimeter levees which hydrologically separate the restoration and management area from adjacent properties. This measure has been incorporated into the proposed restoration and management plan as part of the project description.

Mitigation W-2b. There should be no change in water management in pond 20B (the Perry Parcel) until hydrologic studies are conducted and measure are implemented to protect the adjacent Weber and Oliver parcels from flooding or increased soil moisture/shallow groundwater levels.

Impact W-3: Water Quality/Salinity. The reintroduction of tidal action to the site would begin to dissolve salts contained within the substrates in the former salt production ponds on the site. As a result of the leeching and release of salts within the pond substrates, salinity levels in the substrate would decline or rise to levels essentially in balance with the salinity of the tidal water.

The San Francisco Bay Basin Water Quality Control Plan (RWQCB 1995) provides the water quality objectives to protect and maintain a thriving aquatic ecosystem. The primary water quality objectives or concerns for tidal restoration at the Eden Landing Ecological Reserve are related to salinity. The reintroduction of tidal action to the site will begin to dissolve salts contained within the substrates in the former salt production ponds on the site. Sodium chloride (table salt) is the primary salt in the majority of the ponds. Ponds 14B, 15B, and 16B were also used for the storage of bittern. Bittern is the solution that remains after the sodium chloride has precipitated and is a highly concentrated solution containing magnesium, potassium, bromine, and sulfate. Bittern because of its high salinity is toxic to most aquatic and plant life. The San Francisco Bay Basin Water Quality Control Plan (RWQCB 1995) provides narrative objective criteria for salinity. The objective requires that "*controllable water quality factors shall not increase total dissolved solids or salinity of waters of the state so as to adversely affect beneficial uses, particularly fish migration and estuarine habitat.*"

Restoration of tidal action to the reserve will leach and release salts within the pond substrates. Salinity levels in the substrate will decline or rise to levels essentially in balance with the salinity of the tidal water. Depending on season and runoff, these normal or background values could be as low as a few parts per thousand to mid 20 to 30 ppt (the average salinity in this part of the bay

is approximately 25 ppt). Studies at the Hayward Marsh Restoration project (Josselyn and Perez [1981]) documented a relatively rapid decline in sediment salinity, as much as 70 ppt) during the first month after tidal action was restored to former crystallizer ponds on the Hayward shoreline. After 10 months, surface sediment salinities were within normal expected ranges for tidal habitats in the region. Subsurface salinities declined at a slower rate, but were expected to reach normal levels within 15 months.

For the former crystallizer ponds and pickle ponds east of the Eden Landing Road extension in the proposed tidal restoration area, the relatively rapid decline in sediment salinity is not expected to adversely affect aquatic life. Sediment salinities are not excessive, generally in the range of 60 to 70 ppt. An experiment involving measurements of water salinity from substrates on the site showed a gradual release or leaching of salt concentrations of 8 to 10 ppt per 24 hour period until the water salinity reached equilibrium with the sediment salinity. This experiment involved adding an equal amount of water to sediment (about 2 inches of soil and 2 inches of water) in a large plastic bin. On the site, dissolved salts will be further diluted by the large volume of tidal water flowing into and out of the site on a twice daily basis (potentially 400 to 500 acre-feet per high tide). Assuming a 2 to 3 ppt release of dissolved salts from the soil surface layers (0.5 feet) while inundated at each high tide (6 hours of inundation or 1/4 of the daily release from the 24-hour experimental study). Typical bay salinity, depending on time of year, can be 22 to 27 ppt in this part of the bay. A 2 to 3 ppt increase would equal to a maximum increase of 10 to 11 percent even tidal volumes of bay water were minimal and only covered the site with a few inches of water. Actual changes in water salinity are therefore likely to be negligible given the amount of tidal dilution and regular, twice daily flushing. This projected small change in salinity would not adversely affect species adapted to high ambient salinities. RWQCB criteria is for no more than a 20 percent change in background levels for salinity.

The higher salinity ponds which were historically used for bittern disposal, Ponds 14B, 15B, and 16B, and the CalTrans triangle would be managed to promote snowy plover habitat. One of the major objectives of the proposed management plan for this area is to increase the extent and quality of shallow water feeding habitat through the nesting season and to maintain salt concentrations at levels that would preclude significant vegetation establishment within the ponds. Management of the ponds may result in occasional discharge of small amounts of water from these cells to maintain desired water levels in the management unit or to improve water quality. In general, discharges would occur when water salinity is lower (i.e. end of winter after the higher saline waters have been diluted by rainwater). Such discharge would also typically occur over a several day period and the relatively small volume of discharge would be significantly diluted by tidal flow within the restored Mt. Eden Creek channel.

Mitigation Measure W-3. CDFG shall establish a salinity monitoring station on Mt. Eden Creek to monitor the salinity of water discharged from the snowy plover management area in Ponds 14B, 15B, and 16B. The station shall be setup within 100 yards of the outfall and salinity measurements should be taken at regular intervals when high saline water is discharged. The discharge shall be reduced or stopped if the measured salinity values increase background levels by 20 percent or more.

Impact W-4: Groundwater. Because of the inherent low permeability of the bay muds underling the site, ground water beneath the site is expected to be slow moving (less than 0.5 feet per year). The site is also not in an important recharge area for deeper potable groundwater sources. Salt

production on the site since the late 1800s has also likely salinized the underlying shallow groundwater to where it has a higher salinity than the adjacent water of San Francisco Bay.

The low permeability of the underlying bay muds and the presence of the peripheral dikes is also expected to limit increases in shallow ground water levels to the restoration areas and should not effect adjacent properties. Restoration of the site to tidal action will not adversely affect groundwater resources and may have some positive, long term beneficial impact by lowering groundwater salinity to levels comparable to natural conditions.

Significant Adverse Impacts

The restoration and management of the Eden Landing Ecological Reserve is not expected to have any significant adverse impacts. Restoration of the site will return the site to "natural" hydrologic conditions is expected to result in substantial long term positive benefits for hydrology and water quality.

Significance of Impacts After Mitigation

The proposed restoration and management of the site does not have any anticipated significant adverse impacts to water resources. Restoration of much of the site to tidal action and the incorporation of Measures W-2a, retain and maintain levees, and W-2b, no change in water management for pond 20B, as proposed in the restoration and management plan will maintain or improve existing conditions.

3.2 Biological Resources

3.2.1 Setting

Vegetation

In the recent and historic past, the vegetation on the project site has undergone significant and profound changes due to human intervention. Prior to settlement of the area, the Eden Landing Ecological Reserve was largely composed of tidal salt marshes dominated by pickleweed. Cordgrass occurred in a narrow zone of deeper waters along tidal sloughs and the San Francisco Bay shoreline. An upper marsh zone, which gradually transitioned into upland grasslands, occurred at slightly higher elevations above the pickleweed zone on natural levees and the landward edges of the marsh. The upper marsh community supported salt grass, alkali heath, and gum plant. The northern and eastern edges of the Eden Landing Ecological Reserve lies along this higher marsh/upland margin of the historic Bay. This marsh/upland zone roughly parallels the northeastern boundary of the site. In addition to the extensive tidal salt marsh vegetation, the general area also supported a number of natural salt ponds or pannes, including a large area historically identified as Crystal Pond.

Due to the land use history for salt production and the resulting high salinity of the ponds, the majority of the Eden Landing Ecological Reserve has traditionally supported little vegetation. For the purposes of this report, the ponds have been divided into three general groups based on salinity levels and their associated vegetation characteristics. The northwestern group of ponds (14B to 16B) generally lack any significant vegetation (RMI 1997). The middle group of ponds

(1B, 7C, 7B, 8B to 13B, 17B, and 17C) historically lacked vegetation, but has more recently experienced an increase in vegetation comprised primarily of annual pickleweed and mixed ruderal/grassland species including rabbitsfoot grass (*Polypogonum monspeliensus*) and Mediterranean barley (*Hordeum marinum ssp. guss*) (RMI 1997). The southernmost group of ponds (2B-6B) generally supports patchy annual pickleweed stands mixed with ruderal/hydrophytic grassland species including rabbitsfoot grass and Mediterranean barley (RMI 1997).

Salt production typically involves five different types of salt ponds through which seawater is progressively cycled during salt production operations in order to concentrate and ultimately precipitate salt. The salt production process begins as seawater entered the first type of pond, called an evaporator, or concentrator pond. Evaporator ponds stored Bay water for approximately four to five years and essentially remained permanently filled. The primary function of evaporator ponds is to facilitate the solar evaporation process in order to produce a progressively more concentrated salt solution called brine. As the brine flowed from evaporator pond to evaporator pond, the brine becomes increasingly saturated with salt. Upon saturation, the brine enters the second stage of the process and is pumped into the pickle ponds. The pickle pond solution is then pumped into crystallizer ponds where the precipitation process occurs.

After a layer of salt approximately six inches thick has formed on the bottom of the crystallizer ponds, the remaining solution is called bittern and is composed of highly concentrated magnesium, potassium, bromine, and sulfate. This bittern is pumped into the bittern, or wastewater pond, for permanent storage. During the winter months, salts were mechanically harvested from the crystallizer ponds, which generally remained dry, with the exception of precipitation, until the process repeated itself in late spring. The final stage of the production process consisted of washing the harvested salts in rinse ponds. Due to the salt concentration and extraction process, ponds currently exhibit salinity contents which grade from high salinity (crystallizer and bittern ponds) to lower salinity (evaporator ponds).

The Eden Landing Ecological Reserve is a former salt plant production site and contains four of the five pond types: pickle pond (7B, 7C, 17C, and 17B), crystallizers (2B to 6B and 8B to 13B), bittern pond (14B), and rinse pond (1B). Ponds 15B and 16B appear to have been used for a variety of purposes over the years, including bittern storage, crystallization, and possibly some mid to late stage evaporation pond. Although salt production on the site ended in the early 1970's, these historic uses greatly influence the type and distribution of vegetation present on the property. The presence and density of vegetation also plays a major role in wildlife use of the various ponds.

Vegetation salinity levels have been gradually decreasing over time as evidenced by the increase in vegetation cover on many of the ponds and comparison with soil salinity data collected in 1988 (WESCO 1988) and 1997.

Throughout the site an important relationship exists between soil salinity and vegetation. Vegetation associations within each pond are summarized as follows:

- Annual Pickleweed - Consisting of near 100 percent cover by annual pickleweed (*Salicornia europea*) intermixed with smaller zones of exposed mud.

- Transitional Annual Pickleweed - Annual pickleweed co-dominant with other hydrophytic and grassland species depending on the apparent extent of inundation. In lower, wetter zones, widgeon grass and algal mats may predominate. In higher zones, mixed patches of pickleweed (*Salicornia virginica*) and hydrophytic grasses (*Hordeum marinum* ssp. *gussoneanum*) occur.

- Transitional Salt Marsh - Approximately 50 percent cover by pickleweed (*Salicornia virginica*) with a mix of annual grasses and ruderal species (*Avena sativa, Lolium perenne, Bromus hordaceous, B. diandrus, Parapholis incurva, Lactuca serriola*).
- Transitional Grassland - Patchy mosaic of homogenous stands of *Polypogon monspeliensis, Hordeum marinum* ssp. *Guss sp., Lolium perenne and Salicornia virginica*. Other grasses and ruderal species occasionally occur (*Avena, Bromus hordaceous, Lactuca sp.*). The transitional nature of this association is demonstrated by the concurrent presence of obligate, facultative-wet and facultative species.

- Salt Marsh - Dense stands of nearly 100 percent pickleweed (*Salicornia virginica*).

Vegetation cover is generally limited to those ponds with lower salinity levels. As shown in Figure 11, ponds that have salinity levels lower than 30 parts per thousand (ppt) are more likely to support vegetation than ponds with higher salinity levels (for comparison, the typical salinity for sea water is 32 ppt). Low salinity ponds tend to support associations more characteristic of San Francisco Bay salt marsh (i.e. transitional pickleweed and transitional salt marsh associations). In these ponds a gradual succession from annual pickleweed stands to mixed stands of annual pickleweed and ruderal/hydrophytic grassland association has occurred over the past ten years. Higher salinity muds are colonized on a seasonal basis by annual pickleweed. As salinity levels gradually decline over time, annual pickleweed areas appear to become colonized by transitional grassland associations in higher elevation areas (with shorter hydroperiods) and by transitional salt marsh associations in lower areas. These observations are consistent with previous studies on the site which showed a statistically significant relationship between soil salinity and vegetation (WESCO 1988). Vegetated areas had a mean salinity of 22 ppt compared to non-vegetated areas with mean salinity of 65 ppt. A correlation was also observed between percent vegetative cover greater than 50 percent and salinity less than 50 ppt.

Due to their history as evaporator and crystallizer ponds and their resulting high salinity levels, the northern ponds are generally characterized by a mixture of unvegetated, barren mudflats and salt pans with the exception of ponds 9B, 11B, and 12B which support significant stands of annual pickleweed and transitional salt marsh vegetation. The middle ponds, which historically operated as pickle ponds and rinse ponds and have lower salinity levels, are generally characterized by a mixture of annual pickleweed and transitional saltmarsh associations comprised of annual grasses and ruderal species (*Avena sativa, Lolium perenne, Bromus hordaceous, B. diandrus, Parapholis incurva and Lactuca serriola*). The southern ponds, historically high-salinity crystallizer ponds, are generally devoid of vegetation and consist

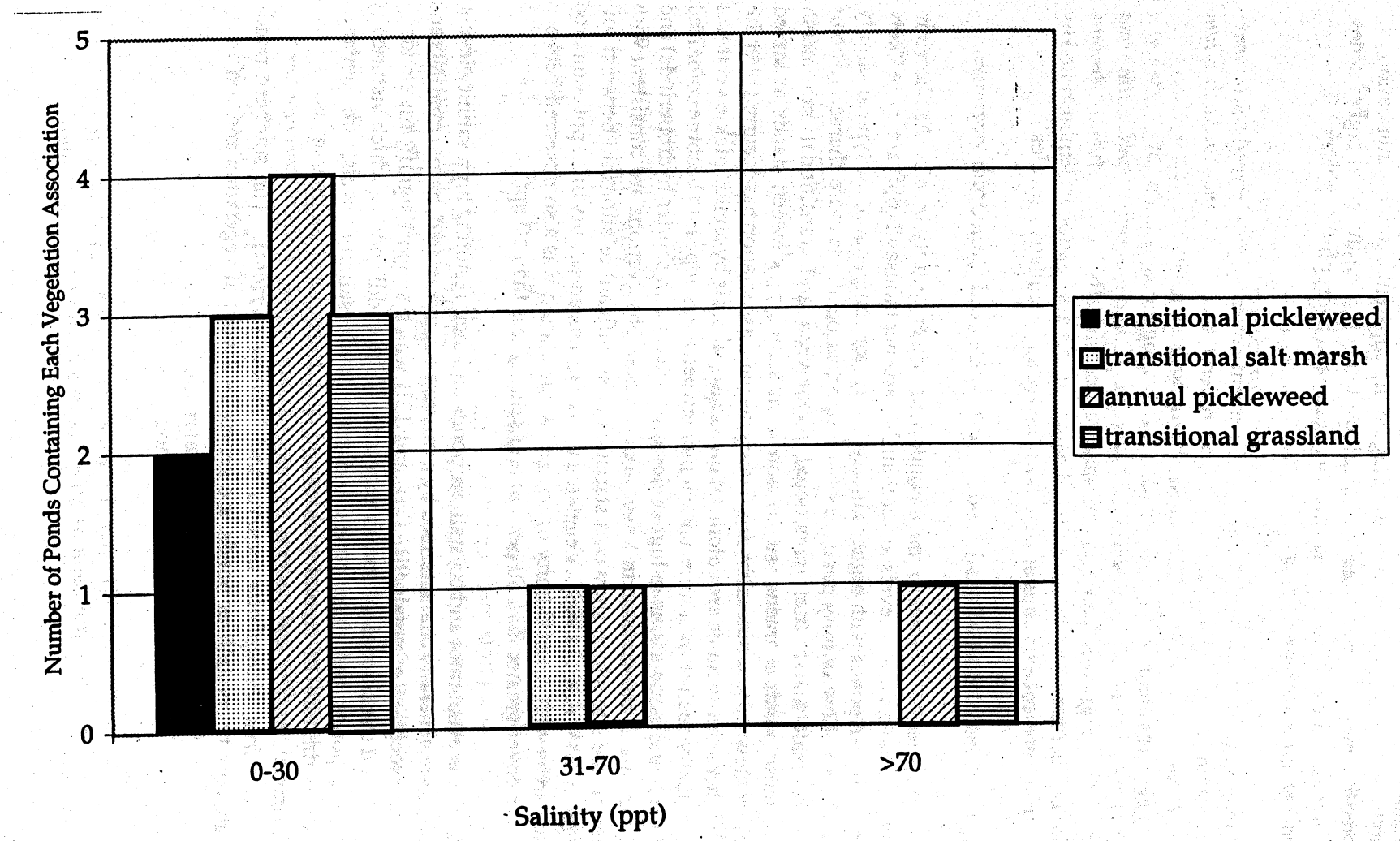


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Figure 11. Soil Salinity and Vegetation

primarily of mudflats and salt pans. Soils on the levees separating the ponds and on the upland margins are less saline and tend to be dominated by stands of transitional grassland species, including *Polypogon monspeliensus, Hordeum marinum ssp. Guss, Lolium perenne, Avena, and Bromus hordaceous,* as well as non-native upland grasses and weedy species.

Wildlife

Despite the man-made origin of the ponds and their condition resulting from intensive salt harvesting operations, the abandoned salt ponds provide valuable wetland habitat to a variety of shorebirds and waterfowl. Water birds are the most visible and abundant wildlife group utilizing the Eden Landing Ecological Reserve. Non-tidal seasonal wetlands serve an important function as feeding and roosting habitats for migratory water birds. Water birds utilize the ponds during the migratory season for feeding, resting and retreat from high tides. Birds exploit the abundant food supply of invertebrate species, including brine shrimp, salt marsh boatman, and brine fly, highly salt tolerant species that typically live in mudflat and salt pan areas. Upland areas in and around the project site provide roosting habitat for water birds when mudflat feeding areas in the region are covered by high tides.

Substantial background data has been collected on waterbird use of the Baumberg Tract and surrounding salt ponds. Waterbird census studies were conducted in the 1980s as part of the Diked Bayland studies conducted by the U.S. Fish and Wildlife Service and California Department of Fish and Game. Additional studies were conducted as part of the proposed Shorelands environmental studies (Cole/Mills Associates et al. 1987). Census studies have also been conducted in the 1996-97 and 1997-98 by the Department of Fish and Game (Casady 1997, 1998a, and 1998b).

Use of the site reaches its peak during the winter season when a wide variety of migratory birds stopover and/or reside in the Bay area in order to feed and roost during seasonal migrations. The most abundant of these shorebirds include the Western sandpiper, dunlin, and black-bellied plover. The existing ponds provide variable wildlife use and in wet years when most ponds are filled with water, most individual ponds can be used by substantial numbers of birds. Under more normal and low rainfall condition, however, the majority of the waterbird use is typically concentrated in just a few ponds. The more consistent high use ponds are 16B, 12B, 11B, 10B, 9B, and 8B depending on tidal cycle (high or low tide), season of use, and the extent and duration of pond flooding (Casady 1998). Ponds 14B, 15B, and 16B have also provided the primary nesting and use areas for the snowy plover over the last several years.

Pond depth also appears to play an important role in governing waterbird use. When shallow water is present in the ponds, small and medium sized shorebirds dominate. In extremely wet years when the ponds fill to more than a few inches in depth, substantial numbers of waterfowl can be found on the site. These relationships and pond use are remarkably consistent with the results of the studies in the 1980s (Cole/Mills Associates et al.1987) and the 1996 to 1998 studies (Casady 1997, 1998b).

Pond 16B in the northwestern portion of the reserve appears to be used the most frequently by water birds for high tide roosting and feeding during the wet season (Casady 1997). Dry season (late May through October) usage is dominated by the western sandpiper, dowitcher, dunlin, and American avocet. Ponds 16B, 14B, 13B, and 17C experience relatively longer periods of water

retention during the dry season and as a result were used by shorebirds to greater extent than the other ponds probably due to increased potential food availability.

The most frequently used ponds share a number of characteristics including large overall size, sparse vegetation, regular and prolonged ponding, and consistent substrate which make them appealing roosting locations for a variety of shorebirds including the western snowy plover, a federally-listed threatened species. Snowy plovers historically nested along coastal dunes and open beaches which lacked vegetative cover allowing unobstructed views of potential predators. However, as these habitats disappear due to development pressure, the plover has shifted its breeding activities to include nesting on man-made landscapes such as salt pond dikes, bare flats and sand fills. Snowy plover nest sites have been identified on several former salt ponds throughout the Baumberg Tract (Cole/Mills et al. 1987; Feeney 1991). Plovers appear to prefer crystallizer and evaporator ponds which are characterized by high salinity levels and correspondingly sparse vegetation cover which renders them ideal nesting locations.

In addition, a wide variety of animals, including small mammals, birds, and insects utilize the upland and wetland communities in and around the site for nesting and foraging. Salt marsh areas support a number of wildlife species including the red fox, domestic cat, jackrabbit, raccoon, striped skunk, and several species of rodents. Common birds observed within the project vicinity include the red-winged blackbird, mallard, American kestrel, Canada goose, and the house finch (EIP 1997). In addition, small mammals, winter concentrations of water birds on the site provide foraging opportunities for raptors, including northern harriers, red-tailed hawks, white-tailed kites, barn owls, golden eagles, and peregrine falcons (EIP 1997).

Special Status Species

Special-status species are plants and animals that are legally protected under the State and Federal Endangered Species Acts or other regulations, and species that are considered rare by the scientific community. Special-status species are defined as follows:

- plants and animals that are listed or proposed for listing as rare, threatened, or endangered under the California Endangered Species Act (Fish and Game Code 1992 Sections 2050 et seq.; 14 CCR Sections 670.1 et seq.) and/or the Federal Endangered Species Act (50 CFR 17.12 for plants; 50 CFR 17.11 for animals; various notices in the Federal Register [FR] for proposed species);

- plants and animals that are Candidates (Category 1) for possible future listing as threatened or endangered under the Federal Endangered Species Act (50 CFR 17.12 for plants; 61 FR 7591, February 28, 1996, for animals);

- plants and animals that meet the definition of rare or endangered species under CEQA Guidelines Section 15380 which includes species not found on State or Federal Endangered Species lists.

- plants occurring on Lists 1A, 1B, 2, 3, and 4 of the California Native Plant Society's (CNPS) Inventory of Rare and Endangered Vascular Plants of California (Skinner and Pavlik 1994). CDFG recognizes that Lists 1A, 1B, and 2 of the CNPS inventory contain plants that, in the majority of cases, would qualify for state listing, and CDFG requests their inclusion in EIRs as necessary.

- animals that are designated as "Species of Special Concern" by CDFG (1994);

- animal species that are "fully protected" in California (Fish and Game Code, Sections 3511, 4700, 5050 and 5515);

- animals that are designated as federal "Species of Concern" by USFWS.

Three listed species, the salt marsh harvest mouse (*Reithrodontomys raviventris*), the California clapper rail (*Rallus longitostris obsoletus*), and western snowy plover (*Charadrius alexandrinus nivosus*) are the primary target or indicator species for the Eden Landing Ecological Reserve Restoration and Management project.

Listed Species

Salt Marsh Harvest Mouse (*Reithrodontomys raviventris raviventris*)

The salt marsh harvest mouse is endemic to the tidal marshes of the San Francisco Bay region. This species is similar to the western harvest mouse, *Reithrodotomys megalotis*. These two species are genetically isolated by a different chromosome number (Shellhammer 1977), however, the salt marsh harvest mouse evolved from western harvest mouse some 8,000 to 25,000 years ago with the creation of the marshes in the San Francisco Bay (USFWS 1984). Its historic range included the extensive marsh system bordering San Francisco, San Pablo, and Suisun bays.

The salt marsh harvest mouse was listed as an endangered species by the United States Department of the Interior in 1970, and by the California Department of Game in 1971 (Shellhammer 1982). The USFWS (1984) Recovery Plan identifies five reasons for decline of this species: habitat loss, fragmentation of remaining habitat, back-filling of habitat, land subsidence, and vegetation changes. Approximately 80 percent of the historic tidal marshes in the Bay have been destroyed or modified (SFEP 1991). Prior to mid nineteenth century, 734 sq km tidal marsh existed around the Bay. Today only 152 sq km exist, much is fragmented or modified (USFWS 1984).

Two sub-species of the salt marsh harvest mouse are recognized: *Reithrodontomys raviventris raviventris*, which is the southern sub-species, and *Reithrodontomys raviventris halicoetes*, the northern sub-species. There are a few populations of the southern sub-species in Marin and Point Richmond, but most of this sub-species occurs in southern half of South San Francisco Bay. In the South Bay the range of the species extends from San Leandro around to the Belmont area. The northern sub-species is found in the marshes along the San Pablo and Suisun bays, and along northern Contra Costa County coast. The pelage coloration on the belly of the southern sub-species is typically cinnamon, from which the scientific name of this species was derived; *Reithrodontomys raviventris* means "grooved-toothed mouse with a red belly."

The salt marsh harvest mouse exhibits physiological and behavioral adaptations which allows this species to survive in the salt marsh and associated grassland (Shellhammer 1987). These unique adaptations include excellent swimming abilities, tolerance of high salinities in its food and drink, and docile behavior. The *R.r.raviventris* can undergo daily torpidity. These adaptations appear to provide this species with a competitive advantage in the marsh environment (Fisler 1965).

The habitat most commonly associated with this species is the mid-to-upper tidal salt marsh. It lives in dense pickleweed (*Salicornia virginica*) stands. Shellhammer (1982) concluded that pickleweed is "the preferred habitat of the salt marsh harvest mouse wherever it occurs, and that the taller, denser stands of pickleweed support the most salt marsh harvest mice." In the 1984 US Fish and Wildlife Service Recovery Plan, the best habitat for the salt marsh harvest mouse is characterized as having 100 percent cover, a cover depth of 30 to 50 cm at summer maximum, greater than 60 percent cover by pickleweed, and habitat complexity which includes saltbush (*Atriplex patula*), alkali heath (*Frankenia grandiflora*), or other halophytes. Wondolleck et al. (1976) and others have also found that in the South Bay, the species was most commonly associated with lush pickleweed, mixed with salt bush and alkali heath. In a study conducted by Johnson and Shellhammer (1988), it was determined that salt marsh harvest mice prefer pickleweed to grassland. They found that 86.8 percent of the salt marsh harvest mice captures occurred in pickleweed. Salt marsh harvest mice did intermittently utilize and move through grassland areas, however, they primarily remained in pickleweed areas. Use of grasslands increased in the spring time, when grasses sprout and provide increased cover in grassland (Johnson and Shellhammer 1988). The use of adjoining grasslands as refugia was also documented by Fisler (1965) during the highest winter tides or flooding events.

In diked marsh systems, the use of grasslands may reflect the lower nutritional value of the pickleweed, which does not receive the daily nutrient input from tidal waters. The salt marsh harvest mouse may be required to seek a wider dietary selection in the grasslands, especially at the onset of the breeding season (Johnson and Shellhammer 1988).

The salt marsh harvest mouse is not an obligate species to pickleweed habitat. It can also occur in other marsh vegetation communities composed of species such as fat hen (*Atriplex triangularis)* and bulrush (*Scirpus robustus*), providing the vegetation offers appropriate multi-layered structure. Zetterquist (1978) found that the salt marsh harvest mouse will use marginal habitats. At some of the sites examined by Zetterquist, the vegetation patterns were altered by diked conditions, and the dense cover was not always present. In other trapping studies of *R. r. halicoetes* conducted by the California Department of Fish and Game (Botti et al. 1986 and WESCO (1979; 1982), salt marsh harvest mice were captured in habitats containing no little or no pickleweed.. The vegetation composition of these areas typically consisted of fat hen, saltgrass, baltic rush (*Juncus baliticus*), alkali heath, and other grass species, and in one location on Suisun Bay, a dense stand of tule (*Scirpus spp.*). Although pickleweed is the preferred habitat for this species, they may be found in sub-optimal habitats depending on the season, environmental condition, and proximity of these areas to more typical habitat.

On the Baumberg Tract, salt marsh harvest mice were found at nine locations along Mt. Eden Creek, the mouth of Old Alameda Creek, and in the northen portions of the historic North Creek channel during surveys conducted by WESCO in 1985. Suitable habitat on the site consists of

the areas dominated by dense salt marsh vegetation (primarily pickleweed) and includes the outboard tidal marsh (Whale's Tail Marsh) and Mt. Eden Creek. Suitable cover also exists in the diked marsh or seasonal wetlands in Pond 20B (the Perry property) (Figure 5).

California Clapper Rail (*Rallus longirostris obsoletus*)

The California clapper rail, a federally and state-listed endangered species, historically occurred in tidal salt marsh and brackish marshes along the northern and central California coastlines. However, the existing population of clapper rails is almost entirely limited to the San Francisco Bay area. As with the salt marsh harvest mouse, the overriding cause for listing the California clapper rail is the loss and fragmentation of suitable tidal marsh habitat, particularly the loss of large blocks (greater than 40 acre in size) of contiguous tidal marsh (Evans and Collins 1992). The California clapper rail is almost exclusively associated with broad tidal marshes which support an intricate network of slough channels which provide feeding areas as well as escape corridors from predators (Harvey 1988). Clapper rails feed on invertebrate species located in mud flats, creek banks, marsh vegetation, and shorelines at low tide. Clapper rails generally occupy habitat composed of mid and high marsh and typically nest in associated vegetation including cordgrass (*Spartina spp.*), pickleweed, and gumplant (*Grindelia* spp.). Twelve clapper rails were observed in the northern half of the Whale's Tail Marsh outboard of the Cargill salt ponds during census counts in 1984 and 1985 (Figure 5) (Cole/Mills Associates et al. 1987). Non-protocol level surveys conducted in 1998 documented clapper rails in the same area, but none were identified at the mouth of Mt. Eden Slough or along the lower slough (Department of Fish and Game unpublished data).

California clapper rail populations have dropped alarmingly in the last two decades. The first intensive survey was conducted by Gill in the early 1970's and he estimated the total population to be between 4,200 and 6,000 birds at that time (Gill 1979). By the early 1990's, the population had declined to about 300 to 500 rails (Takekawa 1992). This latter decline has been attributed introduction and spread of the red fox (*Vulpes fulva*) in the marshes surrounding the Bay. Following implementation of red fox and other predator control programs on the San Francisco Bay National Wildlife Refuge and adjacent baylands, rail populations have rebounded to an estimated bay wide population in the range of 1040 to 1264 rails, of which an estimated 650 to 700 are located in the South Bay (C. Wilcox pers. comm.).

Western Snowy Plover (*Charadrius alexandrinus nivosus*)

The western snowy plover is listed as a threatened species by the FWS. Although it has been documented that snowy plovers have nested at the salt ponds of South Bay since the late 1800s, no surveys or studies of the snowy plover at the Baumberg Tract ponds were undertaken until 1978. On 15 and 16 June 1978, during the mid part of the nesting season, (Point Reyes Bird Observatory (PRBO) surveyed the site and recorded 127 adult Snowy Plovers, 13 broods and 8 nests (Page and Stenzel 1979). Of these, 28 adults, 6 broods and 1 nest were located on the levees or dry bottoms of cells 15B and 16B; 94 adults, 7 broods and 6 nests were in the pickle pond (17B); and 5 adults and 1 nest were in cell 1B. PRBO conducted a similar survey in June 1989 and located 12 adults in cell 16B; 12 adults and 1 brood in 17B; 3 adults and 1 brood in 4B; and 1 adult in 3B (PRBO unpubl. data). Other information on the presence of snowy plovers at the restoration site between the two PRBO surveys are listed in Feeney (1991). They include 1 plover in 4B on 22 May 1984, 3 between 12B/13B on 4 June 1984, and 1 in 12B on 17 June

1984. There were several counts in 17B in 1985. They included 132 plovers on 24 March, 94 on 13 April, 74 on 28 April, 55 on 4 May, 20 on 12 May, and 23 on 18 May (Feeney 1991). Howard Cogswell counted 332 wintering plovers in 17B on 2 February 1986, 201 on 30 January 1988 and 140 on 6 February 1988. On the same 1988 dates he counted 3 and 47 winter plovers, respectively in cell 16B. On 6 February 1988 he also counted 18 wintering plovers in cell 5B (Feeney 1991).

Feeney (1991) monitored nesting snowy plovers on the tract throughout summer 1989 and during April and May 1990. During 1989 she found 23 nests in cell 16B, 2 in 15B and 10 in 17B. The first nest was detected on 2 April in 16B and 11 April in 17B. The presence of two-week old chicks at 17B on 10 May suggests nesting probably commenced there as early as in 16B. She estimated that 9 chicks hatched from the 25 nests in 15B and 16B but that no young fledged. An estimated 6 chicks hatched but no young fledged from the 10 nests in cell 17B. From repeated observations of seven broods in the 16B cell she estimated brood home ranges varied between 2.5 and 13.6 (median = 5.6) acres. During the early part of the 1990 nesting season (April and May), Feeney (1991) found 5 nests in 16B and 5 in 17B.

Feeney (1991) paid particular attention to potential predators of snowy plovers during her studies. Those she felt posed the most threat because of the frequency of their presence in nesting areas and their behavior were red fox, northern harrier and peregrine falcon. Fox tracks were observed at one nest from which the eggs had been taken and a fox was also seen stalking a family of nearly-fledged young. Red foxes have been identified as important predators of plover nests at other California sites such as the beaches of Monterey Bay (G. Page unpubl. data). While Feeney (1991) never saw harriers catch plover young at Baumberg, she observed plovers react to them with alarm and hiding behavior. Harriers also spent considerable time foraging over ponds where the only detectable prey were snowy plovers. Peregrine falcons were frequently observed in the area and one was observed catching an adult plover at the Oliver Brothers ponds (HARD Marsh) across Highway 92 from the Baumberg restoration area. An American kestrel was observed taking one plover chick and a loggerhead shrike was observed hunting chicks although it was unsuccessful. Both species are known predators of plover chicks at other locations (G. Page unpul. data). Common ravens were noted in the area on two occasions. Ravens are important predators of plover eggs at many coastal locations.

Biologists from H. T. Harvey associates monitored plovers at the restoration site in 1996 and documented 21 nesting attempts (Duke et al. 1996). Of these 14 were in cells 15B and 16B, 1 in cell 17B, 3 in cell 8B and 1 in each of cells 3B, 13B and probably 17C. The earliest nest was confirmed on 25 April and the latest was initiated on 17 July. On 20 March, prior to the onset of nesting, 114 plovers were counted in the restoration site. Subsequently numbers declined to about 30-40 birds through May. During June numbers decreased to the lowest level of 6-14 birds before increasing to 21-23 birds in July. Initially the highest numbers of plovers were found in cell 17B with the other area of concentration being cells15/16B. The plovers ceased using 17B to any appreciable degree by late April when pickleweed began to sprout over large areas that had formerly been mostly bare alkali. Simultaneously cells 15/16B, which had been covered with shallow water, became water-free by May, and by June were relatively dry. At this point cells 15/16 B became the most attractive area to the plovers. From March to mid May the surveyors frequently saw northern harriers and a merlin on almost every visit and a peregrine falcon in mid June. Dense concentrations of red fox tracks were found in some areas and a den was located about 400 m northwest of 17B. Ravens were also seen in the area up until mid June.

The Department of Fish and Game monitored snowy plovers at the restoration site from 8 May to 6 August 1997 and from 4 February to 7 August 1998. During the 1997 nesting season, they located 24 nests in cell 16B, 1 in 15B, 16 in 14B and 1 in 17B (Casady 1997). One additional nest was found in cell 17B by G. Page (unpubl. data) bringing to 2 the total number of known nests for 17B in 1997. Although no nests were found in 17C, 4 adults and 3 chicks were seen there on 30 June (Casady 1997). The greatest number of concurrently active nests were present during the last week of May and the first week of June. Except for cell 17B, chicks were seen in all of the cells with nests as well as in cell 17C. Ravens were observed preying on plover eggs and chicks in cell 16B (Casady 1997).

During the 1998 nesting season, snowy plover use was reduced considerably from previous years, declining from 42 identified nests in 1997 to 12 identified nests in 1998 (Casady 1998a). Nest location and pond use also shifted slightly with minor increases in nesting activity in noted in ponds 17C (five nests), and in ponds 7B and 4B where nesting had not been previously identified (Casady 1998a). This decline in numbers and apparent shift in nesting area was attributed to the delay in nesting resulting from the deep and extended ponding in the traditional nesting ponds resulting from the above normal precipitation in the 1997-98 rainy season.

Altogether, the above studies suggest that the restoration site has been used consistently by breeding plovers since at least 1978 and that cells 15/16B and 17B have been the most heavily-used nesting areas within the site and in more recent time, cell 14B has received increased use (Figures 3 and 5). As Duke et al. (1996) point out, between 1978 and 1996, use of cell 17B for breeding has diminished markedly due to invasion of vegetation. Numerous predators of the adults, chicks and eggs have been reported in the area. One of these, the red fox, is a recently introduced non-native predator to the area and another, common raven, is a native predator with a population that has probably only recently expanded into the area. Apparently ravens began nesting on PG&E power transmission lines and CalTrans light standards near the restoration site since only about 1993 (Bob Richmond pers. comm.). Plover nests are located mainly on the bottoms of former salt ponds when they become dry in the spring.

Feeney (1991) found that the plovers feed in shallow water or at the edge of water in ponds but also that young plovers could forage for entire days without approaching water. She noted that the young would forage in vegetation and use it for shelter when it was available. Feeney (1991) concluded that the primary important characteristics of snowy plover breeding habitat at the restoration site are large open areas and abundant insects prey.

Other studies examining plovers over a much broader landscape indicate that San Francisco Bay is one of the most important breeding areas for snowy plovers along the U. S. Pacific Coast (Page et al. 1991) and that the restoration site is an important snowy plover nesting area within San Francisco Bay (Page an Stenzel 1979). The hundreds of plovers at the site in the winter make it one of the most important wintering locations for plovers along the U. S. Pacific Coast (Page et al. 1986).

California Least Tern (*Sterna albifrons browni*)

The California least tern, a federally and state-listed endangered species, requires coastal habitats during its breeding season. Nesting colonies are typically located in close proximity to shallow waters populated by small fish, the main source of food for the least tern, and consist of flat

areas characterized by little or no vegetation, and loose, sandy, or mixed substrate. As a result of human disturbance of traditional breeding areas, the least tern, like the western snowy plover, has shifted its breeding activities to include nesting on salt pond dikes, bare flats, and sand fills.

California least terns do not appear to significantly use the Eden Landing Ecological Reserve restoration area although the adjacent Cargill intake ponds are an important post-fledging staging habitat area (Figure 5). Observations suggest that these two ponds provide important habitat for fledgling least terns that need to develop the requisite foraging and feeding skills critical to successful migration (Feeney 1988).

California Black Rail (*Laterallus jamaicensis coturniculus*)

The California black rail, a state-listed threatened species, inhabits freshwater, saltwater and brackish marshes. The California black rail is an elusive, bird that is rarely observed. As a result, there is little reliable data concerning historical and present population densities. Black rails appear to prefer higher elevation tidal marshes comprised of dense vegetation. Although black rails have not been observed on or around the project site, suitable wintering and potential breeding habitat exists along the upper margins of the marsh at the lower end of Mt. Eden Creek (Thomas Reid Associates 1989).

American Peregrine Falcon (*Falco peregrinus anatum*)

The American peregrine falcon is classified by Federal and state agencies as an endangered species. Peregrine falcons typically nest in cliffs with good visibility, however, they can occasionally be found nesting in transmission towers, bridges, and tall buildings. The area which an individual falcon requires for foraging purposes can be quite large depending upon the availability of an adequate food supply. The peregrine falcon's principal sources of food are passerine birds, waterfowl, and shorebirds. Peregrine falcons are regularly observed foraging on the Eden Landing Ecological Reserve and this use is assumed to include resident and migratory populations of peregrine falcons.

Non-listed Species

Salt Marsh Wandering Shrew (*Sorex vagrans halicoetes*)

The salt marsh wandering shrew is classified as a "Mammalian Species of Special Concern" within the state of California. Salt marsh wandering shrew habitat consists of middle elevation tidal salt marsh composed of dense stands of pickleweed, jaumea (*Jaumea carnosa*), and occasional saltgrass (*Distichlis spicata*). Shrews are typically found in areas of marsh that provide dense cover, an abundance of invertebrate animals for food, suitable nesting and resting sites, and fairly continuous ground moisture (WESCO 1986). Although no shrews have been captured on the site, one shrew was observed during trapping activities conducted by WESCO during 1985 (Thomas Reid Associates 1989).

Burrowing Owl (*Athene cunicularia*)

The burrowing owl, a state species of special concern, is a small to medium sized raptor characterized by its use of burrows for nesting. Burrowing owls typically inhabit grassland and

open areas and enlarge burrows abandoned by other small mammals. They can also inhabit a wide variety of man-made structures, including culverts, wood debris piles, or narrow openings beneath cement or asphalt pavement. In August, 1997 a burrowing owl burrow was located in a culvert at the southeast corner of the Oliver property, adjacent to and east of the Eden Landing Ecological Reserve. In addition, two pairs of breeding owls were observed in the vicinity of the site in 1995 (EIP 1997).

Tanarthrus occidentalis

Tanarthrus occidentalis is a small beetle, approximately 3 to 5 mm in length, in the Antchidae family. This species was first collected in 1976 and subsequently described as a new species in 1979 (Maffei pers. comm.). This species is currently known from only three sites around south San Francisco Bay, including pond 16B on the Eden Landing Ecological Reserve. All known localities are abandoned crystallizers and salt panne habitats. Suitable habitat is assumed to be characterized as areas having extensive areas of encrusted salt crystals interspersed with open areas of fine silt and little or no vegetation. These areas typically remain dry for most of the year except during the winter when the areas pond rainwater.

Tiger Beetles

Tiger beetles are moderate sized beetles that belong to the family Cicindelidae. Two species of tiger beetle may be present on or near the Eden Landing Ecological Reserve: *Cicindela senilis senilis* and *C. haemorrhagica.* Tiger beetles inhabit the open, muddy margins of creeks and streams and also the muddy margins of salt pannes that are occasionally inundated by high tides. High dry banks of channels and open areas of levees associated with salt ponds tend to be favored by *C. senilis senilis*. *C. senilis senilis* is currently distributed throughout the south and central portions of the Bay and has been previously identified on the Eden Landing Ecological Reserve (pond 16B; Maffei, pers, comm.). *C. haemorrhagica* is considered to be in decline and is only currently known from four sites, with the closest site being Hayward Landing.

Salmon and Steelhead

Salmon (*Oncorhynchus tshawytscha*), steelhead (*O. mykiss*), and other fish utilize the channels in tidal marshes for nursery habitat, feeding habitat and in migration. In San Francisco Bay, chinook salmon and steelhead are present during spawning runs and out-migrating juveniles. The major salmon spawning runs are in the North Bay as the salmon move upstream into the Sacramento and San Joaquin river systems. Small runs of steelhead are still present ion some South Bay tributaries such as Alameda Creek and Coyote Creek. Out-migrating juveniles for both species have been found throughout San Francisco Bay, including the South Bay during high flow years. At the present time, the reserve does not provide habitat for either species, except possibly in the extreme lower sections of Mt. Eden Creek or Old Alameda Creek. Upstream migration in both waterways is blocked by dikes or control structures, however.

Plants

No known populations of rare, threatened or endangered plants are known from the site (Cole/Mills Associates et al. 1987; WESCO 1987).

3.2.2 Significance Criteria

The proposed project would result in a significant impact on biological resources if the project would:

- Substantially affect a rare, threatened, or endangered species, including species which while not formally listed by the state or federal governments may meet CEQA Section 15380 criteria.
- Substantially diminish habitat for fish, wildlife, or plants or threaten to eliminate a plant or animal community.
- Interfere substantially with the movement of any resident or migratory wildlife species.
- Cause a wildlife population to drop below self-sustaining levels; or
- Create runoff that significantly affects wildlife habitat.

3.2.3 Impacts and Mitigation Measures

The proposed project is designed to improve and enhance habitat for wetland-dependent wildlife and would involve tidal restoration and reintroduction of tidal influence to 570 acres of the project site and provide management for 126 acres of salt panne habitat and 95 acres of diked, seasonal wetland habitat. The project is designed, in part, to fulfill objectives of adopted recovery plan for the salt marsh harvest mouse and California clapper rail and includes commitments to provide compensatory mitigation for impacts to salt marsh harvest mouse and wetland habitat for the Dixon Landing Road Interchange project and the restoration of tidal salt marsh habitat for the City of San Jose's continued discharge of treated wastewater into San Francisco Bay. Portions of the site which have provided significant breeding, rearing and wintering habitat for the threatened snowy plover will also be managed and enhanced for snowy plover and associated panne-dependent species.

Less Than Significant Impacts

<u>Impact B-1: Conversion of Seasonally Flooded Habitats to Perennial Marsh</u>

Tidal restoration of previously seasonally flooded ponds would alter the conditions that make the areas attractive to some species of water birds. Initially, the restored tidal area will provide valuable mudflat feeding habitat for shorebirds. Shorebird use will likely decline over time as the mudflats become vegetated. Areas selected for tidal restoration generally includes ponds with lower or less consistent levels of use. Ponds with traditionally higher levels of waterbird use will be managed to retain hypersaline conditions and provide the seasonal, shallow flooding regime preferred by most shorebirds. This management will provide for more consistent habitat conditions rather than relying on vagaries of rainfall to flood the ponds and make attractive shorebird habitat. The tidal restoration plan also incorporates construction of panne ponds to provide additional shorebird habitat in restored tidal marsh areas. Extensive shorebird and waterfowl habitat is also present in the surrounding salt ponds. These changes in habitat conditions are not anticipated to adversely impact water bird populations in the area and will

have a significant, long term positive effect on tidal marsh dependent species such as the salt marsh harvest mouse, salt marsh wandering shrew, and California clapper rail.

Impact B-2: Panne-Dependent Species

Several special status species, including the snowy plover, *Tanarthrus occidentalis,* and two species of tiger beetles are known to inhabit portions of the abandoned salt ponds on the site. *Tanarthrus occidentalis* and the tiger beetle are known to occur in the two northwestern ponds, 15B and 16B. These two ponds and the adjacent pond 14B also provide the primary use areas on the site for the snowy plover in recent years. These three ponds will be retained and managed to promote salt panne habitat for these and other panne habitat-dependent species. The proposed management will not significantly alter the basic hydrologic patterns of flooding and drying of the ponds. Under current conditions, the depth and duration of flooding is directly dependent on rainfall patterns and amounts. The proposed management measures will provide more consistent flood-up dates (using bay water rather than relying on rainfall), structures to better control water levels to desired depths, and the ability to draw-down water levels to expose nesting substrates at appropriate times of the year. These conditions are designed to maintain and/or improve the habitat conditions for these species.

Impact B-3: Fish

The restoration of tidal action to the site will open up large areas to use by fish. At low tide, fish, potentially including salmonids such as steelhead and chinook, could become stranded in backwater areas and subject to predation, dehydration, or suffocation (low dissolved oxygen levels). The proposed implementation plan includes excavation of a initial tidal drainage network within the restored marsh areas. These channels are expected to retain standing water even at low tides and should provide sufficient habitat and cover for fish to move in and out of the restored areas even at low tide. Significant stranding problems are not anticipated. In the long-term, tidal marshes provide important nursery habitat for many fish, including salmon (Goals Project 1999).

The project is not expected to have any adverse effects on water quality, including salinity (see Section 3.1.3) which could also impact fish populations

Significant Impacts

Impact B-4: Take (harm or harass) Listed Animal Species

Construction associated with the proposed restoration project would potentially result in the direct mortality of special status species and/or temporary disturbance impacts to snowy plover and California clapper rail breeding habitat on the project site.

Mitigation Measure B-4

Construction for implementation of the Eden Landing Ecological Reserve Restoration and Management Plan would be timed to avoid impact to critical resources. Construction activities in the snowy plover management area will occur between September 20 and February 1 after and

prior to the snowy plover nesting season. Earlier start dates may be allowed if monitoring demonstrates that snowy plover nesting is completed and the young are capable of flight.

For channel excavation within the existing marsh in the lower and upper Mt. Eden Creek channel segments, fabric (silt fence) or heavy gage plastic fences will be erected along the edges of the excavation areas. These constructions areas shall be trapped and all salt marsh harvest mice and special status species shall be removed prior to construction in order to prevent take of the salt marsh harvest mouse. The exclusion fences shall be maintained in working condition through completion of the work. Additionally, no construction work/channel excavation shall occur within 700 feet of clapper rail nesting habitat during the nesting season between March 15 and August 1, unless prior monitoring studies indicate no clapper rails nesting activity. This timing constraint is limited to the lower 1,000 feet of the Mt. Eden Creek channel.

Qualified biological monitors knowledgeable of the restoration and management plan goals and objectives and familiar with salt marsh harvest mouse, clapper rail, and snowy plover biology and habitat requirements shall be utilized to oversee construction activities. The monitors responsibilities shall include:

- Remain present on the site during all excavation and other construction work in or adjacent to occupied habitats for the listed species.
- Stake or fence areas to be avoided by construction equipment.
- Retain authority to control or halt construction activity that is not consistent with the approved construction plans and any amendments.
- Notify the Department of Fish and Game, U.S. Fish and Wildlife Service, U.S. Army Corps of Engineers, and Regional Water Quality Control Board of any unanticipated damage to protected habitat areas, erosion or water quality problems in excess of permit requirements, or dead or injured listed species.

B-5: Loss of Habitat for the Salt Marsh Harvest Mouse

Excavation in the existing Mt Eden Creek channel will result in the loss of approximately 4.8 acres of pickleweed-dominated habitat for the salt marsh harvest mouse (3.8 acres in the lower channel area and approximately 1 acre in the upper, Eden Landing portion of the channel). The existing habitat ranges from approximately 100 feet to 500 feet in width. The proposed new channel will be constructed to 31 feet in width. Measures are incorporated into the project implementation (Mitigation Measure B-4, above) to relocate salt marsh harvest mice and other native small mammal species from construction areas. The loss of the 4 acres of habitat is not expected to significantly impact salt marsh harvest mouse populations or numbers in the area. A significant marsh zone (minimum of 70 feet) will remain along Mt. Eden Creek. This corridor should be sufficient to allow harvest mouse movement along the channel and between the existing marshes and the restored marshes in the main restoration area.

This short term, minor reduction in available habitat for channel construction will be offset by the long term establishment of tidal marsh habitat in the restoration area.

B-5: Alternative Channel Route

CDFG is also working with Cargill to evaluate an alternative alignment that would relocate the existing Pond 10 levee to the north and construct the new channel along the borrow ditch within the pond. This alternative would avoid disruption and loss of 3.8 acres of existing salt marsh harvest mouse habitat in the lower Mt. Eden Creek channel. Use of the alternative channel alignment would avoid the direct loss of harvest mouse habitat and provide for a wider marsh habitat zone between the Whales Tail Marsh on the bay shoreline and the interior restored areas.

Significance of Impacts After Mitigation

With implementation of Mitigation Measures B-4 to minimize potential for direct take and disturbance to special status species, the proposed project would result in a less than significant biological resources impact. Although the short term loss of up to 4.8 acres of salt marsh harvest mouse habitat is not considered significant given the long term increase in habitat resulting from the restoration plan. Implementation of Mitigation B-5, the alternative Mt. Eden Creek channel route, could avoid 3.8 acres of habitat loss and provide greater long term benefits for the species (additional habitat acreage and wider marsh corridors along Mt. Eden Creek). This mitigation measure is contingent upon approval of Cargill Salt Company.

3.3 Utilities and Service Systems

3.3.1 Setting

Existing public utilities on the site include the East Bay Dischargers Authority (EBDA) treated wastewater line, two high voltage Pacific Gas and Electric Company (PG&E) transmission lines, and an ACFCD stormwater pipeline and outfall (Figure 12). EBDA owns and operates a 60-inch pipeline within a 40-foot wide easement which diagonally bisects the eastern portions of the restoration area and then proceeds westerly across the northern boundary of the site. One PG&E transmission line parallels the EBDA easement across the eastern portions of the site. The second transmission line runs east-west across ponds 14B, 15B, and 16B. The ACFCD has a 48-inch diameter force main which transports stormwater runoff from a pump station at the corner of Arden and Eden Landing roads. The force main is approximately 1600 feet in length lies within the existing access road extension of Eden Landing Road on the site. The force main discharges through a flap-gated outfall into Mt. Eden Creek.

Cargill's existing operations include several features which are present within the boundaries of the Eden Landing Ecological Reserve. Access to these facilities is from Eden Landing Road through the reserve. Cargill's existing brine distribution system from their intake ponds north of Mt. Eden Creek uses a constructed canal or ditch which lies within reserve boundaries for most of its length. The ditch lies along the north edge of the levee along the north bank of Mt. Eden Creek. The ditch runs along the southern edge of the reserve from pond 16B in the northwest, parallel to Mt. Eden Creek to a point east of the central portion of Pond 17B. From this point, the brine is pumped under the Mt. Eden Creek channel by a pump house on Cargill's property on the west bank of the creek (Figure 6). Cargill also maintains a rip-rap material storage area on the site. These facilities as well as the existing water circulation between the ponds bordering the North Creek tidal connection to Alameda Creek need to be incorporated into or relocated as part of the restoration project.

The current retention of water on the Baumberg Tract results in periodic significant mosquito hatches and requires significant control efforts by Alameda County Mosquito Abatement District.

3.3.2 Significance Criteria

A significant impact to utilities and service systems would occur if either of the following would result from implementation of the proposed project:

- Existing infrastructure must be substantially expanded or altered to meet the needs of the proposed project.
- Additional treatment or distribution facilities would be needed to serve the proposed project
- Increased costs for operations/or difficulty in completing operations and maintenance activities or repairs for existing facilities.

3.3.3 Impacts and Mitigation Measures

Less Than Significant Impacts

Impact C-1: Mosquito Abatement. Although tidal restoration is generally considered beneficial and is expected to reduce current mosquito abatement requirements, poorly drained backwater areas or panne ponds which retain standing water for extended periods of time would potentially create breeding habitat and mosquito hatches.

Mitigation Measure C-1. Project design shall incorporate applicable control methods, provide adequate access to backwater areas, and minimize backwater ponding and poor drainage to maximize mosquito abatement on the project site. The CDFG will continue to cooperate with Alameda County Mosquito Abatement District to allow access and implement appropriate control measures.

Potentially Significant Impacts

Impact C-2. Implementation of the proposed project could affect costs and the ability of service providers to access existing facilities on site for the purposes of operations, maintenance, and emergency repair. The establishment of the Eden Landing Ecological Reserve and implementation of the restoration and management plan will create and significantly expand habitat for the endangered California clapper rail and salt marsh harvest mouse in the reserve and change the hydrologic regime in the tidal restoration areas from a seasonally flooded environment to a perennially wet environment. This change would include the EBDA and PG&E utility easements. Although repair and maintenance activities within these easements are currently encumbered by the need to comply with Section 404 and state and federal endangered species regulations (the majority of the existing easements currently lie within Section 404 jurisdiction and provide habitat for one or more other listed species), the restoration plan incorporates measures to avoid significantly increasing potential operation costs and or regulatory burdens on EBDA or PG&E.

The management plan incorporates procedures that would address routine maintenance and emergency repair procedures in relation to EBDA and PG&E facilities on the reserve. Implementation of these procedures are designed to be incorporated into the permits, including the Corps permit and Section 7 consultation and Biological Opinion for the implementation of the Eden Landing Ecological Reserve Restoration and Management Plan. This approach would allow EBDA and PG&E to perform routine maintenance and emergency repairs with a minimum of regulatory delay as long as applicable protection measures for threatened and endangered species are followed and restoration requirements are implemented once the repairs are completed. The types of activities considered and required protection measures are discussed below.

Mitigation Measure C-2a. The proposed restoration plan retains existing dikes and roadways that provide direct access to EBDA's existing wastewater line access portals and the PG&E boardwalk. In order not to unreasonably restrict access or significantly increase potential repair costs over the remainder of the EBDA easement while achieving the desired tidal restoration, a broad low berm will be constructed over EBDA's easement. Equipment use of the berm would only be for emergency situations or scheduled and permitted repair of leaks in the pipeline. This berm could not be used for regular maintenance or inspections. The berm is proposed to be supra-tidal, i.e., above the normal high tide range. The berm would also have periodic low point/breaks in order to provide water flow to both sides of the berm. The top of the berm would be designed to an elevation suitable for high marsh community establishment (MHHW plus 0.5 feet), but not of an elevation that would create upland conditions. This is necessary to minimize creating upland habitats and upland travel corridors for red fox and other undesirable, introduced species. A similar type of berm was incorporated into the Roberts Landing tidal marsh restoration project in San Leandro for emergency access and has worked well for that purpose. The berm will allow for emergency equipment access without the need for significant de-watering of adjacent wetlands. If necessary, channel breaks could be filled to allow for emergency access.

Mitigation Measure C-2b. The following measures are incorporated into the project description and should be formalized in an operational agreement with the two entities to mitigate potential effects on EBDA and PG&E facilities:

Normal Maintenance/Inspection
- Regular inspection and maintenance to access portals (EBDA) and transmission line towers via existing roads and boardwalks.

Emergency Situations
- Pipeline leak or rupture; downed conductor or tower collapse.

Repair Activities
- Equipment access
- Temporary fill/blockage of cuts in the berm/tidal channels within the easement necessary to provide equipment access, contain the spill, and/or prevent tidal leakage or flow into the break
- Excavation of trench/work area, back-filling
- Fill associated with the temporary storage of excavated material

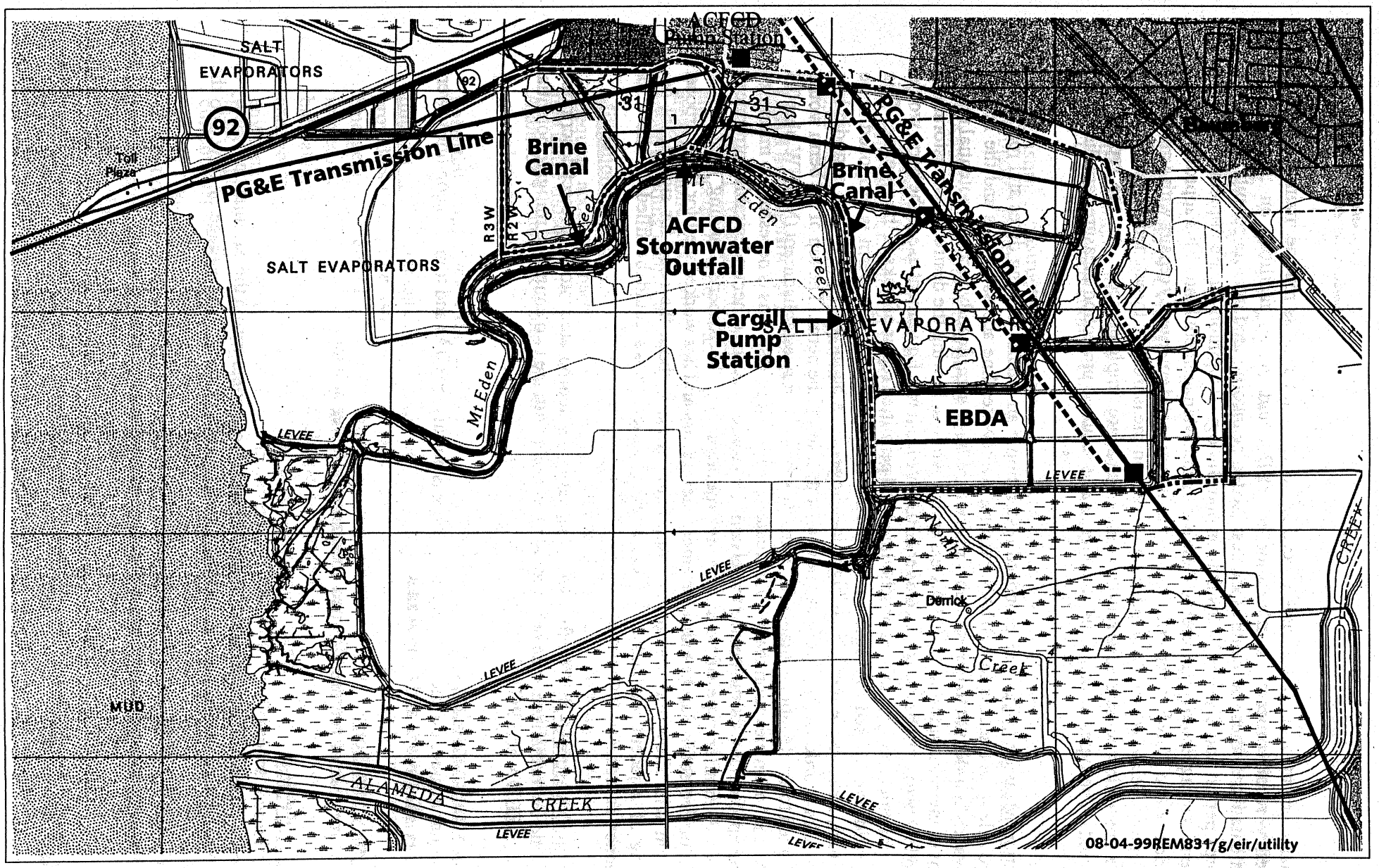

Figure 12. Utility Easements and Infrastructure

N

Scale in feet

0 2000

■ **EBDA Wastewater Line Access Portals**

- Pipeline and transmission line footing replacement/repair.
- Discharge of water from the work area.

Protection Measures/Conditions

1) Non-emergency repairs shall be coordinated with FWS and CDFG; timing and approval shall be subject to FWS and DFG approval.
2) Repair activities should be scheduled to occur between August 1 and March 1 to avoid potential disturbance to clapper rail nesting activity in restored marsh areas and February 1 to September 15 in the snowy plover management area.
3) For non-emergency repairs in and adjacent to restored tidal marshes, fabric or heavy gage plastic fences shall be erected around work areas and along access routes. Areas within these exclusion zones shall be trapped and all salt marsh harvest mice and special status species shall be removed prior to construction. Exclusion fences shall be maintained in working condition through completion of the work.
4) For emergency access notification to the FWS and DFG within 12 hours
5) Repair work should be completed as soon as feasible; a schedule and plan for repair and restoration shall be submitted to DFG and FWS within 5 working days of the emergency
6) Overnight/out-of-use equipment parking and materials storage will need to be confined to existing dikes/upland locations; specific locations to be approved by DFG in cooperation with EBDA and PG&E
7) All disturbed areas shall be returned to pre-existing grades immediately after repairs are completed all compacted soils shall be lightly worked with a disk, tines on an excavator bucket, or other suitable device to reduce compaction*
8) All excavated material shall be placed on mats, thick plastic sheeting, or tarps; all excavated material shall be replaced, any excess material shall be off-hauled*
9) The top 6 inches of marsh shall be excavated and stored separately from the deeper materials; the top layer shall be replaced following repairs to facilitate revegetation*
10) All equipment working in wetlands (off the retained dikes) shall be required to work from mats or otherwise have approved, low pressure tracks*
11) Normal house-keeping and water quality protection measures will need to be employed*
12) Compliance with other relevant standard terms and conditions of applicable Corps and Regional Water Quality Control Board permits and regulations[1]

Impact C-3: Effect of Berm on the Pipeline: Construction of the berm over the EBDA easement will increase the weight over the compressible bay muds. The additional weight could cause additional settlement, potentially causing the line to crack or leak. For most of the easement, the amount or depth of fill is only 1 to 2 feet. Over in the lower portions of the easement through the southern crystallizers, up to 4 feet of fill may be required to create the berm. The EBDA easement agreement allows fill to be placed up to 7 feet in elevation over the pipeline.

Mitigation Measure C-3: CDFG shall conduct specific geotechnical studies to assess the potential effects of the berm on the pipeline. If recommended by the studies, the high point of

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**Indicates standard, required measures for Corps nationwide permits relative to utility line work, maintenance activities, and other covered activities.*

the berm should be offset to the west from pipeline such that the weight of the berm fill is not directly over the pipeline.

Impact C-4: Effect of on ACFCD pump station and outfall.

Construction for and restoration of tidal conditions in Mt. Eden Creek and the remainder of the restoration area could adversely affect the operation of the ACFCD pump station, force main, and outfall. The ACFCD force main is buried under the road that provides the main access route into the reserve and to Cargill's adjacent operations. The project has been designed to retain the existing access along the force main route and to the outfall structure. As such, restoration activities should not adversely affect maintenance of these facilities. Various construction activities for the restoration and management plan are also planned in the vicinity of the force main and outfall. These include channel excavation, construction of recreational facilities (viewing mound, trail, parking/staging area), cleanup/removal of debris and salt production facilities (pipes, valves and pump station), and lowering and removing designated dikes and levees. Construction activities for these could inadvertently be disturbed.

ACFCD also raised the concern that the restoration of tidal action may affect the depth of water in Mt. Eden Creek at the outfall and that tail water, if affected, may impact operation of the pumps. ACFCD was also concerned about potential siltation at the outfall.

As described in Section 3.1.3, the increased tidal prism in Mt. Eden Creek will maintain a larger, open and deeper channel. This will reduce siltation at the outfall and should improve outflow capacity within the channel. The existing elevations within Mt. Eden Creek, except for the narrow 2 to 3 foot-wide channel, are in the range of 3.9 feet near the outfall. The outfall discharge apron is also in the range of 3.5 to 4 feet in elevation, with the force main invert near 4 feet. The predicted restored tidal regime is to have a MHHW (the average of the daily higher high tide) in the range of 2.7 to 3 feet in the vicinity of the outfall. Under most conditions, tidal levels in the restored creek should be at or below the existing force main outfall. Even under extreme high tide and storm conditions, the operation of the pump station and discharge through the flap gate should be unaffected. The existing flap gate, if properly maintained by ACFCD, should prevent any back flow into the force main. In extreme flood conditions water levels are not expected to be worse than current conditions and may improve with the increased drainage and channel capacity.

Mitigation Measure C-4:

The presence of the ACFCD force main and outfall should be identified on any construction plans and noted that these facilities must not be altered or disturbed without prior permission from ACFCD.

Impact C-4: Access to Old Alameda Creek Channel

CDFG has proposed providing alternative access routes for Cargill and ACFCD to the lower section of Old Alameda Creek west of the levee breach for North Creek to eliminate the need for an expensive bridge at this location. The alternative access routes would require cross the new North Creek channel in the southeastern portion of the main restoration area (southwest corner of pond 4B). The alternative route would create additional travel distance and potential costs for

inspection and maintenance activities along the Old Alameda Creek levee. However, the need for maintenance of the channel downstream of the breach should be reduced. The increased tidal prism is expected to widen and deepen the lower channel below the breach and increase channel capacity. This should improve outflow capacity in the channel, eliminating or significantly reducing the need for any maintenance dredging of the lower channel.

Mitigation C-4:

If agreements cannot be reached with ACFCD and Cargill for alternative access, a bridge will be required at the North Creek breach of the Old Alameda Creek levee.

Significance of Impact After Mitigation

Implementation of the above Mitigation Measures C2a and C2b would incorporate EBDA and PG&E operations and maintenance into the authorized activities for the restoration and management of the reserve. These measures would reduce existing regulatory burdens and potential time delays for EBDA and PG&E to obtain the required state and federal clearances associated with Section 404 and state and federal Endangered Species Act compliance requirements for normal operations and maintenance and emergency repair. These measures would allow EBDA and PG&E continued use of the easements and their facilities consistent with their existing easements while minimizing potential utilities and service systems impacts associated with the proposed project to a less than significant level.

Mitigation Measure C-4 provides notification to contractors to avoid disturbance of ACFCD force main facilities. Mitigation Measure C-5 would mitigate potential impacts for increased maintenance and inspection costs along lower Old Alameda Creek to a level of insignificance if necessary.

3.4 Cultural and Historical Resources

3.4.1 Setting

Information contained in this section was derived from the *Cultural Resources - Baseline Report, Baumberg Tract Wetlands Restoration*, completed in July 1997 by William Self Associates. The report includes information on the ethnography, prehistory, history, and historic land changes of the project area based on the results of the records and literature search conducted for the project. Results of the records search included records obtained from the Northwest Information Center, Rohnert Park, California, the National Register of Historic Places, the California Register of Historic Places, and the Map Room at the University of California, Berkeley.

The project site is located on unincorporated Alameda County land, west of the City of Hayward, adjacent to San Francisco Bay. The area comprises approximately 800 acres of the historic Baumberg Tract in the western portion of the County. The site is presently subdivided by a series of levees and dikes associated with the commercial salt production activities that occurred there between the mid-nineteenth century to the 1970's.

Prehistoric Overview

The project area lies within the region occupied at the time of historic contact by the Ohlone or Costanoan group of Native Americans (Kroeber, 1925). Although the term Costanoan is derived from the Spanish work *Costanos,* or "coast people," its application as a means of identifying this population is based in linguistics. The Costanoans spoke a language now considered one of the major subdivisions of the Miwok-Costanoan, which belonged to the Utian family within the Penutian language stock (Shipley 1978). Costanoan actually designates a family of eight languages. Of these, Chochenyo was the language spoken by the estimated 2,000 people who occupied the area ". . . between Richmond and Mission San José, and probably also in the Livermore Valley" (Levy 1978). Although the terms Costanoan and Ohlone have been used interchangeably, present-day descendants prefer the term Ohlone when referring to their ancestral identity.

On the basis of linguistic evidence, it has been suggested that the ancestors of the Ohlone arrived in the San Francisco Bay area about 500 A.D., having moved south and west from the Sacramento-San Joaquin Delta region. Although linguistically linked as a "family," the eight Ohlone languages actually comprised a continuum in which neighboring groups could probably understand each other. However, beyond neighborhood boundaries, each group's language was unrecognizable to the other (Levy 1978).

Each of the eight language groups was subdivided into smaller village complexes or tribelets. The Lisyan triblet appears to have occupied the area in the vicinity of the Eden Landing Ecological Reserve. The tribelets were independent political entities, each occupying specific territories defined by physiographic features. Access to the natural resources of the territories was controlled by each tribelet. Although each tribelet had one or more permanent villages, their territory contained numerous smaller camp sites used as needed during a seasonal round of resource exploitation (Levy 1978). The arrival of the Spanish in the San Francisco Bay Area in 1775 led to a rapid and major reduction in Native California populations. Diseases, declining birth rates, and the effects of the mission system served to eradicate aboriginal lifeways. Brought into the missions, the surviving Ohlone, along with former neighboring groups of Esselen, Yokuts, and Miwok, were transformed from hunters and gatherers into agricultural laborers (Levy 1978; Shoup et al. 1994).

Historic Overview

Eden Landing dates back to 1850, when an association of location farmers organized as the Mt. Eden Company, established a landing on the north bank of Mount Eden Creek. The landing itself was one of at least two established in the vicinity, which became known collectively as Eden Landing. Agricultural products, such as bailed hay and grain, were shipped across the bay to the San Francisco waterfront from the Eden Landing site, as well as from other nearby landings. Figure 13 presents a view of the 1855 historical map of the area.

Most of the salt production facilities in the 19th century were small family operations that often co-existed with farming activities. By 1896, four small salt works were in operation in the marshlands now defined as the Eden Landing Ecological Reserve. These were Peterman's at the western end of the tract, F.F. Lund's to the east, Liguori's in the southeastern portion of the tract, and Baumberg's in the northeast corner.

08-04-99REM83/g/eir1historic

Source: Historical Atlas Map of Alameda County

Figure 13. Eden Landing 1878

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Over time, the small family-operated salt production facilities were absorbed by larger companies, principal of which was the Oliver Salt Company. By the 1920s, the Oliver Salt Company controlled over 1400 acres of land devoted to the production of salt and produced 30,000 tons of crude salt per year. In 1931, the Oliver Salt Company was acquired by the Leslie Salt Company. This acquisition allowed the Leslie Salt Company to consolidate its operations into two large facilities, the Baumberg plant north of Coyote Hills Slough, and the Alvarado plant south of it (Dobkin 1994). Salt production continued in the Baumberg Tract until 1972, when the Leslie Salt Company suspended use of the salt ponds in that area.

Cultural Resources On-Site

The records search conducted for the project area determined that twelve archaeological sites have been recorded within the boundaries of the project's Area of Potential Effect (APE) (Ananian 1985). These sites were recorded during the preliminary planning phase for the Baumberg Biological Mitigation Project (Hope et al. 1996). Of the twelve recorded sites, eleven were relocated in the 1996 survey, and one previously unknown resource was recorded. One of the previously-recorded sites (CA-ALA-491H) was not relocated.

Archaeological sites identified in the Eden Landing Ecological Reserve comprise two prehistoric activity areas (CA-ALA-485 and 486), five historic refuse scatters (ALA-487H, 488H, 490H, 492H, and 493H), a historic occupation area (ALA-500H), a newly discovered shipwreck (P-01-001791), and three sites (previously recorded separately) that comprise the historic shipping facility known as Eden Landing (ALA-489H, 497H, 501H).

The five refuse scatters (ALA-487H, 488H, 490H, 492H, 493H), the shipwreck (P-01-001791), and the historic occupation area (ALA-500H) have been evaluated and determined ineligible for the National Register of Historic Places and the California Register of Historic Resources (Hope et al. 1996:20-22). The two prehistoric activity areas (ALA-485 and 486) and the Eden Landing site (collectively designated as archaeological sites ALA-489H, 497H, and 501H) have not been formally evaluated for potential eligibility for nomination to the National Register or California Register. However, it is believed that these sites are potentially significant and, as such, potential effects to these areas have been considered in the development of the restoration plan.

Significance Criteria

The proposed project would result in a significant impact on cultural resources if the following conditions result:

9) Potential damage or disturbance to significant archaeological, historical, or cultural resources. A significant cultural resource is a location that meets one of the following criteria:

a. Is associated with an event or person of:
   1) Recognized significance in California or American history, or
   2) Recognized scientific importance in prehistory;

b. Can provide information that is both of demonstrable public interest and useful in addressing scientifically consequential and reasonable or archaeological research questions;

c. Has special or particular quality such as oldest, best example, largest, or last surviving example of its kind;

d. Is at least 100 years old and possesses substantial stratigraphic integrity; or

e. Involves important research questions that historical research has shown can be answered only with archaeological methods.

Impacts and Mitigation Measures

Less Than Significant Impacts

Three cultural resource sites, two prehistoric sites and one historic site, are present on the site which may potentially significant resources and potential eligibility for nomination to the National Register or California Register. The primary constraint for these cultural resource sites is not to disrupt or destroy the cultural integrity or value of the sites. Tidal restoration, or flooding of the sites, is not considered to adversely affect the sites and, in some cases, may provide additional protection to the sites from illegal pot hunting and artifact removal. All restoration construction work will avoid the two prehistoric sites.

The historic Eden Landing site occupies a large area along Mt. Eden Creek. Although the site has been altered over the years through construction of dikes, levees, and other features associated with salt production and other activities, potentially significant historical resources could remain buried in the area. The site also encompasses the proposed alignment for the restored tidal channel along Mt. Eden Creek. The expanded channel in this alignment would only excavate sediments which had accumulated in the channel in recent years. The proposed channel bottom elevation is -3.7 feet NGVD or a minimum of 1 foot above the anticipated minimum historic basement elevation of the channel (-4.7 feet NGVD based on review of Coastal Geodectic Survey maps). The new channel would also contribute to restoring the historical context of the site as a port or landing.

Other restoration work within the boundaries of this historic site include removal of surplus roads, dikes, and salt production facilities such as the existing (modern) pump house, associated piping, and flood control gates present in, and adjacent to, the brine channel east of Eden Landing Road. The elevation of the levees in this area and along the west side of Eden Landing Road will also be reduced from the current elevations of 13 to 14 feet to 7.0 feet or 1 to 2 feet above their historic level of approximately 5 feet. The historic elevation of these levees is defined by a slight bench visible in the levee sidewalls. The historic elevation is also marked by the absence of pickleweed above the line of the bench. Although the structures and levees lie within the newly-drawn site boundary, they are modern improvements and their removal and reduction will have no impact on the historic character of Eden Landing property.

Introduction of periodic tidal flow to the site, and the consequent inundation of the location of the historic Eden Landing site, will have no effect on the alignment of pilings, the only visible

structural element that may be associated with the historic landing site. Although the immediate area surrounding the Eden Landing site has been seasonally dry for the past 25 years, it had been subject to flooding at least during the preceding 50 years when salt was being harvested from the ponds that now surround the site. Re-introduction of flooding to the site will neither affect the condition of the potentially historic property nor alter the existing characteristics that may qualify the site for the National Register. To the contrary, introduction of tidal and seasonal flooding and restoration of the wetlands will serve to protect the site from any further incursion by bottle hunters or other who seek to illegally recover remnants of the 19th century cultural activities that occurred in the region and will contribute to restoring the historical context of the site as a port or landing.

All restoration construction work would avoid the two prehistoric sites. The proposed elevation of the existing levee roads would have no effect on the previously disturbed areas of these resources, nor would enhancement of the seasonal flooding pattern in this area of the project. For the reasons discussed above, it is anticipated that the proposed project would have a less than significant impact on cultural resources.

Potentially Significant Impacts

Impact D-1. Despite the incorporation of measures into the proposed project to ensure avoidance of impacts to cultural resources, the potential does exist for undocumented resources to be impacted during project construction. To avoid inadvertent disturbance of undocumented resources during project related construction, the following mitigation is proposed.

Mitigation Measure D-1. Consistent with the CEQA Guidelines relevant to potential cultural resources, in the unlikely event that cultural resources are uncovered during construction, work within 30 feet would be halted and an archaeologist consulted to develop and implement procedures to determine the significance and means of protecting the find as applicable.

Impact After Mitigation

With implementation of Mitigation Measure D-1, the proposed project would result in a less than significant cultural resources impact.

3.5 Recreation

Setting

The project site is not currently open for public access or recreation. However, people occasionally walk or ride bikes on the main levees around the perimeter of the reserve. Access to duck hunting clubs which operate on lands leased from Cargill also occurs through the site.

Criteria for Determining Significance

Implementation of the proposed project would result in a significant impact upon recreational facilities if the following occurs:

- the capacity of existing recreational facilities would be exceeded such that substantial physical deterioration of facilities would occur or be accelerated; or

- substantial new facilities which might have an adverse effect on the environment would be required.

Impacts and Mitigation Measures

As part of the proposed project, public access would be provided along a trail which will provide an important link in the San Francisco Bay Trail. The project will help to fulfil regional goals for this trail network. The trail alignment is located along the northern and eastern boundary of the reserve (See Figure 9). The trail, to be funded and constructed by the East Bay Regional Park District, is expected to be 12 feet in width, with a 4 to 6 inches of paving material such as crushed aggregate, gravel, or decomposed granite. The primary trail head would be off Eden Landing Road. At this point, parking would be provided and a raised viewing platform/mound would be constructed to allow views across the reserve and out toward the bay. The primary trail route would proceed eastward along the existing road and levee across the northern edge of the reserve. The trail would follow the reserve boundary around the edge of the seasonal wetland area in pond 1B.

The trail alignment from this point depends on potential tie-ins to off-site projects. As currently planned the trail would head eastward across pond 20B to tie into the proposed trail from the adjacent Oliver Trust West Parcel residential development. If this development is not constructed, the trail would continue to the southeast corner of the reserve and terminate at that point until future trial connections to the south are identified and completed.

The trail may also proceed westward from Eden Landing, across the northern levees of ponds 14B, 15B, and 16B. This trail segment would connect to a pedestrian overpass of Highway 92 which is expected to be constructed by CalTrans as part of the Highway 92 widening project.

A fence will be constructed along the trail route to minimize human and pet access off the trail and into the restored marsh and management areas. The fence will be a hog-wire mesh with treated peeler core posts set on 8-foot centers. The fence will be set mid-slope on the slope of the trail levees.

Landscape planting along the trail will be limited to native, non-invasive shrubs, sub-shrubs, and herbaceous species compatible with the bayside environments. No shrubs will be planted with 1,000 feet of the snowy plover management area in order to limit potential nesting substrates for avian predators of snowy plovers such as the loggerhead shrike. All plantings, if any, will be funded, completed, and maintained by the East Bay Regional Park District.

Interpretive signs describing the rules and regulations for the reserve, natural history, cultural history, and restoration and management objectives will also be provided.

Access to duck clubs will be maintained and will occur along the re-routed access roads along the new north bank of the new Mt. Eden Creek channel (Figure 8). This access route for Cargill's maintenance/operations and leased duck hunting clubs was selected to minimize

potential conflicts between recreation use of the Bay Trail segment and access to adjacent lands. The only conflict point is at the entrance to the site off of Eden Landing Road.

Potential Adverse Impacts

As proposed, the project does not have any significant or less than significant adverse impacts to recreation.

4.0 ALTERNATIVES TO THE PROPOSED PROJECT

4.1 Introduction

Under Section 15126(d) of the CEQA Guidelines, a range of reasonable alternatives must be considered. Alternatives considered must have the potential to "feasiblely accomplish most of the basic purposes of the proposed project. In accordance with Section 15126(d)(5), the range of alternatives is governed by the "rule of reason," which requires that an EIR set forth only those alternatives necessary to permit a reasoned choice. An EIR need not consider any alternative whose effect cannot be reasonably ascertained and whose implementation is remote and speculative. Factors considered in determining the feasibility of an alternative include site suitability, economic viability, availability of infrastructure, general plan consistency, other plans or regulatory limitations, jurisdictional boundaries, and whether a proponent can reasonably acquire, control, or otherwise have access to an alternative site.

CEQA requires that both a No Project alternative and an environmentally superior alternative be considered as part of the range of reasonable alternatives. If a lead agency concludes that no feasible alternative locations exist or that there are no on-site changes in design that would reduce any of the significant impacts from a proposed project, it must disclose the reasons for this finding within the EIR.

4.2 Determination and Evaluation of Alternatives

A series of meetings were conducted with a Technical Advisory Committee (TAC), a Public Advisory Committee Public (PAC), and with key individual agencies such as the U.S. Fish and Wildlife Service and CalTrans. The TAC consisted of personnel from resource and regulatory agencies such as the California Department of Fish and Game, U.S. Army Corps of Engineers, East Bay Regional Park District, U.S. Fish and Wildlife Service, Regional Water Quality Control Board, CalTrans, Environmental Protection Agency, Bay Conservation and Development Commission, East Bay Discharger Association, and Alameda Flood Control District. The PAC meeting were open to the general public and included a variety of concerned citizens, representatives of local environmental organizations, and local government representatives. The first TAC and PAC meetings were held on July 9, 1997 and were designed to provide background information on the Eden Landing Ecological Reserve, the general goals and commitments for the restoration and management of the reserve, and to obtain input for restoration management objectives.

Based on input received from the PAC and TAC meetings, review and analysis of the environmental baseline information, the following three broad alternatives which would achieve the basic project purposes were developed and considered:

- Alternative 1: Snowy Plover Habitat Management
- Alternative 2: Maximization of Tidal Restoration
- Alternative 3: Hybrid Alternative

As required under CEQA, the following fourth alternative is considered in this EIR:

- Alternative 4: No Project Alternative

These four alternatives were evaluated based on the following criteria:

1) ability to achieve restoration and management goals;
2) costs, logistics, and technology for implementing the desired restoration,
3) compatibility with existing infrastructure and utilities; and
4) compatibility with existing site values.

4.2.1 Alternative 1

Implementation of this alternative would entail retaining and managing snowy plover habitat in the lower half of pond 16B where the majority of recent snowy plover nesting activity had been centered. Additionally, former snowy plover habitat on pond 17B would be restored (see Figure 14). Tidal marsh restoration would be massed across the northern tier of former crystallizer and bittern ponds and in the major portion of the southern crystallizers. A corridor of tidal marsh west of the snowy plover habitat in pond 17B would connect the two primary tidal restoration blocks. Seasonal wetland habitat would be located in the Perry property (pond 20B) and the portions of ponds 2B, 3B, and 6B east of the EBDA easement. This alternative would provide approximately*:

170 acres of Snowy Plover or Panne Habitat1
100 acres of Seasonal Wetland
530 acres of Tidal Marsh Restoration

*Acreage figures for alternatives do not include the area required for dikes, levees, and other associated features.

Water

Under this alternative, the majority of the tidal marsh would be in the northern portion of the site and the main tidal source would be through Mt. Eden Creek. This would require a relatively wide channel, potential top width of 80 to 90 feet. From a hydrologic perspective, this layout, while feasible, is inverse to the desirability of having the primary tidal source follow the Alameda Creek/North Creek alignment (i.e. the tidal marsh should be massed to the south).

The restoration of ponds 15B and 16B could adversely affect water quality and/or require special measures to dilute and process the hypersaline conditions in these two ponds resulting from the disposal of bittern in these two ponds.

Biological Resources

The massing of a larger block of tidal marsh in the north would require a wider channel to be constructed in Mt. Eden Creek, potentially significantly increasing the loss or disruption of existing salt marsh harvest mouse habitat from 4.8 acres under the proposed plan to 12.4 to 14.4 acres under this alternative. The wide channel, estimated to be 80 to 90 feet in width, would also occupy much of the existing marsh within the narrower sections (100-foot wide) of Mt.

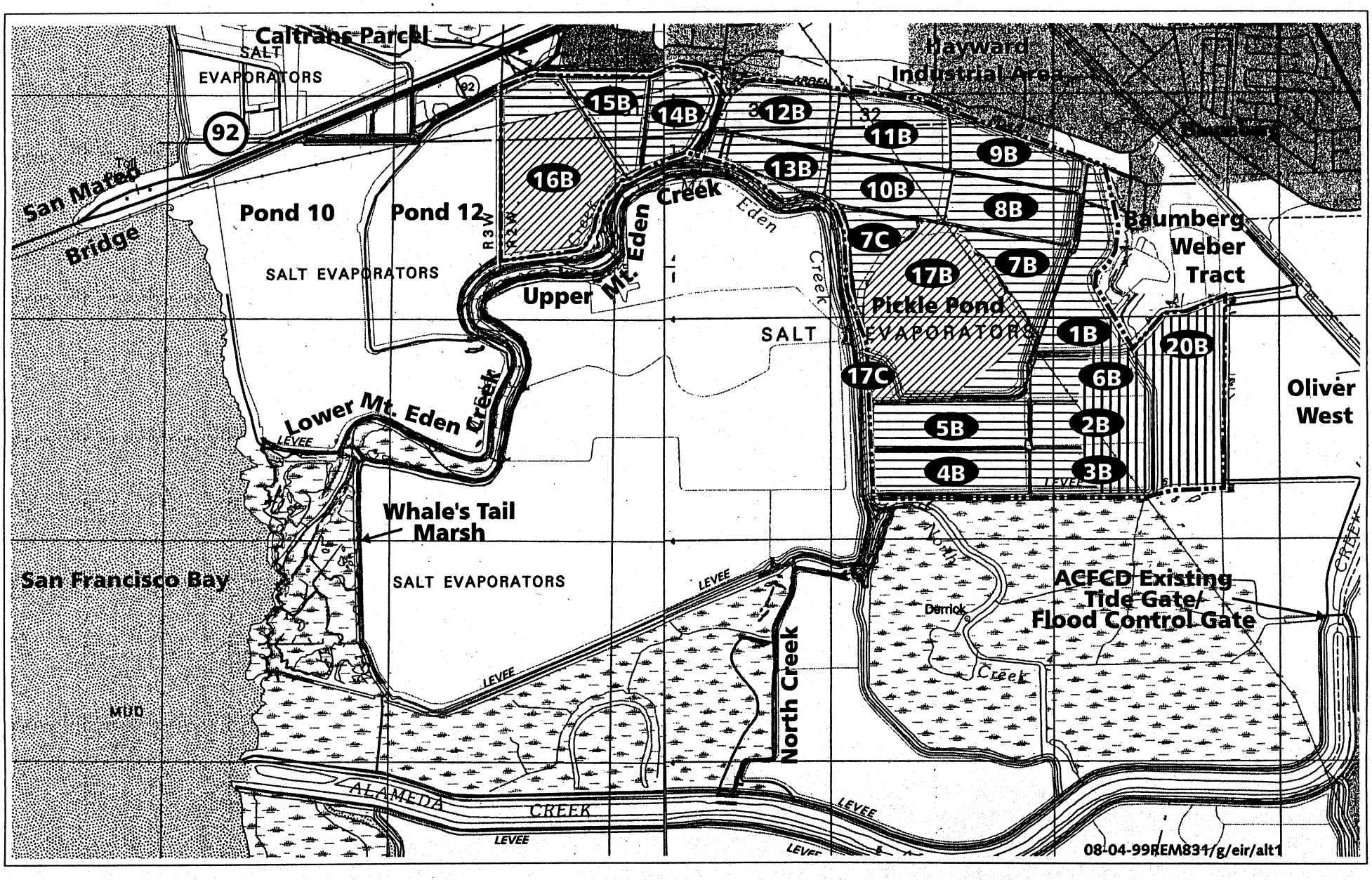

Figure 14. Alternative #1

RESOURCES AGENCY CALIFORNIA DEPARTMENT FISH & GAME

N

Scale in feet

0 2000

Snowy Plover

Salt Marsh Restoration

Seasonal Wetland

EDEN LANDING ECOLOGICAL RESERVE
RESTORATION AND MANAGEMENT PLAN

Eden Creek, reducing corridor widths for dispersal of salt marsh harvest mice between Whales Tail Marsh and restored habitats in the reserve. The tidal marsh restoration would result in creation of at least three somewhat disjunct tidal marsh units. These smaller marsh units would be more susceptible to predator access, reducing their suitability as clapper rail habitat. The northwestern unit comprising ponds 14B, 15B, and a portion of 15B would be separated from the 8B to 13B complex by the need to retain the access down Eden Landing Road to Cargill's operations and for management access to the snowy plover area in pond 17B. The two larger tidal northern (8B to 13B) and southern marsh units (2B to 6B) would also only be connected by relatively narrow tidal marsh corridors.

This alternative would involve converting most of ponds 15B and 16B which have provided important snowy plover habitat and nesting activity in recent years to tidal marsh. Restoration or creation of snowy plover habitat would require intensive management measures to restore hypersaline conditions to pond 17B and reverse the current vegetation encroachment. This could be accomplished through a number of measures. High saline substrate could be mechanically salvaged from the portions of ponds 14B, 15B, and 16B to be restored to tidal action. The saline material could also be dissolved and piped in solution to pond 17B and allowed to evaporate. The potential disadvantages of this approach are costs, if mechanically removed (the soft substrates in ponds 14B, 15B and 16B would require specialized, wide tracked equipment to excavate and transport the material) or prolonged implementation time if the material is dissolved and pumped to the pond (this process might take one to two years to substantially increase base salinity in pond 17B). These measures would be experimental and while technically feasible, there is no guarantee appropriate conditions could be re-established for snowy plovers or that snowy plover would adopt the new habitat areas. Existing habitat for the tiger beetle and the beetle *Tanarthrus occidentalis* would be greatly reduced and populations of the species may not be able to be relocated or appropriate habitat conditions recreated.

Utilities and Service Systems

Potential impacts to utilities and service would be similar in nature and scope to the proposed project. Portions of the EBDA easement would be incorporated into a levee for the Pond 17B plover management area and portion would be incorporated into an seasonal wetland management unit. This could reduce potential conflicts with EBDA access to these portions of the wastewater pipeline for emergency repairs. However, other portions of the easement would be within restored tidal areas and would require similar measures (berm) and permit conditions to minimize potential increases in cost and time delays for operations and maintenance activities.

Cultural Resources

Potential impacts to cultural resources would be similar in nature and scope to the proposed project. The larger mass of tidal habitat in te Mt Eden Creek restoration unit would require a larger and possibly deeper channel. This channel would still need to pass through the Eden Landing historical site boundaries and the deeper channel, probably approaching historic channel bottom elevation, would increase the potential for uncovering artifacts.

Recreation

Trail and public access facilities and routes would be similar to the proposed plan. No adverse effects would occur.

4.2.2 Alternative 2

Alternative 2 would involve concentrating all of the tidal restoration to the west of the EBDA easement (See Figure 15). This would provide a large contiguous block of tidal habitat and which would be the closest to the tidal sources along Mt. Eden Creek on the west and North Creek to the south. Snowy plover or panne habitat would be created and managed in a broad area east of the EBDA alignment. Seasonal wetlands would form an exterior bank around the plover habitat and in pond 20B. This alternative would provide approximately:

140 acres of Snowy Plover or Panne Habitat
60 acres of Seasonal Wetland
600 acres of Tidal Marsh Restoration

Water

This alternative maximizes the amount of tidal restoration and would be beneficial from a hydrological and construction prospective. Tidal marsh restoration areas would be massed closer to the bay. Hydraulic requirements for channel widths and depths would likely be similar to the proposed project. The restoration of ponds 14B, 15B, and 16B could adversely affect water quality and/or require special measures to dilute and process the hypersaline conditions in these three ponds resulting from the disposal of bittern in these two ponds.

Biological Resources

This alternative would involve the conversion of existing high use shorebird and snowy plover habitat to tidal marsh. Snowy plover habitat would be recreated in a new area likely involving mechanical or water solution as described in Alternative 1. This relocation of habitat would potentially cause a temporal loss of nesting habitat for the snowy plover. Although the new nesting habitat could feasiblely be created, this approach is experimental and would provide no guarantees that snowy plovers would adopt the new habitat area for nesting.

Utilities and Service Systems

This alternative would result in minimal potential conflicts with establishing tidal habitats over the existing EBDA and transmission line utility easements. A new levee would need to be constructed along the EBDA easement which would form the upland extent of the tidal marsh restoration and could provide the primary maintenance and management access route for the project. This levee would provide the primary access for operations and maintenance for EBDA, PG&E, and the reserve.

Cultural Resources

Potential impacts to cultural resources would be similar in nature and scope to the proposed

project. The block of tidal habitat in the Mt Eden Creek restoration unit would be similar in size to the proposed project and would require similar channel widths and depths. This channel would still need to pass through the Eden Landing historical site boundaries

Recreation

This alternative would incorporate similar trail and public access facilities to the proposed project. The trail route would likely be routed to the east of Pond 1B (see Figure 2 for pond location) along an improved levee along the edge of the reserve.

4.2.3 Alternative 3

Alternative 3 represents a hybrid of Alternatives 2 and 3 (See Figure 16). Implementation of this alternative would preserve the existing snowy plover habitat areas in ponds 15B and 16B, and would establish new plover habitat in a second block in portions of ponds 7B, 1B, and 6B east of the EBDA and transmission line easements. Seasonal wetland would be in pond 20B and portions of pond 1B. Tidal marsh would occur in a broad zone across the northern portion of the site, through the central portion of the reserve and in the southern ponds. This alternative would provide approximately:

160 acres of Snowy Plover or Panne Habitat
80 acres of Seasonal Wetland
560 acres of Tidal Marsh Restoration

Water

This alternative would provides a greater use of existing infrastructure, and would enhance the ability to control tidal source and drainage areas. Restoration of tidal action to ponds 17B and ponds 8B to 13b would promote the ongoing decline in soil salinity and increasing vegetation establishment in these ponds similar to the proposed project. The restoration of pond 16B could adversely affect water quality and/or require special measures to dilute and process the hypersaline conditions in this pond resulting from the disposal of bittern.

Biological Resources

This alternative would preserve large areas of existing snowy plover and shorebird habitat, while providing a large mass of contiguous tidal marsh. The principle advantage of this alternative over alternatives 1 and 2 is the preservation of the majority of the existing snowy plover and panne-associated species habitats in Ponds 14B and 15B.

Utilities and Service Systems

Potential impacts to utilities and service would be similar in nature and scope to the proposed project. Portions of the EBDA easement would be incorporated into a levee for the Pond 17B and 7B and across pond 6B to establish a plover management area. This could reduce potential conflicts with EBDA access to these portions of the wastewater pipeline for emergency repairs. However, other portion of the easement would be within restored tidal areas and would require

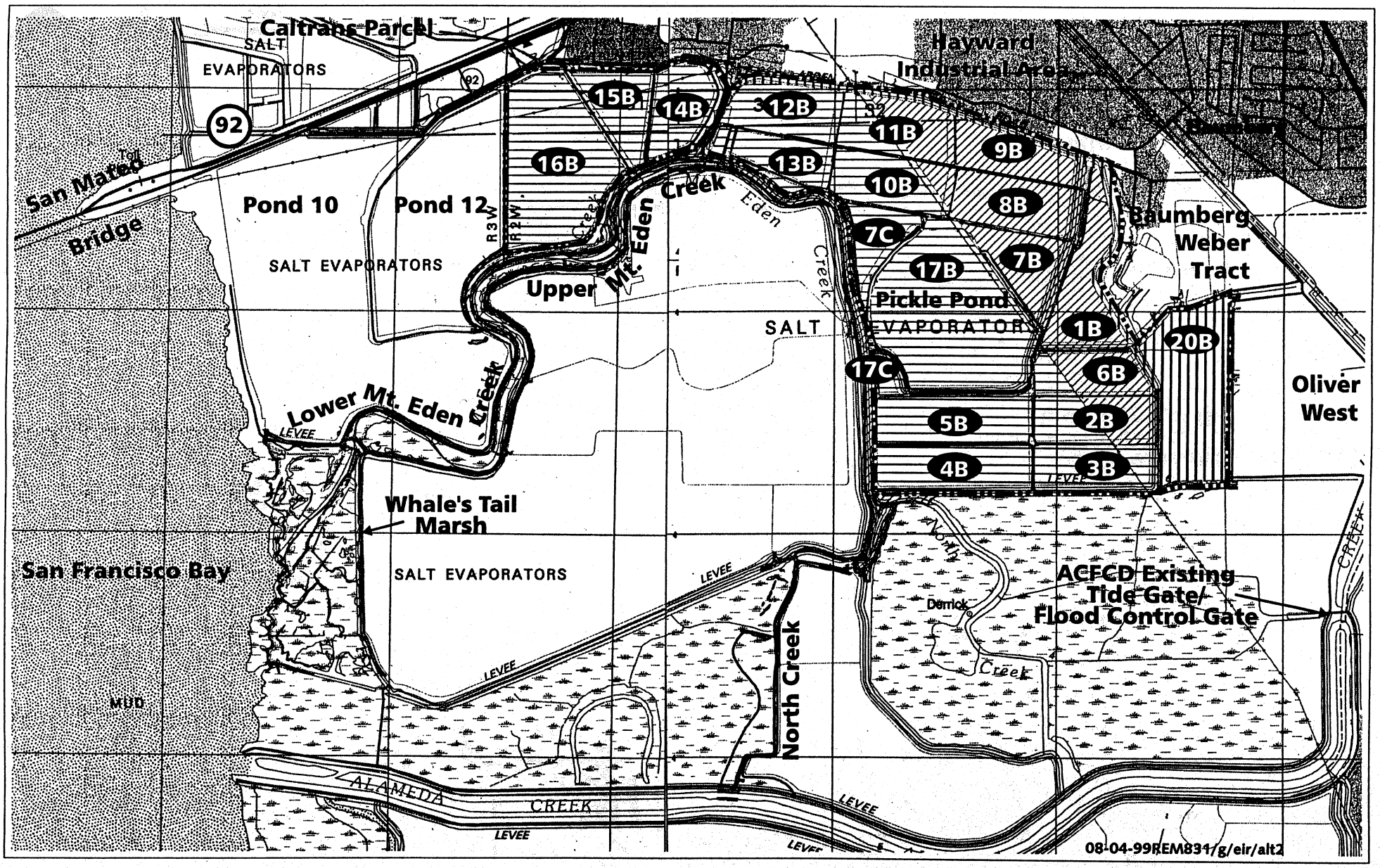

Figure 15. Alternative #2

N

Scale in feet

0 2000

Snowy Plover

Salt Marsh Restoration

Seasonal Wetland

EDEN LANDING ECOLOGICAL RESERVE
RESTORATION AND MANAGEMENT PLAN

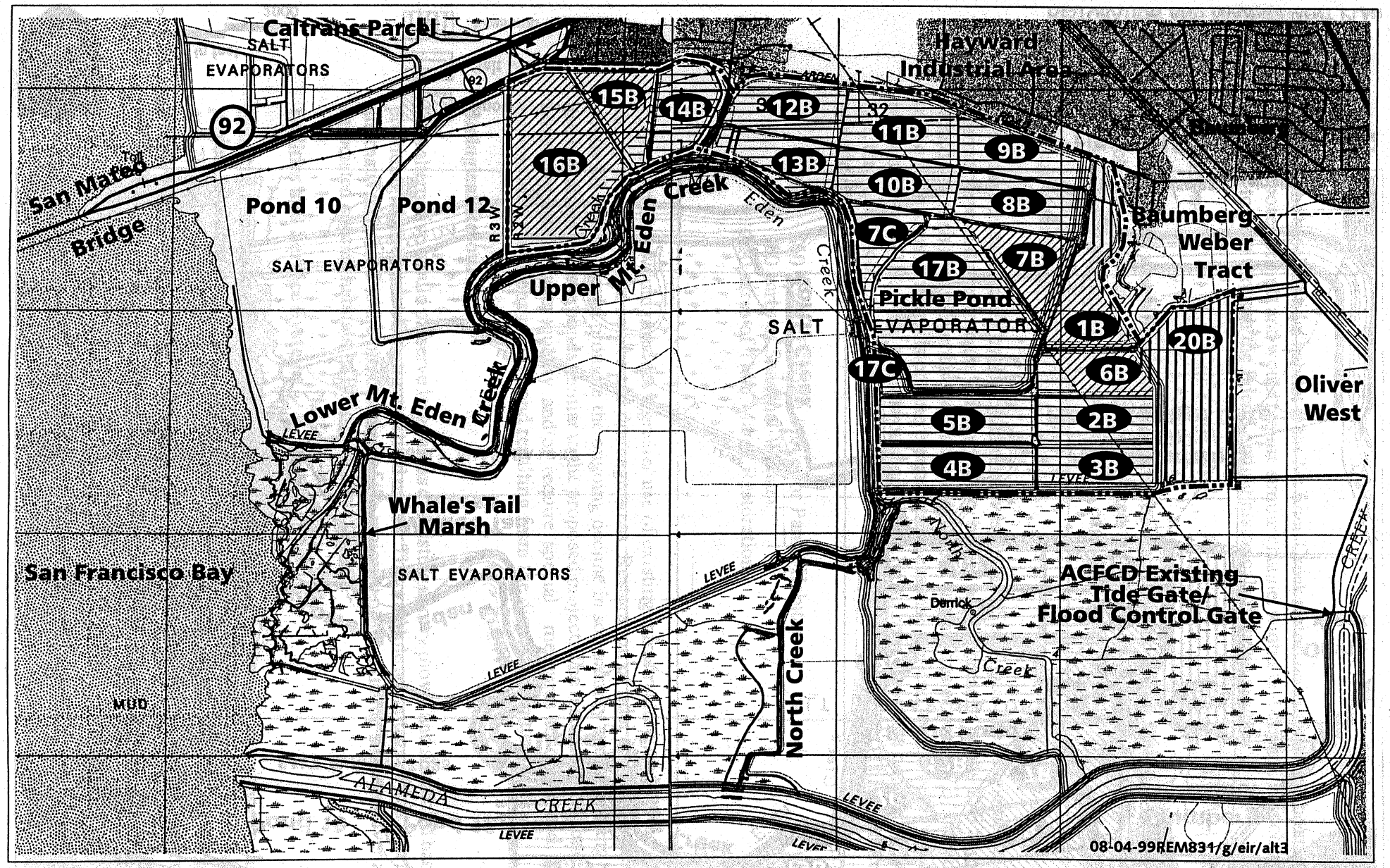

Figure 16. Alternative #3

RESOURCES AGENCY CALIFORNIA DEPARTMENT FISH & GAME

N

Scale in feet

0 2000

Snowy Plover

Salt Marsh Restoration

Seasonal Wetland

EDEN LANDING ECOLOGICAL RESERVE
RESTORATION AND MANAGEMENT PLAN

similar measures (berm) and permit conditions to minimize potential increases in cost and time delays for operations and maintenance activities.

Cultural Resources

Potential impacts to cultural resources would be similar in nature and scope to the proposed project. The block of tidal habitat in the Mt Eden Creek restoration unit would be similar in size to the proposed project and would require similar channel widths and depths. This channel would still need to pass through the Eden Landing historical site boundaries.

Recreation

This alternative would incorporate similar trail and public access facilities to the proposed project.

4.2.4 Alternative 4

Alternative 4 is the No-Project alternative. Under the No-Project alternative, the proposed restoration project would not be implemented. The property would remain in its current state, as a conglomeration of inactive salt production ponds, diked saltmarsh, seasonal/ruderal wetlands, and portions of Mt. Eden Creek. Generally, the No Project alternative would result in no changes to the existing environment as described in the Setting section of Chapter III.

Water

Implementing the No Project alternative would perpetuate existing conditions on the project site, such that tidal circulation would continue to be restricted to the existing portion of Mt. Eden Creek. Tidal sedimentation would not occur, and salinity levels in existing ponds would remain approximately the same or likely continue to decline as has occurred over the last 15 years. Additionally, conditions which currently encourage mosquito breeding would not be altered.

Biological Resources

Under this alternative, the project site would continue to provide habitat for a range of plant and wildlife species, primarily for shorebirds and waterfowl. No increases in habitat would occur for tidal marsh species such as the salt marsh harvest mouse and California clapper rail would occur and elements of the recovery plan for these species would not be implemented.

Utilities and Service Systems

The No Project alternative would not result in any changes in the current constraints and conditions under which the existing utilities and service systems are operated or maintained. Existing patterns of seasonal flooding would continue and wastewater and storm water lines, and Pacific Gas and Electric lines would not be affected.

Cultural Resources

No impact to prehistoric resources would occur with implementation of this alternative. Historic resources on site would continue to be vulnerable to individuals seeking to illegally uncover historic remnants without the reintroduction of tidal influence.

Recreation

With implementation of the No Project alternative, much of the funding for the acquisition, management, and recreational facilities development would be lost. Until alternative funding was found, the project site would likely continue to be closed to public access. The area around the perimeter of the site would continue to be available for recreational uses, and duck hunting clubs located throughout the site would continue to be accessible.

4.3 Environmentally Superior Alternative

Section 15126(d)(4) of the California Environmental Quality Act Guidelines requires the identification of an "environmentally superior alternative." In the event that the No Project alternative is the superior environmental alternative, a selection must be made from among the proposed project and the range of reasonable alternatives.

Alternative 2 provides the most logical layout of the alternatives with respect to minimizing potential conflicts with existing utilities and massing tidal marsh restoration in large blocks closer to the bay and tidal sources. The principal disadvantage of this alternative is the conversion of existing high value shorebird, snowy plover, and other panne-dependent species habitats to tidal marsh and the potentially significant long term loss of nesting habitat for the snowy plover and populations of the tiger beetles and *Tanarthrus occidentalis* which only occur in the northwestern ponds 15B and 16B.

Alternative 1 has similar impacts to snowy plover habitat and likely additional constraints/impacts to water quality. Potential impacts to cultural resources, Eden Landing, are also greater under this alternative.

The no project alternative would not have the short term impacts to existing salt marsh harvest mouse habitat and would not alter the current constraints and conditions under which the existing utilities and service systems are operated or maintained. This alternative, however, does not fulfill the project objectives for tidal restoration and marsh habitat creation associated with established recovery plans for the endangered salt marsh harvest mouse and California clapper. Based upon a review of the proposed project, the alternatives, and their future potential impacts upon existing physical environmental conditions, the "environmentally superior alternative" is the proposed Restoration and Management Plan. The proposed plan incorporates the advantages of Alternative 3 and maximizes the ability to achieve project objectives with minimal change to ponds with the most consistent and highest levels of shorebird use and existing high value snowy plover nesting habitat. The project also provides measures to protect and reduce regulatory requirements (need for individual consultation and Section 404 permitting) for normal operations and maintenance activities and emergency repairs for EBDA and PG&E

5.0 TOPICAL ISSUES AND IMPACT OVERVIEW

5.1 Cumulative Impacts

CEQA defines cumulative impacts as "*two or more individual effects, which, when considered together, are considerable, or which can compound or increase other environmental impacts.*" Section 15130 of the CEQA Guidelines requires that an EIR evaluate potential environmental impacts that are individually limited but cumulatively significant. These impacts can result from the proposed project alone or together with other projects.

When evaluating cumulative projects, CEQA allows the use of either a list of reasonably-anticipated relevant projects, including projects outside the control of the lead agency, or a summary of projections from an adopted planning document. Relevant, large scale future restoration projects in the South San Francisco Bay region which could result in cumulative impacts include the following:

- Bair Island, potential1400 acres of tidal marsh restoration. San Mateo County. Project proponents: U.S. Fish and Wildlife Service and Department of Fish and Game. Time frame: 2002 or after.

- Deep Water Slough Island restoration, 30 acres tidal marsh restoration. Redwood City. Project proponent: Pacific Shores Center Limited Partnership. Time frame: scheduled for implementation 2000.

- Outer Bair Island, San Francisco Airport mitigation. San Mateo County. Proposed proponent: San Francisco Airport. Time frame: scheduled for implementation 2000.

Implemented tidal marsh restoration projects in the region which may have contributed to or may continue to contribute to cumulative impacts include:

- Oro Loma Marsh, 150 acres of tidal marsh restoration. Hayward. Project Proponent: East Bay Regional Park District. Implemented 1998.

- Roberts Landing, 128 acres of tidal marsh restoration. San Leandro. Project Proponent: Citation Homes Central. Implemented 1998.

- San Leandro Shoreline, 172 acres of tidal marsh restoration. San Leandro. Project Proponent: City of San Leandro. Implemented 1994.

- Martin Luther King Jr. Regional Shoreline Wetlands Project, 33 acres of tidal marsh restoration, 13 acres of seasonal wetland enhancement/creation. Project proponent: Port of Oakland and East Bay Regional Park District. Implemented 1998.

- Pond B-1, 47 acres of tidal marsh restoration. Alameda County. Project Proponent: Cargill Salt Company.

In addition to the above proposed and recently implemented restoration project, additional tidal restoration projects are anticipated in the future as mitigation for approved projects which impact

wetlands bordering San Francisco Bay and as additional historic bayland sites are acquired by public agencies or groups for habitat restoration and management. The time frames and extent of future restoration projects is unknown but will likely require 5 to 10 years or more for land acquisition, project planning and approvals, and implementation.

5.1.1 Hydrology and Water Quality

The reintroduction of tidal influence to the project site and other restoration projects in the region would generally improve hydrologic functions and water quality in San Francisco Bay. Additionally, pollutants originating from existing and/or proposed adjacent development would be naturally filtered by marsh vegetation and entrapment of sediment associated with the proposed project.

An issue regarding large scale tidal marsh restoration within San Francisco Bay is the presence of an adequate supply of sediment which will be necessary to restore large tracts of subsided lands to tidal marsh (San Francisco Bay Ecosystems Goals Project 1999). At the present time, there appears to be an adequate sediment supply within most of San Francisco Bay. Mudflats and offshore shoals are expanding and accreting in much of the bay, including offshore areas of Old Alameda Creek and much of the shoreline in the East Bay. Studies suggest, however, that the volume of sediment into the bay has declined significantly since the 1960s and will continue to decline (San Francisco Bay Ecosystems Goals Project 1999).

The concern is that the cumulative affect of numerous large scale tidal restoration projects, perhaps involving many thousands of acres within a similar time frame, could alter sediment budgets and cause a significant decrease in the extent of near-shore mudflats/shallow water habitats. Lower sediment loads could also increase time frames to reach elevations in subsided areas suitable for plant colonization. Sedimentation rates tend to be higher in the earlier stages of tidal restoration and generally decline as elevations in the restored marsh plain approach MHW.

The restoration of 570 acres of the Eden Landing Ecological Reserve to tidal marsh is not anticipated to affect local sediment supply or the extent of offshore mudflats on either an individual basis or cumulatively. Most of the Mt. Eden Creek restoration unit is at or near elevations between the anticipated MHW and MHHW levels necessary for mid-marsh community development. Little sediment (generally less than 1 foot in depth) is likely to be ultimately deposited in this area. In portions of the North Creek restoration unit (primarily the southern crystallizers), elevations are lower. These areas will require 2 to 2.5 feet of sediment to reach the anticipated MHW to MHHW elevations. With a projected sedimentation rate of 0.4 to 0.5 feet per year (RMI et al. 1999), the majority of the significant sedimentation within the restoration area should occur within 4 to 6 years of implementation.

Given the typical multi-year frame for land acquisition, planning, permitting, and implementation for large scale restoration projects, tidal marsh conditions in the Eden Landing Ecological Reserve are likely to be well established prior to the implementation of other tidal marsh restoration projects of the magnitude that could affect sediment availability and the extent of offshore mudflats.

5.1.2 Biological Resources

Potential adverse cumulative impacts to biological resources include the spread of exotic species, conversion of seasonal wetlands/shorebird habitats to habitats favoring tidal marsh-dependent species, loss of salt marsh harvest mouse habitat and individuals, and potential reductions in mudflat feeding habitat for shorebirds.

As discussed in Section 5.1.1, above, large scale tidal restoration over large areas may alter the sediment balance in the bay and result in a reduction in mudflat/shallow water foraging habitat for shorebirds and other fish and wildlife species. The proposed tidal restoration, planned for implementation in 2000, is not expected to be of a magnitude as an individual project, nor cumulatively with other proposed or existing tidal restoration projects that would exceed existing sediment availability in the south bay region. As such, the project is not anticipated to cumulatively significantly affect the extent of mudflats in the region.

Several species of non-native cordgrass (*Spartina alterniflora, S. densiflora, S.patens*) have become established in San Francisco Bay and are considered a potential threat to the bay ecosystem, biological diversity, and habitat for species such as the clapper rail and salt marsh harvest mouse. Restoration of the site and other proposed or reasonably foreseeable tidal restoration projects would expand tidal habitat suitable for the rapid invasion and dominance by these and other aggressive exotic plant species. The proposed restoration and management plan includes provisions for monitoring and control of exotic pest plant species within the restored marsh and adjacent tidal marshes. The cumulative ability to successfully control the cumulative effects and spread of exotic species of cordgrass and other plants requires a region-wide effort and the willingness of resource agencies to fund bay-wide control programs. Without adequate regional control programs, the proposed tidal restoration would likely include a significant cumulative expansion of these exotic species.

The long term effect and objective of the proposed project is to convert approximately 570 acres of existing seasonal wetland and open water pond to intertidal marsh and associated habitats. The project would also direct specific active management to increase habitat values on 126 acres of remaining pond habitat for shorebirds and other panne-dependent species and 95 acres of diked seasonal wetland habitat. The potential large scale conversion of salt ponds and other types of seasonal wetland habitats to tidal habitats could have a long term adverse impact on shorebird and waterfowl populations and use in the bay. San Francisco Bay is also a critically important site for wintering and migrating water birds in the Pacific Flyway and cumulative affects could affect water bird populations through the Pacific Flyway.

The San Francisco Bay Ecosystems Goals Project (1999) has attempted to address this issue and develop recommendations for goals for key habitats in different regions in the bay. For the south bay subregion as a whole, the habitat goal recommendations are to increase tidal marsh habitats from the current approximately 9,000 acres to 25,000 to 30,000 acres and managing 10,000 to 15,000 acres of salt pond habitat. The equates to a rough ratio of 2 to 2.5 of tidal marsh to managed salt pond. The proposed restoration plan contributes approximately 570 acres of tidal marsh restoration and 126 acres of managed salt pond/panne habitat to these broad, long term goals. While the restoration and management plan for the Eden Landing Ecological Reserve places a greater emphasis on tidal restoration when viewed in terms of general subregion goals (roughly 4.5 tidal marsh to managed salt pond), the proposed project preserves and enhances

through directed management actions the ponds on the site with the highest levels of water bird use and snowy plover nesting and wintering habitat. The management plan also provides for establishment of high marsh ponds which provide valuable shorebird habitat in tidal marshes.

Given the vast acreage of active Cargill salt ponds in the subregion and adjacent to the reserve, the proposed emphasis on tidal restoration is not expected to adversely affect shorebird and other water bird populations in the subregion or the Bay Area.

The restoration and management plan would result in a short term loss of 4.8 acres of existing salt marsh harvest mouse habitat. Other past and reasonably foreseeable tidal restoration projects listed above such as Roberts Landing, San Leandro Shoreline, Oro Loma Marsh, Deep Water Slough, and Bair Island have had or will have short term losses of existing salt marsh harvest mouse habitat in order to facilitate or implement tidal restoration. Various development projects also affect existing harvest mouse habitat. These projects are also typically required to provide compensatory habitat mitigation for such impacts. The Eden Landing Ecological Reserve was purchased and funding for restoration is provided, in part, as mitigation for impacts to salt marsh harvest mouse habitat resulting from the Dixon Landing Road Interchange project and the City of San Jose's continued discharge of treated wastewater into San Francisco Bay.

The cumulative acreage of impacted habitat, however, does not provide a standard to measure the significance of cumulative adverse impacts to this species. Salt marsh harvest mouse populations tend to be confined to often small, disjunct marsh areas. These populations are typically genetically isolated and the long term survival of these individual populations is dependent on the ability to maintain viable numbers of individuals within the specific habitat area. The potential adverse effects of short term habitat losses needs to be assessed on a site by site basis considering factors such as size, productivity/population levels, overall conditions, and surrounding land uses of the habitat areas. The significance of impacts to the species is based on the ability to sustain these separate populations. Impacts of habitats loss would only be cumulatively significant if the loss reduced or eliminated the ability of a site to sustain or expand the population at that site.

The short term loss of habitat for the implementation of the Eden Landing Ecological Reserve tidal restoration represent a relatively minor component of the total existing, available habitat for this species in this area. This minor habitat reduction will not adversely affect population levels in Mt. Eden Creek or the Whales Tail Marsh. Therefore, the project will not contribute to a significant adverse cumulative impact this species. The project provides a significant beneficial effect by improving long term habitat viability and expanding and connecting existing habitat areas as part of the recovery strategy for this species.

5.1.3 Utilities and Service Systems

Implementation of the proposed project would not result in the need for additional facilities, which, in combination with requirements associated with other projects, would result in a significant cumulative utilities and service systems impact. Access to other facilities on site, including PG&E transmissions lines and the East Bay Discharges Authority (EBDA) treated waste water line would be maintained with implementation of the proposed restoration project. Restoration of tidal marsh habitats have occurred previously within existing EBDA and PG&E easements at Oro Loma Marsh, Roberts Landing (PG&E), and San Leandro Shoreline. None

of these other restoration projects included provisions to address wetland and endangered species permitting issues related to long term operation and maintenance activities for these or similar facilities. However, at the Oro Loma Marsh restoration site, the East Bay Regional Park District (EBRPD) agreed to an MOU with EBDA to reimburse or pay for increased costs caused by the tidal restoration project. To date, no significant adverse affects have been reported to the operations and maintenance of EBDA's or PG&E facilities as a result of one of these restoration projects. Incorporation of the proposed operations and maintenance procedures for wetlands and endangered species habitats (see Section 3.3) in the state and federal permits for the implementation of the restoration project would minimize EBDA's and PG&E's potential delays and costs associated with the change in water regime from seasonal flooding to perennial flooding consistent with the existing easement for these facilities. As such, no significant cumulative impacts are anticipated.

5.1.4 Cultural Resources

The cumulative impacts on cultural resources within the vicinity of the project site is not expected to be significant with implementation of the proposed project. Cultural resources known to exist on the project site would be avoided with implementation of the restoration plan. The possibility of uncovering previously undocumented prehistoric resources with development in the project area cannot be discounted.

However, with implementation of the mitigation measures recommended in this EIR, and compliance with Hayward General Plan policies regarding cultural resource preservation, a significant local cumulative cultural resources impact is not anticipated. Wetland restoration projects also typically involve activities requiring Section 404 or Section 10 permits from the Corps of Engineers. As such, before projects are authorized, all project must comply with Section 106 of the federal Historic Preservation Act which requires impacts to historical resources to be avoided or mitigated.

The Roberts Landing Restoration project in Hayward involved similar issues to the Eden Landing Ecological Reserve. The main tidal channel for that restoration project also followed a historical channel alignment through another 19th century commercial landing area (Roberts Landing). That project was approved and implemented in 1997. Monitoring was conducted during construction for identification and salvage of buried cultural resources. None were found.

5.1.5 Recreation

The proposed project would not involve the construction of residential development which would result in increased population and an associated increase in demand for parks and recreation facilities in the project area. As part of the proposed project, the Bay Trail would be developed through the site. Development of formal public access and completion of this segment of the Bay Trail serves to contribute to regional objectives for recreational opportunities which would serve existing and future development in the project area.

5.2 Effects Found Not to Be Significant

Findings from the Initial Study (Appendix A of the Draft EIR), prepared and attached to the Notice of Preparation for the proposed project, concluded that the project would not cause

potentially significant environmental impacts on the following resources or items in the CEQA Environmental Checklist Form of the Initial Study:

5.2.1 Land Use and Planning

- Project would be consistent with existing land use designations on and in the vicinity of the project site.
- Proposed wetland restoration and enhancement would be consistent with goals of the Hayward Area Shoreline Planning Agency.

5.2.2 Population and Housing

- Project would not involve development of additional housing, and consequently would not contribute to increased population in the project area.
- Project would not contribute to further growth in the area.
- No existing housing would be displaced.

5.2.3 Geologic Problems

- No effect on faults within the project area.
- No structures are proposed which would be subject to groundshaking
- No structures are proposed; the site is underlain by bay muds which are not subject to liquefaction.
- With restoration of tidal influence to the project site, the potential for subsidence associated with soil oxidation would be precluded.
- Where erosion may occur with implementation of the proposed project, buffers would be provided to allow natural geomorphic processes to occur and erosion protection would be provided where structures would potentially be affected.
- No structures are proposed which would be affected by expansive soils.
- No unique geologic or physical features are present on the site.

5.2.4 Air Quality

- Implementation of Basic and Enhanced Control Measures per Bay Area Air Quality Management District Guidelines, no significant air quality impact would occur.
- Air movement patterns, moisture, and temperature would not be altered as a result of the proposed project.

- Regular tidal circulation and proper wetland management would avoid objectionable odors on site and control dust which has been an air quality issue in the past..

5.2.5 Transportation/Circulation

- The project would not result in any change of land use which would increase traffic to or from the site.
- No public roads would be constructed or affected by the project.
- Existing access for vehicles to and from the site would be maintained; the project would include providing access to the site for pedestrians and bicycles as an element of the Bay Trail.
- As part of providing trail head facilities for the Bay Trail, a small parking lot would be developed in a ruderal upland area at the northern entrance to the Eden Landing Ecological Reserve. This would provide off street parking for trail users.
- The project would be consistent with adopted policies, as it would contribute to the regional bicycle network by facilitating development of the Bay Trail.

5.2.6 Energy and Mineral Resources

- The project would not result in long-term energy use which would conflict with adopted energy conservation plans.
- The project would not result in the use of non-renewable resources.
- Former salt production facilities on site were abandoned in the early 1970's. No other mineral resources are known to exist on the project site.

5.2.7 Hazards

- No known hazardous substances are present on the project site. A bittern storage area is present on-site. Potential impacts associated with the release of bittern into the aquatic environment are addressed in the Hydrology and Water Quality section of the EIR.
- The project would not interfere with any emergency response or evacuation plan, the site supports no major roads which could be used for evacuation purposes.
- The project would be designed to maximize mosquito abatement. This issue is addressed in the Hydrology and Water Quality section of the EIR.
- Maintenance associated with access trails would abate weeds which could pose a fire threat to adjacent areas.

5.2.8 Noise

- Long-term noise levels in the project area would not be altered by the proposed project.
- Short-term noise increases would be associated with project construction, and therefore, would be temporary in nature.

5.2.9 Public Services

- The project would not result in the need for additional school facilities or staff.
- The project would not adversely affect police or fire response times, or result in the need for additional law enforcement or fire protection services.

5.2.10 Aesthetics

- No Scenic Highways or vistas would be affected by the proposed project.
- The project would result in an overall visual enhancement of the site.
- The project would not result in any change in the amount of light and glare on site.

5.3 Significant Effects Subject to Mitigation

The proposed restoration and management of the Eden Landing Ecological Reserve could result in the following significant impacts:

- Potential for direct mortality of special status species and/or temporary disturbance impacts to snowy plover and California clapper rail breeding habitat on-site due to construction activities.
- Loss of up to 4.8 acres of existing habitat for the endangered salt marsh harvest mouse through the widening (construction/excavation) of the new Mt. Eden Creek channel.
- Effects on costs and ability of service providers to access existing facilities on site for the purposes of operations, maintenance, and emergency repair.
- Potential adverse effects on the operation of the ACFCD pump station, force main, and outfall; changes in water depths in Mt. Eden Creek.
- Additional travel distance and potential increase in costs for inspection and maintenance activities along the Old Alameda Creek levee.
- Potential impacts to previously undocumented cultural resources during project construction.

5.4 Significant Irreversible Changes

CEQA requires that EIRs assess whether the project would result in significant irreversible changes to the physical environment. The CEQA guidelines describe three distinct categories of significant irreversible changes that should be considered, as further detailed below.

5.4.1 Changes in Land Use Which Would Commit Future Generations

The establishment of the Eden Landing Ecological Reserve committed the site to open space and habitat uses in perpetuity. This commitment has a positive beneficial effect on the environment and long term restoration of a healthy San Francisco Bay ecosystem.

5.4.2 Irreversible Changes from Environmental Accidents

The restoration and management of the Eden Landing Ecological Reserve will not increase the potential for environmental accidents.

5.4.3 Consumption of Nonrenewable Resources

During construction, the restoration and management of the Eden Landing Ecological Reserve will require a short term commitment of energy, labor and materials. Operation and management of the reserve will not increase the long term consumption of nonrenewable resources, the current demand for energy, water, wastewater treatment capacity, or solid waste disposal.

5.5 Significant Unavoidable Impacts

No significant unavoidable impacts are anticipated with implementation of the proposed project.

5.6 Growth-inducing Impacts

Completion of the proposed project is not expected to influence growth in the project area. The project would not involve the construction of new housing or infrastructure, the creation of new jobs, or any other project components which typically induce growth.

6.0 PREPARERS OF THE EIR

Carl Wilcox, California Department of Fish and Game – Project Coordinator and Contract Administration

Don Wagenet, Resource Management International, Inc. (RMI) - Administrative Project Manager

Steve Foreman, LSA Associates, Inc. (formerly with RMI) - Technical Manager, EIR and Report Preparation, Public Participation

Greta Kirschenbaum, LSA Associates, Inc. - EIR Preparation

Hope Kingma, LSA Associates – Biological Existing Site Conditions

Bill Vandeveer, Clearwater Hydrology - Hydrologic Baseline and Design

William Self, William Self and Associates - Cultural Resources

Jim Allan, William Self and Associates - Cultural Resources

Gary Page, Point Reyes Bird Observatory - Snowy Plover Setting

Al Franks, PhD. - Analysis of Restoration Activities on Flood Control, Engineering Constraints

Andrea Hines, LSA - Graphics

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Appendix A Initial Study

Notice of Completion and Environmental Document Transmittal Form

Mail to: State Clearinghouse, 1400 Tenth Street, Sacramento, CA 95814 — 916/445-0613

See NOTE below
SCH # 99032078

1. Project Title Eden Landing Ecological Reserve Restoration + Management Plan
2. Lead Agency Calif. Dept. of Fish + Game
3. Contact Person Carl Wilcox
3a. Street Address 7329 Silverado Trail
3b. City Napa
3c. County Napa
3d. Zip 94558
3e. Phone 707-944-5525

Project Location
4. County Alameda
4a. City/Community Hayward
4b. Assessor's Parcel No. 461-0060-008, 009 + 010
4c. Section ____ Twp. ____ Range ____
5a. Cross Streets Eden Landing Rd
5b. For Rural, Nearest Community ____
6. Within 2 miles: a. State Hwy # 92, I-880 b. Airports ____
c. Railways Southern Pacific d. Waterways San Francisco Bay, Old Alameda Creek Flood Channel

7. Document Type

CEQA: 01. [X] NOP 02. [ ] Early Cons 03. [ ] Neg Dec 04. [ ] Draft EIR 05. [ ] Supplement/Subsequent EIR (Prior SCH No.: ____) 06. [ ] NOE 07. [ ] NOC 08. [ ] NOD

NEPA: 09. [ ] NOI 10. [ ] FONSI 11. [ ] Draft EIS 12. [ ] EA

OTHER: 13. [ ] Joint Document 14. [ ] Final Document 15. [ ] Other ____

8. Local Action Type

01. [ ] General Plan Update
02. [ ] New Element
03. [ ] General Plan Amendment
04. [ ] Master Plan
05. [ ] Annexation
06. [ ] Specific Plan
07. [ ] Community Plan
08. [ ] Redevelopment
09. [ ] Rezone
10. [ ] Land Division (Subdivision, Parcel Map, Tract Map, etc.)
11. [ ] Use Permit
12. [ ] Waste Mgmt Plan
13. [ ] Cancel Ag Preserve
14. [ ] Other ____

9. Development Type

01. [ ] Residential: *Units* ____ *Acres* ____
02. [ ] Office: *Sq.ft.* ____ *Acres* ____ *Employees* ____
03. [ ] Shopping/Commercial: *Sq.ft.* ____ *Acres* ____ *Employees* ____
04. [ ] Industrial: *Sq.ft.* ____ *Acres* ____ *Employees* ____
05. [ ] Water Facilities: *MGD* ____
06. [ ] Transportation: *Type* ____
07. [ ] Mining: *Mineral* ____
08. [ ] Power: *Type* ____ *Watts* ____
09. [ ] Waste Treatment: *Type* ____
10. [ ] OCS Related
11. [X] Other: Wetland Restoration

10. Total Acres 850
11. Total Jobs Created N.A.

12. Project Issues Discussed in Document

01. [X] Aesthetic/Visual
02. [ ] Agricultural Land
03. [X] Air Quality
04. [ ] Archaeological/Historical
05. [ ] Coastal Zone
06. [ ] Economic
07. [ ] Fire Hazard
08. [X] Flooding/Drainage
09. [X] Geologic/Seismic
10. [X] Jobs/Housing Balance
11. [X] Minerals
12. [X] Noise
13. [X] Public Services
14. [X] Schools
15. [X] Septic Systems
16. [X] Sewer Capacity
17. [ ] Social
18. [ ] Soil Erosion
19. [ ] Solid Waste
20. [X] Toxic/Hazardous
21. [ ] Traffic/Circulation
22. [X] Vegetation
23. [X] Water Quality
24. [X] Water Supply
25. [X] Wetland/Riparian
26. [X] Wildlife
27. [ ] Growth Inducing
28. [ ] Incompatible Land Use
29. [ ] Cumulative Effects
30. [ ] Other ____

13. Funding (approx.) Federal $ 400,000 **State $** 1,250,000 **Total $** 1,650,000

14. Present Land Use and Zoning Openspace

15. Project Description Restoration of 835 acres of inactive salt evaporation ponds to tidal marsh and managed seasonal wetland. Identification of a Bay Trail alignment through the project site.

16. Signature of Lead Agency Representative Carl Wilcox **Date** 3-15-99

NOTE: Clearinghouse will assign identification numbers for all new projects. If a SCH number already exists for a project (e.g. from a Notice of Preparation or previous draft document) please fill it in.

Form Revised 4/86 — Replaces CA189

Mark Distribution on Reverse

STATE OF CALIFORNIA

Governor's Office of Planning and Research

1400 TENTH STREET SACRAMENTO, CALIFORNIA 95812-3044

Gray Davis
GOVERNOR

99 MAR 26 PM 4:35

March 26, 1999

To: Reviewing Agencies

Re: Eden Landing Ecological Reserve Restoration & Management Plan
SCH# 99032078

Attached for your review and comment is the Notice of Preparation (NOP) for the Eden Landing Ecological Reserve Restoration & Management Plan draft Environmental Impact Report (EIR).

Responsible agencies must transmit their comments on the scope and content of the NOP, focusing on specific information related to their own statutory responsibility, within 30 days of receipt of this notice. We encourage other agencies to also respond to this notice and express their concerns early in the environmental review process.

Please direct your comments to:

Carl Wilcox
California Department of Fish and Game
7329 Silverado Trail
Napa, CA 94558

with a copy to the State Clearinghouse in the Office of Planning and Research. Please refer to the SCH number noted above in all correspondence concerning this project.

If you have any questions about the environmental document review process, please call the State Clearinghouse at (916) 445-0613.

Sincerely,

Mosie Boyd

Mosie Boyd
Project Analyst, State Clearinghouse

Attachments
cc: Lead Agency

NOP Distribution List

SCH# [redacted]

S = sent by lead agency
X = sent by SCH

Resources Agency

- [X] Nadell Gayou
  Resources Agency
  1020 Ninth Street, Third Floor
  Sacramento, CA 95814
  916/327-1722 Fax 916/327-1648
- [ ] Susie Betzler
  Dept. of Boating & Waterways
  1629 S Street
  Sacramento, CA 95814
  916/445-6281 916/327-7250
- [X] Elizabeth A. Fuchs
  California Coastal Commission
  45 Fremont Street, Suite 1970
  San Francisco, CA 94105-2219
  415/904-5200 Fax 415/904-5400
- [X] William Ahern
  State Coastal Conservancy
  1330 Broadway, Suite 1100
  Oakland, CA 94612
  510/286-1015 Fax 510/286-0470
- [X] Keren Yowell
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  801 K Street, MS-24-02
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  916/445-8733 Fax 916/324-0948
- [ ] Allen Robertson
  Dept. of Forestry & Fire Protection
  1416 Ninth Street, Room 1516-24
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  916/657-0300 Fax 916/653-8957
- [X] Hans Kreutzberg
  Office of Historic Preservation
  P.O. Box 942896
  Sacramento, CA 94296-0001
  916/653-9107 Fax 916/653-9824
- [X] Beth Walls
  Resource Management Board
  Dept. of Parks and Recreation
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- [ ] Environmental Review
  Reclamation Board
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  916/327-1531 Fax 916/327-1600
- [ ] Steve McAdam
  S.F. Bay Conservation & Dev't. Comm.
  30 Van Ness Avenue, Room 2011
  San Francisco, CA 94102
  415/557-3686 Fax 415/557-3767
- [X] Nadell Gayou
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  1020 Ninth Street, Third Floor
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- [ ] Robert Hultquist
  Dept. of Health/Drinking Water
  601 N. 7th Street, PO Box 942732
  Sacramento, CA 94234-7320
  916/323-6111 Fax 916/327-6092

~~Fish and Game - Regional Offices~~

- [ ] Richard L. Elliott (Region 1)
  Department of Fish and Game
  601 Locust
  Redding, CA 96001
  530/225-2363 Fax 530/225-2381
- [ ] Binky Curtis (Region 2)
  Department of Fish & Game
  1701 Nimbus Road, Suite A
  Rancho Cordova, CA 95670
  916/358-2898 Fax 916/358-2912
- [ ] Brian Hunter (Region 3)
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  P.O. Box 47
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  707/944-5518 Fax 707/944-5563
- [ ] George Nokes (Region 4)
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  San Diego, CA 92123
  619/467-4234
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  562/590-5159
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  407 West Line Street, Room 8
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Independent Commissions/Agencies

- [ ] Greg Newhouse
  California Energy Commission
  1516 Ninth Street, MS-15
  Sacramento, CA 95814
  916/654-5000 Fax 916/654-4162
- [ ] Debbie Treadway
  Native American Heritage Comm.
  915 Capitol Mall, Room 364
  Sacramento, CA 95814
  916/653-4082 Fax 916/657-5390
- [ ] Andrew Barnsdale
  Public Utilities Commission
  505 Van Ness Avenue
  San Francisco, CA 94102
  415/703-3231 Fax 415/703-1184
- [ ] Betty Silva
  State Lands Commission
  100 Howe Avenue, Suite 100-S
  Sacramento, CA 95826
  916/574-1872 Fax 916/574-1885
- [ ] Gerald R. Zimmerman
  Colorado River Board
  770 Fairmont Avenue, Suite 100
  Glendale, CA 91203-1035
  818/543-4676 Fax 818/543-543-4685
- [ ] Tahoe Regional Planning
  Environmental Review
  P.O. Box 1038
  Zephyr Cove, NV 89448
- [ ] John Rowden, Manager
  Office of Emergency Services
  11030 White Rock Road, Ste.110
  Rancho Cordova, CA 95670
  916/464-1014
- [ ] Debby Eddy
  Delta Protection Commission
  P.O. Box 530
  Walnut Grove, CA 95690
  916/776-2290 FAX 776-2293

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  1656 Union Street (P.O. Box 3700)
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- [ ] Marc Birnbaum
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- [ ] Stephen J. Buswell
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  Los Angeles, CA 90012
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- [ ] Mike Sim
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  Dept. of General Services
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  916/324-0214 Fax 916/322-3987

California Environmental Protection Agency

- [ ] Mike Tollstrup
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  Sacramento, CA 95815
  916/322-8473 Fax 916/322-5982
- [ ] Jeanie Blakeslee
  Calif. Waste Management Board
  8800 Cal Center Drive
  Sacramento, CA 95826
  916/255-4164 Fax 916/255-4216
- [ ] Wayne Hubbard
  State Water Resources Control Board
  Division of Clean Water Programs
  P.O. Box 944212
  Sacramento, CA 94244-2120
  916/227-4408 Fax 916/227-4349
- [ ] Phil Zentner
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- [ ] Mike Falkenstein
  State Water Resouces Control Board
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  916/657-1377 Fax 916/657-1485
- [ ] Dept. of Toxic Substances Control
  CEQA Tracking Center
  400 P Street, Fourth Floor
  P.O. Box 806
  Sacramento, CA 95812-0806
  916/324-3119 Fax 916/324-1788

Regional Water Quality Control Board

- [ ] NORTH COAST REGION (1)
  5550 Skyline Blvd., Suite A
  Santa Rosa, CA 95403
  707/576-2220 Fax 707/523-0135
- [X] SAN FRANCISCO BAY REGION (2)
  Environmental Document Coordinator
  1515 Clay Street, Suite 1400
  Oakland, CA 94612
  510/622-2300 Fax 510/622-2760
- [ ] CENTRAL COAST REGION (3)
  81 Higuera Street, Suite 200
  San Luis Obispo, CA 93401-5427
  805/549-3147 Fax 805/543-0397
- [ ] LOS ANGELES REGION (4)
  CEQA Coordinator
  320 West 4th Street, Suite 254
  Los Angeles, CA 90017
  213/266-7500 Fax 213/266-7600
- [ ] CENTRAL VALLEY REGION (5)
  3443 Routier Road, Suite A
  Sacramento, CA 95827-3098
  916/255-3000 Fax 916/255-3015
  - ○ Fresno Branch Office
    3614 East Ashlan Avenue
    Fresno, CA 93726
    209/445-5116 Fax 209/445-5910
  - ○ Redding Branch Office
    415 Knollcrest Drive
    Redding, CA 96002
    916/224-4845 Fax 916/224-4857
- [ ] LAHONTAN REGION (6)
  2501 Lake Tahoe Boulevard
  South Lake Tahoe, CA 96150
  530/542-5400 Fax 530/544-2271
  - ○ Victorville Branch Office
    15428 Civic Drive, Suite 100
    Victorville, CA 92392-2359
    760/241-6583 Fax 760/241-7308
- [ ] COLORADO RIVER BASIN REGION (7)
  73720 Fred Waring Drive, #100
  Palm Desert, CA 92260-2564
  760/782-7495 Fax 760/341-6820
- [ ] SANTA ANA REGION (8)
  3737 Main Street, Suite 500
  Riverside, CA 92501-3339
  909/782-4130 Fax 909/781-6288
- [ ] SAN DIEGO REGION (9)
  9771 Clairemont Mesa Blvd., Suite B
  San Diego, CA 92124-1324
  619/467-2952 Fax 619/571-6972
- [ ] OTHER: _____
- [ ] OTHER: _____

Exhibit 2: Final Environmental Impact Report

Notice of Completion and Environmental Document Transmittal Form

Mail to: State Clearinghouse, 1400 Tenth Street, Sacramento, CA 95814 — 916/445-0613

See NOTE below

SCH # _____

1. Project Title Eden Landing Ecological Reserve Restoration + Management Plan

2. Lead Agency Calif. Dept. of Fish + Game
3. Contact Person Carl Wilcox
3a. Street Address 7329 Silverado Trail
3b. City Napa
3c. County Napa
3d. Zip 94558
3e. Phone 707-944-5525

Project Location

4. County Alameda
4a. City/Community Hayward
4b. Assessor's Parcel No. 461-0060-008, 009 + 010
4c. Section _____ Twp. _____ Range _____
5a. Cross Streets Eden Landing Rd
5b. For Rural, Nearest Community _____
6. Within 2 miles: a. State Hwy # 92, I-880 b. Airports _____
c. Railways Southern Pacific d. Waterways San Francisco Bay, Old Alameda Creek Flood Channel

7. Document Type

CEQA:
- 01. [X] NOP
- 02. [ ] Early Cons
- 03. [ ] Neg Dec
- 04. [ ] Draft EIR
- 05. [ ] Supplement/Subsequent EIR (Prior SCH No.: _____)
- 06. [ ] NOE
- 07. [ ] NOC
- 08. [ ] NOD

NEPA:
- 09. [ ] NOI
- 10. [ ] FONSI
- 11. [ ] Draft EIS
- 12. [ ] EA

OTHER:
- 13. [ ] Joint Document
- 14. [ ] Final Document
- 15. [ ] Other _____

8. Local Action Type

- 01. [ ] General Plan Update
- 02. [ ] New Element
- 03. [ ] General Plan Amendment
- 04. [ ] Master Plan
- 05. [ ] Annexation
- 06. [ ] Specific Plan
- 07. [ ] Community Plan
- 08. [ ] Redevelopment
- 09. [ ] Rezone
- 10. [ ] Land Division (Subdivision, Parcel Map, Tract Map, etc.)
- 11. [ ] Use Permit
- 12. [ ] Waste Mgmt Plan
- 13. [ ] Cancel Ag Preserve
- 14. [ ] Other _____

9. Development Type

- 01. [ ] Residential: *Units* _____ *Acres* _____
- 02. [ ] Office: *Sq.ft.* _____ *Acres* _____ *Employees* _____
- 03. [ ] Shopping/Commercial: *Sq.ft.* _____ *Acres* _____ *Employees* _____
- 04. [ ] Industrial: *Sq.ft.* _____ *Acres* _____ *Employees* _____
- 05. [ ] Water Facilities: *MGD* _____
- 06. [ ] Transportation: *Type* _____
- 07. [ ] Mining: *Mineral* _____
- 08. [ ] Power: *Type* _____ *Watts* _____
- 09. [ ] Waste Treatment: *Type* _____
- 10. [ ] OCS Related
- 11. [X] Other: Wetland Restoration

10. Total Acres 850

11. Total Jobs Created N.A.

12. Project Issues Discussed in Document

- 01. [X] Aesthetic/Visual
- 02. [ ] Agricultural Land
- 03. [X] Air Quality
- 04. [ ] Archaeological/Historical
- 05. [ ] Coastal Zone
- 06. [ ] Economic
- 07. [ ] Fire Hazard
- 08. [X] Flooding/Drainage
- 09. [X] Geologic/Seismic
- 10. [X] Jobs/Housing Balance
- 11. [X] Minerals
- 12. [X] Noise
- 13. [X] Public Services
- 14. [X] Schools
- 15. [X] Septic Systems
- 16. [X] Sewer Capacity
- 17. [ ] Social
- 18. [ ] Soil Erosion
- 19. [ ] Solid Waste
- 20. [X] Toxic/Hazardous
- 21. [ ] Traffic/Circulation
- 22. [X] Vegetation
- 23. [X] Water Quality
- 24. [X] Water Supply
- 25. [X] Wetland/Riparian
- 26. [X] Wildlife
- 27. [ ] Growth Inducing
- 28. [ ] Incompatible Land Use
- 29. [ ] Cumulative Effects
- 30. [ ] Other _____

13. Funding (approx.) Federal $ 400,000 **State $** 1,250,000 **Total $** 1,650,000

14. Present Land Use and Zoning Openspace

15. Project Description Restoration of 835 acres of inactive salt evaporation ponds to tidal marsh and managed seasonal wetland. Identification of a Bay Trail alignment through the project site.

16. Signature of Lead Agency Representative Carl Wilcox **Date** 3-15-99

NOTE: Clearinghouse will assign identification numbers for all new projects. If a SCH number already exists for a project (e.g. from a Notice of Preparation or previous draft document) please fill it in.

Form Revised 4/86 — Replaces CA189

Mark Distribution on Reverse

Notice of Preparation

To:

From: California Department of Fish and Game
Central Coast Region
P. O. Box 47
Yountville, CA 94599

Subject: Notice of Preparation of a Draft Environmental Impact Report

The Department of Fish and Game will be the Lead Agency and will prepare an environmental impact report for the project identified below. We need to know the views of your agency as to the scope and content of the environmental information which is relevant to your agency's statutory responsibilities in connection with the proposed project. Your agency will need to use the EIR prepared by our agency when considering your permit or other approval for the project.

The project descriptions, location, and the probable environmental impacts are contained in the attached materials.

Due to the time limits mandated by State law, your response must be sent at the earliest possible date but not later than 45 days after receipt of this notice.

Please send your response to the Department of Fish and Game at the address above. We will need the name for a contact person in your agency.

Project Title: Eden Landing Ecological Reserve Restoration and Management Plan

Project Applicant: California Department of Fish and Game

Date: March 17, 1999

Carl Wilcox
California Department of Fish and Game
Environmental Services Supervisor
Central Coast Region
(707) 944-5525

Project Description

The Wildlife Conservation Board (WCB) acquired approximately 835 acres of the Baumberg Tract in May 1996 for the purposes of wetland restoration, preservation, and enhancement. The purchase and restoration of the tract, to be named the Eden Landing Ecological Reserve, represent a major commitment by the WCB and the California Department of Fish and Game (CDFG) to the restoration and recovery of a healthy San Francisco Bay ecosystem. The major goals of the Restoration and Management Plan for the Eden Landing Ecological Reserve are to:

- Restore 570 acres tidal salt marsh by; restoring tidal influence to 515 acres of inactive salt ponds, removing interior levees and roads (25 acres), and establishing tidal influence to 30 acres existing diked marsh and active salt ponds.

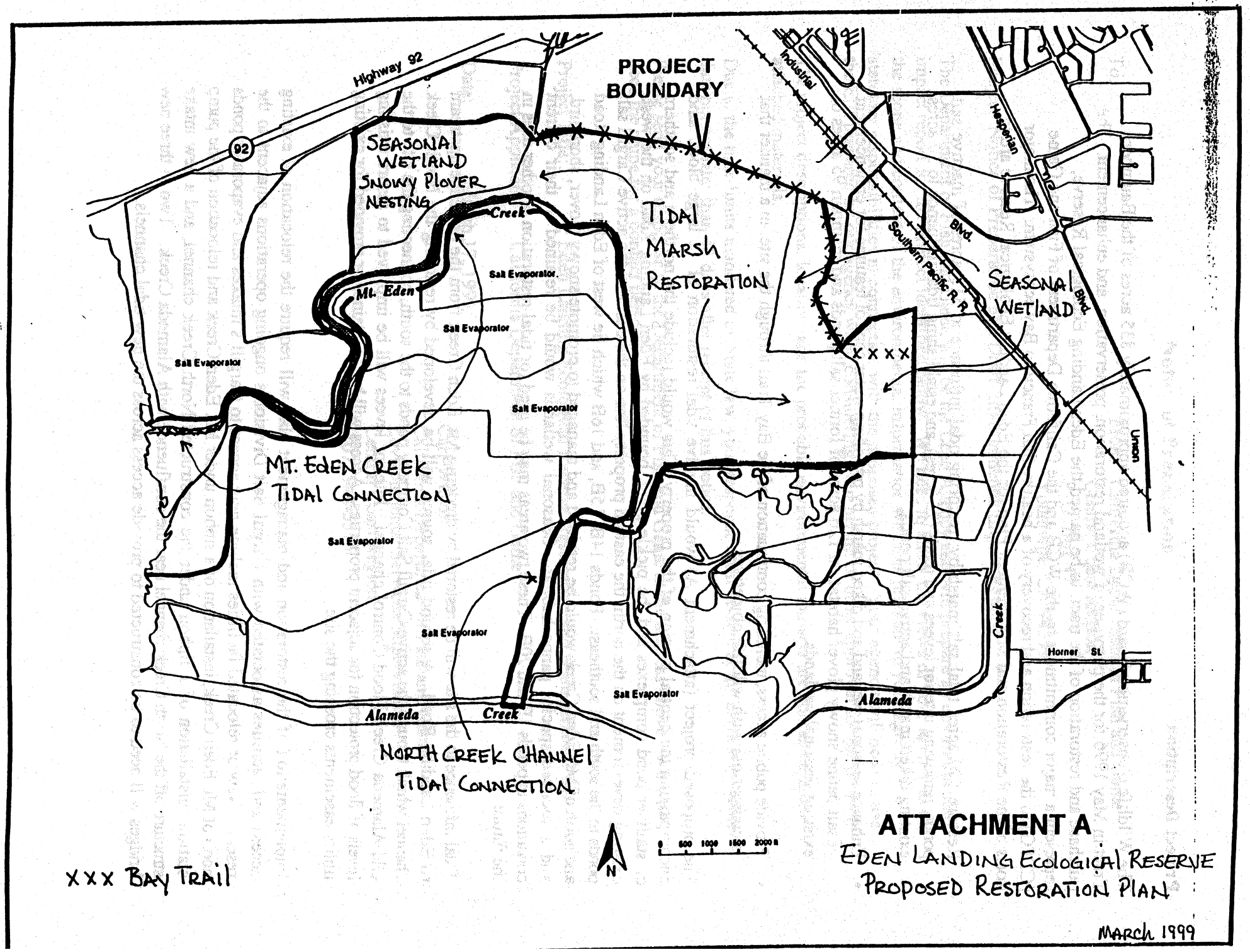
- Enhance seasonal wetland and diked marsh by providing water control features for enhancement of salt panne/snowy plover habitat on 126 acres of former salt ponds and maintain 95 acres of existing seasonal wetlands.

- Provide public access, including continuation of the Bay Trail through the site, in a manner that is compatible with wildlife objectives.

The proposed project (attachment A) would involve tidal restoration of a large block land encompassing the central portion of the property. This would include the northern and southern crystallizer pond complexes and the pickle pond, bounded by Eden Landing Road on the west, existing development on the north, the eastern property line on the east and the active Cargill salt ponds to the south and southeast. Ponds 14B, 15B, and 16B which lie west of Eden Landing Road and north of Mt. Eden Creek would be retained and managed to promote snowy plover, shorebird, and associated species panne habitat. Seasonal wetlands would be retained in their current conditions in ponds 1B and 20B. These two areas may be used for tidal restoration or other uses in the future.

Tidal influence to the site will be restored by dredging Mt. Eden Creek from the bay edge upstream to Eden Landing Road. A second tidal source will be developed by restoring the North Creek channel which though the active Cargill Salt Company ponds to the south, connecting the site to the Old Alameda Creek Flood Control channel. Interior levees will be improved to assure existing levels of flood protection for adjacent properties. Access will be maintained or provided for existing utility easements crossing the site.

Implementation of the restoration and management plan will require the relocation of existing access and facilities associated with Cargill Salt Division's ongoing operations adjacent to the reserve. New or relocated facilities include new access to Cargill's intakes and evaporator ponds north of Mt. Eden Creek, installation of a siphon under Mt. Eden Creek and relocation of the pump station, installation of a siphon under the constructed North Creek channel, and a new intake structure off the North Creek channel near the confluence with Alameda Creek. Two to three new bridges will need to be constructed to provide access across the new tidal channels.


Highway 92
92
PROJECT BOUNDARY
SEASONAL WETLAND SNOWY PLOVER NESTING
Creek
Mt. Eden
Salt Evaporator
Salt Evaporator
Salt Evaporator
Salt Evaporator
Salt Evaporator
Salt Evaporator
Salt Evaporator
TIDAL MARSH RESTORATION
Industrial
Southern Pacific R.R.
Hesperian
Blvd.
Blvd.
SEASONAL WETLAND
XXXX
Union
MT. EDEN CREEK TIDAL CONNECTION
Alameda
Creek
NORTH CREEK CHANNEL TIDAL CONNECTION
Creek
Horner St.
Alameda
N
0 500 1000 1500 2000 ft
XXX BAY TRAIL
ATTACHMENT A
EDEN LANDING ECOLOGICAL RESERVE
PROPOSED RESTORATION PLAN
MARCH 1999

Public access would be provided along a trail alignment located along the northern and eastern boundary of the reserve. The trail, to be funded and constructed by the East Bay Regional Park District, is expected to be 12 feet in width, with 4 to 6 inches of paving material such as gravel. The trail would connect to a pedestrian overpass that is expected to be constructed by CalTrans as part of the Highway 92 widening project. Other access points include Eden Landing Road and the proposed residential development to the east of the Eden Landing Ecological Reserve. Impacts to identified archeological sites will be avoided. Impacts to the historic Eden Landing port site will be avoided through plan design which will enhance the historical character of the site.

Location of Project

The Eden Landing Ecological Reserve is located in the southwestern portion of Hayward, California along the East Bay shoreline south of Highway 92 and west of the Southern Pacific Railroad. The Eden Landing Ecological Reserve is bounded on the north by business and commercial development, and on the east by the community of Baumberg, a modest residential area, and two properties known as the Oliver and Weber Tracts. To the south and west, the site is surrounded by active salt production ponds owned by the Cargill - Salt Division and several hundred acres of tidal salt marsh, known as the Whale's Tail Marsh, fronting San Francisco Bay. The tract is connected to San Francisco Bay via the Mt. Eden Slough which is largely blocked by siltation and an open brine distribution canal which transports brine taken in from the Bay into Cargill's ponds 10 and 11 through the reserve to existing Cargill salt production ponds south and west of the reserve.

The Eden Landing Ecological Reserve consists of approximately 835 acres of inactive salt production ponds, diked saltmarsh, seasonal/ruderal wetlands, and portions of Mt. Eden Creek. The site was formerly part of a network of salt harvesting operations that extended along the East Bay shoreline. Since salt production ceased in 1972, the site has been undeveloped and provided seasonal feeding, roosting, and nesting habitats for a wide variety of shorebirds and waterfowl. The restoration and management area also includes State Lands within Mt. Eden Creek and the tidal marshes outboard of Cargill's active salt production ponds and a 5.3-acre CalTrans parcel.

Probable Environmental Effects

The probable environmental impacts of this restoration project are limited. Based upon the initial study the DEIR will focus on:

Water Quality
Mosquito Abatement
Flood Control
Public Services
Biological Resources

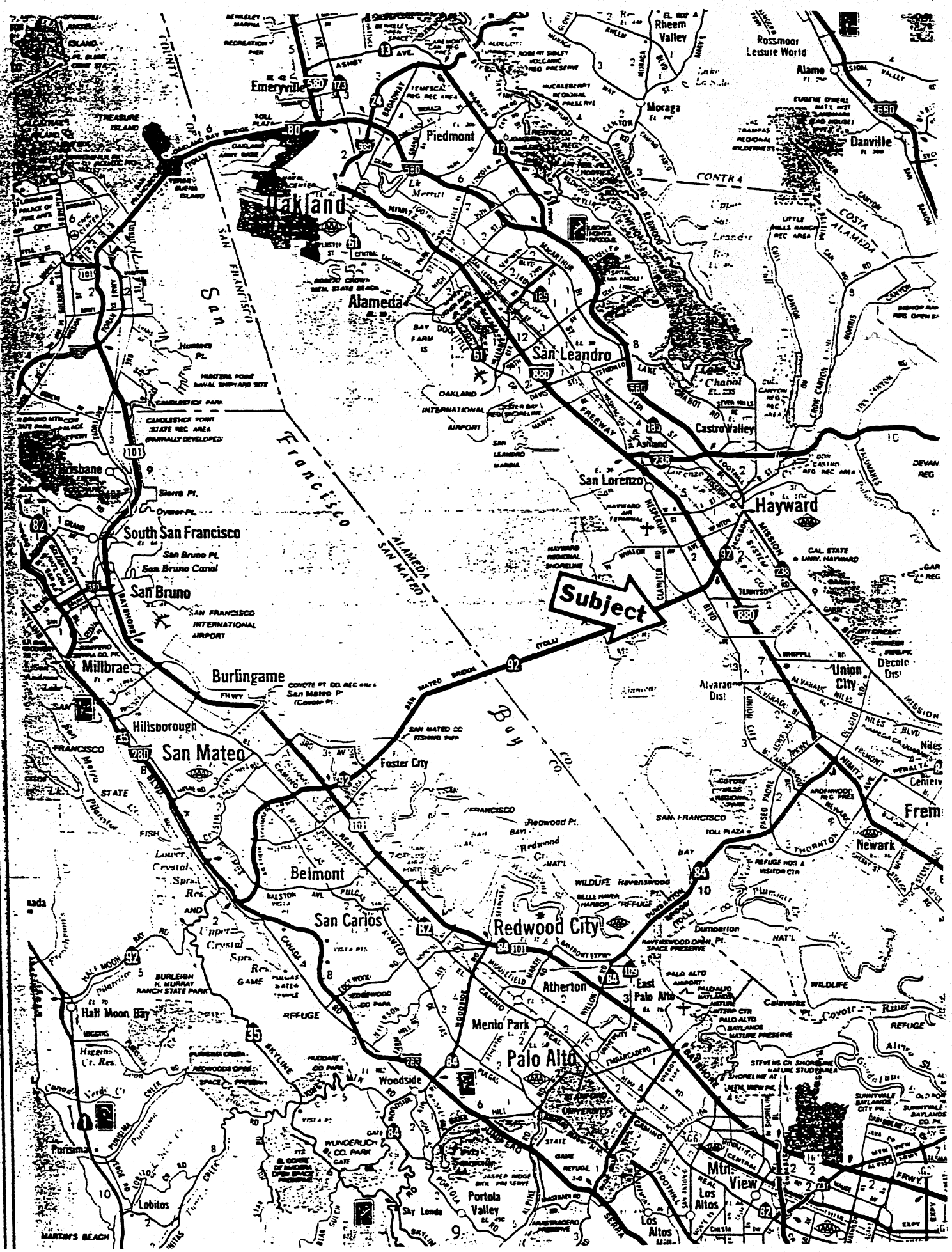
Endangered Species:
- Western Snowy Plover (*Charadrius alexandrinus nivosus*)
- California Clapper Rail (*Rallus longirostris obsoletus*)
- Salt Marsh Harvest Mouse (*Reithrodontomys raviventris raviventris*)
- California Least Tern (*Sterna albifrons browni*)
- California Black Rail (*Laterallus jamaicensis coturniculus*)

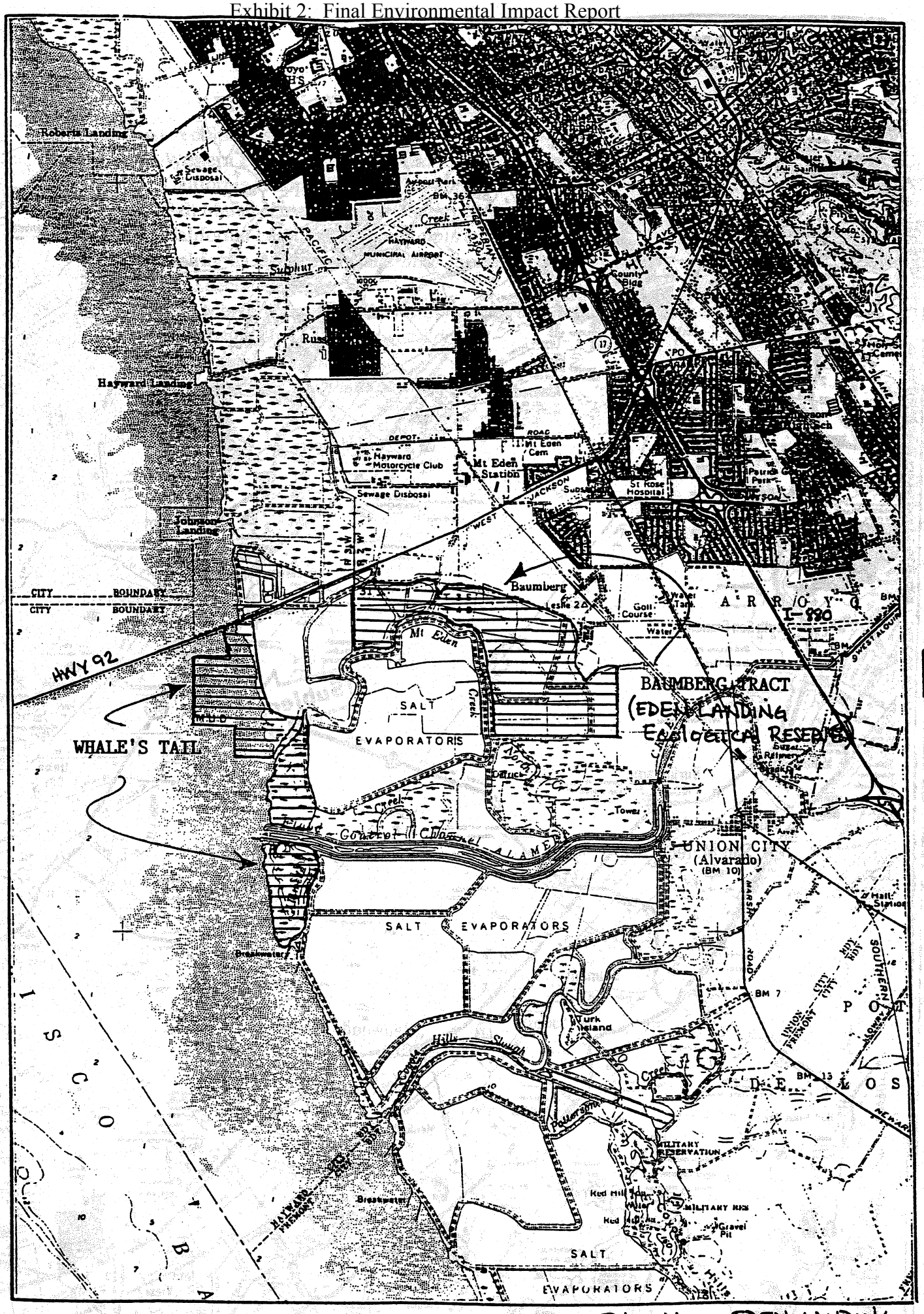
Species of Special Concern:
- Salt Marsh Wandering Shrew (*Sorex vagrans halicoetes*)
- Burrowing Owl (*Athene cunicularia*)
- *Tanarthrus occidentalis*
- Tiger Beetles (*Cicindela haemorrhagica*)

Cultural Resources

Recreation

Location Map





Site MAP EDEN LANDING
Ecological RESERVE (BAUMBERG Tr

ENVIRONMENTAL CHECKLIST FORM / INITIAL STUDY

1. **Project Title:** Eden Landing Ecological Reserve Restoration and Management Plan

2. **Lead Agency Name and Address:** California Department of Fish and Game
Central Coast Region
P.O. Box 47, Yountville, CA 94599

3. **Contact Person:** Carl Wilcox,
Environmental Services Supervisor
California Department of Fish and Game
Central Coast Region
P.O. Box 47
Yountville, CA 94599
(707) 944-5525

4. **Project Location:** Hayward, California

5. **Project Sponsor's Name and Address:** California Department of Fish and Game
P.O. Box 47
Yountiville, CA 94599

6. **Description of Project:** Restoration of 835 acres of inactive salt evaporation ponds to tidal marsh and managed seasonal wetlands. The project will restore appoximately 570 acres of tidal marsh and enhance or maintain 221 acres of seasonal wetlands.

7. **Surrounding Land Uses and Setting:** The site is currently abandon salt ponds, the site is bordered on the north by commercial and light industrial uses, on the east by rural residential, agricultural and openspace lands a portion of which are proposed for commercial and residential development. The site is bounded on the south and west by active salt ponds operated by Cargill Salt Company.

Environmental Factors Potentially Affected:

The environmental factors checked below would be potentially affected by this project, involving at least one impact that is a "Potentially Significant Impact", as indicated by the checklist on the following pages.

- ☐ Land Use and Planning
- ☐ Population and Housing
- ☐ Geological Problems
- ☐ Water
- ☐ Air Quality
- ☐ Transportation/Circulation
- ☒ Biological Resources
- ☐ Energy and Mineral Resources
- ☐ Hazards
- ☐ Noise
- ☐ Mandatory Findings of Significance
- ☐ Public Services
- ☐ Utilities and Service Systems
- ☐ Aesthetics
- ☒ Cultural Resources
- ☐ Recreation

Determination:

On the basis of this initial evaluation:

I find that the proposed project COULD NOT have a significant effect on the environment, and a NEGATIVE DECLARATION will be prepared. ☐

I find that although the proposed project could have a significant effect on the environment, there will not be a significant effect in this case because the mitigation measures described on an attached sheet have been added to the project. A NEGATIVE DECLARATION will be prepared. ☐

I find that the proposed project MAY have a significant effect on the environment, and an ENVIRONMENTAL IMPACT REPORT (EIR) is required. ☒

I find that the project MAY have a significant effect(s) on the environment, but at least one effect (1) has been adequately analyzed in an earlier document pursuant to applicable legal standards, and (2) has been addressed by mitigation measures based on the earlier analysis as described on attached sheets, if the effect is a "potentially significant impact" or "potentially significant unless mitigated." An EIR is required, but it must analyze only the effects that remain to be addressed. ☐

I find that although the proposed project could have a significant effect on the environment, there WILL NOT be a significant effect in this case because all potentially significant effects (1) have been analyzed adequately in an earlier EIR pursuant to applicable standards, and (2) have been avoided or mitigated pursuant to that earlier EIR, including revisions or mitigation measures that are imposed upon the proposed project. ☐

Carl L Wilcox
Signature

3-15-99
Date

CARL WILCOX
Printed Name

For

Issues	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less Than Significant Impact	No Impact or Positive Impact
I. LAND USE AND PLANNING. Would the proposal:				
a. Conflict with general plan designation or zoning	☐	☐	☐	☑
b. Conflict with applicable environmental plans or policies adopted by agencies with jurisdiction over the project?	☐	☐	☐	☑
c. Be incompatible with existing land use in the vicinity?	☐	☐	☐	☑
d. Affect agricultural resources or operations (e.g., impacts to soils or farmlands, or impacts from incompatible land uses)?	☐	☐	☐	☑
e. Disrupt or divide the physical arrangement of an established community (including a low-income or minority community)?	☐	☐	☐	☑
II. POPULATION AND HOUSING. Would the proposal:				
a. Cumulatively exceed official regional or local population projections?	☐	☐	☐	☑
b. Induce substantial growth in an area either directly or indirectly (e.g., through projects in an undeveloped area or extension of major infrastructure)?	☐	☐	☐	☑
c. Displace existing housing, especially affordable housing?	☐	☐	☐	☑
III. GEOLOGIC PROBLEMS. Would the proposal result in or expose people to potential impacts involving:				
a. Fault rupture?	☐	☐	☐	☑
b. Seismic ground shaking?	☐	☐	☐	☑
c. Seismic ground failure, including liquefaction?	☐	☐	☐	☑
d. Seiche, tsunami, or volcanic hazard?	☐	☐	☐	☑
e. Landslides or mudflows?	☐	☐	☐	☑
f. Erosion, changes in topography, or unstable soil conditions from excavation, grading, or fill?	☐	☐	☐	☑
g. Subsidence of the land?	☐	☐	☐	☑
h. Expansive soils?	☐	☐	☐	☑
I. Unique geologic or physical features?	☐	☐	☐	☑

Issues	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less Than Significant Impact	No Impact or Positive Impact
IV. WATER. Would the proposal result in:				
a. Changes in absorption rates, drainage patterns, or the rate and amount of surface runoff?	☐	☐	☐	☑
b. Exposure of people or property to water related hazards, such as flooding?	☐	☐	☐	☑
c. Discharge into surface waters or other alteration of surface water quality (e.g, temperature, dissolved oxygen, or turbidity)?	☐	☐	☑	☐
d. Changes in the amount of surface water in any water body?	☐	☐	☐	☑
e. Changes in currents, or the course or direction of water movements?	☐	☐	☐	☑
f. Change in the quantity of ground waters, either through direct additions or withdrawals, or through interception of an aquifer by cuts or excavations, or through substantial loss of groundwater recharge capability?	☐	☐	☐	☑
g. Altered direction or rate of flow of groundwater?	☐	☐	☐	☑
h. Impacts to groundwater quality?	☐	☐	☐	☑
I. Substantial reduction in the amount of groundwater otherwise available for public water supplies?	☐	☐	☐	☑
V. AIR QUALITY. Would the proposal:				
a. Violate any air quality standard or contribute to an existing or projected air quality violation?	☐	☐	☑	☐
b. Expose sensitive receptors to pollutants?	☐	☐	☐	☑
c. Alter air movement, moisture, or temperature, or cause any change in climate?	☐	☐	☐	☑
d. Create objectionable odors?	☐	☐	☐	☑
VI. TRANSPORTATION/CIRCULATION. Would the proposal result in:				
a. Increased vehicle trips or traffic congestion?	☐	☐	☐	☑
b. Hazards to safety from design features (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?	☐	☐	☐	☑
c. Inadequate emergency access or access to nearby uses?	☐	☐	☐	☑
d. Insufficient parking capacity on-site or off-site?	☐	☐	☐	☑

Issues	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less Than Significant Impact	No Impact or Positive Impact
e. Hazards or barriers for pedestrians or bicyclists?	☐	☐	☐	☑
f. Conflicts with adopted policies supporting alternative transportation (e.g., bus turnouts, bicycle racks)?	☐	☐	☐	☑
g. Rail, waterborne, or air traffic impacts?	☐	☐	☐	☑
VII. BIOLOGICAL RESOURCES. Would the proposal result in impacts to:				
a. Endangered, threatened, or rare species or their habitats (including but not limited to plants, fish, insects, animals, and birds)?	☐	☑	☐	☐
b. Locally designated species (e.g., heritage trees)?	☐	☐	☐	☑
c. Locally designated natural communities (e.g., oak forest, coastal habitat, etc.)?	☐	☐	☐	☑
d. Wetland habitat (e.g., marsh, riparian, and vernal pool)?	☐	☐	☐	☑
e. Wildlife dispersal or migration corridors?	☐	☐	☐	☑
VIII. ENERGY AND MINERAL RESOURCES. Would the proposal:				
a. Conflict with adopted energy conservation plans?	☐	☐	☐	☑
b. Use non-renewable resources in a wasteful and inefficient manner?	☐	☐	☐	☑
c. Result in the loss of availability of a known mineral resource that would be of true value to the region and the residents of the State?	☐	☐	☐	☑
IX. HAZARDS. Would the proposal involve:				
a. A risk of accidental explosion or release of hazardous substances (including but not limited to: oil, pesticides, chemical, or radiation)?	☐	☐	☐	☑
b. Possible interference with an emergency response plan or emergency evacuation plan?	☐	☐	☐	☑
c. The creation of any health hazard or potential health hazard?	☐	☐	☑	☐
d. Exposure of people to existing sources of potential health hazards?	☐	☐	☐	☑
e. Increased fire hazard in areas with flammable brush, grass, or trees?	☐	☐	☐	☑
X. NOISE. Would the proposal result in:				
a. Increases in existing noise levels?	☐	☐	☐	☑
b. Exposure of people to severe noise levels?	☐	☐	☐	☑

Issues	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less Than Significant Impact	No Impact or Positive Impact
XI. PUBLIC SERVICES. Would the proposal have an effect upon, or result in a need for new or altered government services in any of the following areas:				
a. Fire protection?	☐	☐	☐	☑
b. Police protection?	☐	☐	☑	☐
c. Schools?	☐	☑	☐	☐
d. Maintenance of public facilities, including roads?	☐	☐	☐	☐
e. Other governmental services?	☐	☐	☐	☑
XII. UTILITIES AND SERVICE SYSTEMS. Would the proposal result in a need for new systems or supplies, or substantial alterations to the following utilities:				
a. Power or natural gas?	☐	☐	☐	☑
b. Communications systems?	☐	☐	☐	☑
c. Local or regional water treatment or distribution facilities?	☐	☐	☐	☑
d. Sewer or septic tanks?	☐	☐	☐	☑
e. Storm water drainage?	☐	☐	☐	☑
f. Solid waste disposal?	☐	☐	☐	☑
g. Local or regional water supplies?	☐	☐	☐	☑
XIII. AESTHETICS. Would the proposal:				
a. Affect a scenic vista or scenic highway?	☐	☐	☐	☑
b. Have a demonstrable negative aesthetic effect?	☐	☐	☐	☑
c. Create light or glare?	☐	☐	☐	☑
XIV. CULTURAL RESOURCES. Would the proposal:				
a. Disturb paleontological resources?	☐	☐	☐	☑
b. Disturb archaeological resources?	☐	☑	☐	☐
c. Affect historical resources?	☐	☑	☐	☐

Issues	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less Than Significant Impact	No Impact or Positive Impact
d. Have the potential to cause a physical change which would affect unique ethnic cultural values?	☐	☐	☐	☑
e. Restrict existing religious or sacred uses within the potential impact area?	☐	☐	☐	☑
XV. RECREATION. Would the proposal:				
a. Increase the demand for neighborhood or regional parks or other recreational facilities?	☐	☐	☐	☑
b. Affect existing recreational opportunities?	☐	☐	☐	☑
XVI. MANDATORY FINDINGS OF SIGNIFICANCE.				
a. Does the project have the potential to degrade the quality of the environment, substantially reduce the habitat of a fish and wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, reduce the number or restrict the range of a rare or endangered plant or animal, or eliminate important examples of the major periods of California history or prehistory?	☐	☑	☐	☐
b. Does the project have the potential to achieve short-term, to the disadvantage of long-term, environmental goals?	☐	☐	☐	☑
c. Does the project have impacts that are individually limited, but cumulatively considerable?	☐	☐	☐	☑
d. Does the project have environmental effects which will cause substantial adverse effects on human beings either directly or indirectly?	☐	☐	☐	☑

Explanation of Checklist Responses

I. Land Use and Planning

a. The project site in currently designated open space by the City of Hayward and Alameda County. The area is also identified for wetland preservation and restoration in the Hayward Area Shoreline Planning Agency. Proposed wetland restoration and enhancement would be consistent with the land use designations.

b. The project is consistent with the plans of the Hayward Area Shoreline Planning agency and the policies of the Bay Conservation and Development Commission.

c. The site is currently bounded on the north by light industrial and commercial uses, on the west and south by active salt evaporators, and on the east by agricultural lands proposed for residential uses. The site is currently open space and will continue as such into the future. This use is consistent with surrounding uses.

d. The site has been used for salt production since its reclamation from tidal wetlands in the 1800's. The land is not suitable for the production of agricultural crops.

e. The project site is on the southern boundary of the City of Hayward and contiguous with salt evaporation ponds which function as open space to the south. The site is outside the City's future development area as determined by the South of 92 Specific Plan.

II. Population and Housing

a. The project will not result in the development of additional housing. Consequently, it will not contribute to increased population in the area.

b. The project insures open space protection for lands which have been proposed for development in the past. It will not contribute to future growth in the area.

c. The project site is currently open space and will not displace existing housing.

III. Geologic Problems

a. The project will have no effect on faults within the area. It will maintain the existing character of the land.

b. No structures are proposed which would be subject to ground shaking.

c. No structures are proposed the site is underlain with bay muds which are not

subject to liquefaction.

d. The site is not subject to Seiche, tsunami, or volcanic hazards. No structures which could be affected by such events are proposed.

e. The site is flat and no potential for landslides or mudflows exists.

f. The project will result in grading which will remove internal levees and berms on the site. It will also result in the excavation of silted in channels to reestablish tidal flows into restoration areas. These changes are considered minor and insignificant. The restoration of tidal influence will result in sediment deposition on the site. This is considered insignificant since deposition will occur only to high marsh elevations which are the objective of the restoration project. Some erosion is tidal channels may occur. Where channel erosion may be a problem buffers will be provided to allow natural geomorphic processes to occur and erosion protection will be provided where structures may be affected.

g. Subsidence of the site has occurred in the past due to soil oxidation. With restoration of the site to tidal influence sedimentation will occur in subsided areas increasing their elevation. With the reintroduction of tidal influence to the site any future subsidence from oxidation should be precluded.

h. The site is underlain by bay muds which are expansive. No structures are proposed which would be affected by such a condition.

I. No unique geologic or physical features are present on the site.

IV. Water

a. The project will not change absorption rates since the character of the land will not be changed. Drainage from the site will improve with increased tidal influence, which should improve drainage from surrounding developed areas. The existing storm drain outfall on the site will be protected.

b. The exposure of people or adjacent properties to flooding will not be increased. Existing inboard levees will be maintained and enhanced to maintain current levels of flood protection. Development on adjacent properties is required to be at elevations above the predicted 100 year flood event. Restoration should have a positive effect by improving drainage from surrounding developed areas.

c. The project will expand the size of San Francisco Bay. It will not result in a new discharge to the bay which would alter existing surface water quality. With initial introduction of tidal water to the site, small increases in salinity may occur as salts are leached out of the soils of the former crystallizing bed. This is not anticipated to be a long term or significant effect. With restoration of 600 acres

of tidal marsh surface water quality benefits should be achieved by the natural filtering of pollutants by marsh vegetation and entrapment of sediment.

The bittern storage area which is present on the site will not be restored to tidal influence so that the potential effects of bittern discharge will not occur. The bittern storage area will be incorporated into the proposed snowy plover management area. Additionally much of the bittern stored onsite has been reincorporated into the ongoing salt production facilities to increase salinities lowered by high rainfall during the last few years.

d. The project will increase the surface area of San Francisco Bay by approximately 600 acres. This is considered to be a positive impact.

e. The project will introduce tidal influence to 600 acres of historic tidal marsh habitat. The restoration will result in reestablishment of tidal channels through Mt. Eden Creek and the North Creek channel connected to the Old Alameda Flood Control Channel. The increased tidal prism of the restoration will increase currents in these channels. These effects are considered minor and potentially beneficial, reducing sedimentation in flood control channels and improving storm drainage from adjacent lands.

f. The groundwater beneath the site is expected to be very slow-moving (less than 0.5 feet/year) because of the limited permeability of the underlying bay mud soils. Salt production on the site since the late 1800s has likely salinized the underlying groundwater to where it has a higher salinity than the adjacent water of San Francisco Bay. Restoration of the site to tidal action will not adversely effect groundwater and may have some minor positive benefit by lowering the salinity levels to levels comparable to natural conditions.

g. The project will not affect movement of ground water.

h. The project will not change conditions from those presently occurring on the site which might affect groundwater quality. See response to question (f).

I. The project will not affect groundwater availability. No ground water is proposed to be used as part of the project.

V. Air Quality

a. Air Quality impacts will be associated with the construction phase of the project. The Basic and Enhanced Control Measures identified in the Bay Area Air Quality Management District CEQA Guidelines will be implemented. Based upon those criteria no significant impact will occur.

b. See (a.) above.

c. The project will change the character of the site from dry unvegetated ponds in summer to tidal marsh. Air movement patterns, moisture and temperature should not be changed.

d. Odors can be associated with wetlands. This is particularly the case where poor water circulation occurs and excessive aquatic vegetation can accumulate and decompose. The tidal wetlands will have regular water circulation, twice daily with the tides, which will preclude the buildup of decaying organic material which can generate odors. Areas managed as seasonal wetland will be allowed to dry out in the summer when odor problems associated with managed or permanent wetlands generally occur.

VI. Transportation/Circulation.

a. The project will not result in any change of land use which will increase traffic to or from the site.

b. No public roads will be constructed or affected by this project.

c. Existing access to and from the site will be maintained.

d. Parking at the entrance to the site, at the end of Eden Landing Road, may be provided as a staging area for users of the Bay Trail.

e. The project site is currently closed to the public. As part of the project access to the site for pedestrians and bicyclists will be provided as an element of the Bay Trail.

f. The project is consistent with adopted policies in that it contributes to the regional bicycle network by facilitating development of a segment of the Bay Trail.

g. Not applicable.

VII. Biological Resources.

a. The project will increase or enhance habitats for the endangered California clapper rail and the salt marsh harvest mouse and the threatened western snowy plover. The project will have short term impacts to the salt marsh harvest mouse resulting from dredging of Mt. Eden Creek to reestablish tidal circulation to the majority of the restoration site. This will result in the loss of approximately 2 acres of habitat and possible direct mortality of harvest mice. Mitigation measures will be incorporated to minimize adverse effects to endangered species associated with construction. The project will result in the restoration of 600 acres of habitat for the harvest mouse. No direct adverse impacts to the clapper

rail have been identified. Some conversion of existing nesting habitat, pond 7B which has low levels of use by snowy plover will occur. The majority of existing snowy plover nesting habitat on the site will be retained and enhanced. Restoration of the project site is identified in the United States Fish and Wildlife Services Recovery Plan for the Salt Marsh Harvest Mouse and the California Clapper rail as essential for their recovery.

b. Burrowing owls which are in decline in the Bay area occur on the site. No direct impacts are expected from the project. Nesting sites identified on the site will be avoided and protected.

c. The site currently functions as a seasonal wetland. It exists within a complex of active salt ponds which provide similar functions for waterfowl and shorebirds. Restoration of the site to tidal influence will reduce the amount of area on the site subject to seasonal ponding. Approximately 250 acres of the 850-acre site will be retained and enhanced as seasonal wetland habitat for shorebirds and waterfowl. Additionally the restored tidal marshes will provide foraging and roosting habitats for these species.

d. See (c.) above.

e. The site currently serves to support wildlife dispersal and migration. With the proposed project it will continue to serve this function, possibly at a higher level.

VII. Energy and Mineral Resources.

a. The project will not result in a change in energy use which would conflict with adopted energy conservation plans. Energy use would be confined to construction activities in the short-term.

b. The project will result in the use of non-renewable resources (i.e., fuel for equipment). Long-term the project will not require the use of non-renewable resources.

c. The site is not known to contain any mineral resources. The area was a former evaporative salt production facility, which was abandon in the early 1970's to make way for adjacent commercial development. It can be assumed that if the ponds had been of importance to ongoing salt production that Cargill Salt Company the former owner would have incorporated them into their ongoing salt production operation which boarders the site to the south and west.

IX. Hazards.

a. No know hazardous substances are present on the site. The site contains a bittern

storage area. The bittern, a byproduct of the salt making process, consists of high concentrations of all salts present in the environment. When discharged undiluted into the aquatic environment it can be acutely toxic to aquatic organisms due to its imbalanced ionic conposition. The bittern pond area will not be restored to tidal influence but incorporated into the managed seasonal wetland/snowy plover management area. The bittern from the pond has been being reincorporated into the salt making process by Cargill Salt over the last several years to raise salinities in their concentrator ponds which have been depressed by above average rainfall over the last several years. The bittern pond is currently used by shorebirds for foraging and by snowy plovers for nesting.

b. The site supports no major roads which could be used for evacuation purposes. The main access to and through the site will be maintained.

c. The project proposes to restore the area to tidal marsh and managed wetlands. Appropriate measures will be designed into the project in consultation with the Alameda Mosquito Abatement District to avoid or minimize potential mosquito problems. Improved tidal circulation and drainage through Mt. Eden Creek will alleviate existing mosquito problems resulting from poor drainage in that area. The restoration of the site will eliminate dust generation problems which have been associated with the site in the past.

d. The project will not change the level of exposure since it will maintain open space conditions. As noted in (c.) above it may serve to eliminate some existing problems with mosquitos and dust.

e. The project will not change existing conditions. Maintenance associated with access trails will abate weeds which could pose a fire threat to adjacent areas.

X. Noise.

a. The project will maintain existing noise levels. During construction equipment operation may increase noise levels for the short-term. Much of the work will be conducted well away from occupied buildings. The site borders Highway 92 which generates high existing ambient noise levels. The site is surrounded by commercial, light industrial and open space uses which are not expected to be adversely affected.

b. The project as noted above will generate only short-term construction related noise associated with earth moving. Generation of severe noise levels is not expected.

XI. Public Services.

a. No change in the level of fire protection is anticipated since the basic land use is

not being changed.

b. No change in the level of police protection is anticipated with implementation of wetland restoration. With development for the recreational trail through the site a greater number of people will be using the site which may result in a higher level of patrol. The trial will be developed and maintained by the East Bay Regional Park District which maintains its own park polices. Increased access may also increase the interaction between the public and duck hunters who lease adjacent salt ponds for waterfowl hunting. This may increase the Departments level of patrol activity in the area.

c. The project will not result in increased population or the need for additional schools. Restoration of the site may provide an opportunity for nature study at the site by schools in the area. Existing educational programs at the Hayward Area Recreation District Hayward Shoreline interpretive center north of Highway 92 will be able to use the site for study and research.

d. The site is crossed by two PG&E transmission lines, the East Bay Dischargers Authority (EBDA) treated waste water line, and an abandon fuel transmission line. Three of the lines are in the same easement running south to north through the eastern portion of the site. The PG&E transmission line through the tidal restoration area has an existing boardwalk to access the transmission towers. Surveys of the site show that the tower footings and boardwalk will be above the highest tides predicted for the site, so access to these facilities will be maintained. The EBDA line has four access man holes which are accessed by existing levee roads. These will be maintained. Emergency access to the pipeline between the man holes will be maintained by developing a high marsh berm which could be used to gain emergency access to the pipeline in the case of an emergency. The second PG&E transmission line crosses the northern portion of the site from east to west. The management of the land in this area will not be substantially changed. Consequently, access to the transmission towers will be maintained at the current level. Routine maintenance and repairs and emergency access will be addressed as part of the project impacts addressed in the EIR and necessary permits to address concerns by the affected agencies and companies about regulatory restrictions.

e. No affect is expected.

XII. Utilities and Service Systems.

a. The project will not result in a need for new power or natural gas.

b. The project will not result in a need for additional communication systems.

c. The project will not result in a need for new or additional water treatment or

distribution facilities. The project will affect the EBDA waste water line discussed in XI.d. above.

d. The project will not require new sewer or septic tanks.

e. The project will not require new storm drainage facilities. The existing storm drainage outfall on the site will be maintained and protected as necessary. Overall the project should improve storm water drainage from adjacent lands by improving onsite circulation and drainage.

f. No added solid waste disposal needs will result from the project.

g. The project will not require service by local water suppliers. No facilities are planned which will require water service.

XIII. Aesthetics.

a. There are no Scenic Highways or Vistas that would be affected by this project.

b. The proposed project should enhance the visual character of the area by removing abandon levees and restoring the site to vegetated tidal marsh and open water. The project should result in an overall improvement of the site.

c. The site is currently vacant and unlighted. This condition will continue with implementation of the project.

XIV. Cultural Resources.

a. The site has been extensively surveyed for the previously proposed Shorelands Development for which EIRs were prepared. No Paleontological resources have been identified on the site.

b. Several archeological locations have been identified on the site as a result of past EIRs for proposed development of the site. The Restoration plan and recreational trail would avoid impacts to these sites.

c. The historical Eden Landing is located on the project site. Historical surveys conducted as part of past EIRs for the Shorelands Project and the Highway 92 widening has identified this site as potentially qualifying for listing on the historical register. Planning for the restoration project has incorporated measures to avoid or minimize impacts to the site. Restoration may reduce the potential for vandalism of the site by flooding portions of the site. Additionally the project will restore the historic character of the site by reestablishing conditions which existed at the time of its establishment.

d. No effect to unique ethnic cultural values has been identified by current or previous archeological or historical studies of the site.

e. No sacred of religious uses of the site are known.

XV. Recreation.

a. The project will not result in any development which would increase demand upon existing recreational facilities. Development of the Bay Trail through the site should expand recreational opportunities.

b. Development of the Bay Trail though the site should expand recreational opportunities. The site is currently subject to trespass by joggers, walkers and others. Development of formal public access on the site will increase recreational opportunities in the area.

XVI. Mandatory Findings of Significance.

a. The project has the potential to reduce the number of an endangered species (salt marsh harvest mouse) in the short-term, as a result of restoration construction. In the long-term the project will increase habitats for the harvest mouse and the California clapper rail and will enhance habitat for the western snowy plover.

b. The project will contribute to long-term goals for endangered species recovery and tidal wetlands restoration.

c. The affects of the project are considered positive from an environmental perspective, since the project will protect existing open space and restore habitats for endangered species and other wetlands associated wildlife.

d. No adverse impacts to human beings from this project have been identified. As noted in (d.) above the project should enhance the quality of life in the area by protecting open space, improving the aesthetic character of the area and increasing recreational opportunities.

Appendix B NOP Response Letters

CITY OF
HAYWARD
HEART OF THE BAY

RECEIVED
MAY - 7 1999
LSA ASSOCIATES, INC.
PT. RICHMOND OFFICE

April 20, 1999

Mr. Carl Wilcox
California Department of Fish and Game
Environmental Services Supervisor, Central Coast Region
P.O. Box 47
Yountville, CA 94599

RE: Notice of Preparation of a Draft Environmental Impact Report
Eden Landing Ecological Reserve Restoration and Management Plan

Dear Mr. Wilcox:

On behalf of the City of Hayward, we thank you for the opportunity to provide input as to the scope and content of the environmental information to be included in the DEIR for this project. Restoration and management of the wetlands is consistent with the City of Hayward's General Plan policies for the conservation of the shoreline.

We have reviewed the project description and would appreciate clarification on the following items:

- The South of Route 92 Specific Plan shows adjoining seasonal wetlands on the Weber property. What, if any, impact would there be to inhibit or enhance management of the Weber wetlands?

- Please clarify the location of the Bay Trail connection through the Oliver property at the neighborhood park, which will be used as a staging area.

- What, if any, impact would the tidal marsh conversion have on development to the north and northeast? Would particular fencing and vegetation be necessary along these boundaries?

We look forward to reviewing the Draft EIR upon its completion. Should you need further information please call me at (510) 583-4210.

Sincerely,

Cathy Woodbury

Cathy Woodbury, ASLA/AICP
Landscape Architect/Senior Planner

DEPARTMENT OF COMMUNITY AND ECONOMIC DEVELOPMENT
DEVELOPMENT REVIEW SERVICES
777 B STREET, HAYWARD, CA 94541-5007
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REGIONAL PARKS

EAST BAY REGIONAL PARK DISTRICT

65 YEARS

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Jean Siri
Ward 1
Pat Bacien
General Manager

April 7, 1999

Mr. Carl Wilcox
Environmental Services Supervisor
California Department of Fish and Game
PO Box 47
Yountville, CA 94599

RE: Notice of Preparation: Eden Landing Ecological Reserve Restoration and Management Plan

Dear Carl:

Thank you for providing the East Bay Regional Park District with a copy of the subject NOP. As you know, the District assisted the Wildlife Conservation Board with the purchase of the Baumberg Tract, and will be responsible for the construction of the two and one-half mile Bay Trail segment along the northern and eastern edges of the property. In addition, the District is expected to contract with the Department of Fish and Game for the wetland restoration project. The present, preliminary comments refer to the alignment of the Bay Trail segment across the site.

The trail will be a continuation of more than five miles of trail along the District's Hayward Regional Shoreline, to the north of Route 92. The planned Route 92 bicycle-pedestrian overcrossing will touch down at the western end of Pt. Eden Way. The District and Caltrans are currently negotiating a right-of-way which will provide access from this point into the Reserve. A trail segment along the levee running east from the northwest corner of the Reserve, adjacent to ponds 16B and 15B, joining the main trail at Eden Landing Road, should therefore be included in the plan. If potential snowy plover nesting activities may require seasonal trail closures, the EIR should examine alternate trail alignments. Additionally, we understand that this trail segment may be used to provide vehicular access for duck hunters. The District is concerned about potential safety hazards and user conflicts arising from such an arrangement. The EIR should discuss design and management solutions which will avoid those conflicts.

At the Eastern property boundary, the trail is shown running along the eastern property boundary, to the east of Pond 1B. There is no levee in this location; constructing a trail here would be redundant with the existing levee road to the west of Pond 1B. The trail alignment should follow the existing levee road.

Finally, the Plan should include a potential staging and parking area within the property at the Eden Landing Road entrance. Maintaining the existing entry point at Arden Road should also be considered.

Thank you for the opportunity to comment. We look forward to receiving the Management Plan and EIR.

Sincerely,

Brian Wiese

Brian Wiese
Advance Planning

RECEIVED
APR 19 1999
LSA ASSOCIATES, INC.
PT. RICHMOND OFFICE

2950 Peralta Oaks Court P.O. Box 5381 Oakland, CA 94605-0381
www.ebparks.org
TDD: 510 633-0460
TEL: 510 635-0135
FAX: 510 569-4319

SAN FRANCISCO BAY TRAIL

FISH & GAME
MAR 25 1999
YOUNTVILLE

March 22, 1999

Carl Wilcox
California Department of Fish and Game, Central Coast Region
P.O. Box 47
Yountville, CA 94599

Subject: Notice of Preparation of a DEIR for the Eden Landing Ecological Reserve Restoration and Management Plan

Dear Mr. Wilcox:

I have reviewed the March 17, 1999, notice of preparation of a draft environmental impact report (EIR) for the Eden Landing Ecological Reserve Restoration and Management Plan, and am submitting comments by the Bay Trail Project on the scope and content of the EIR. Ours is a nonprofit organization administered by the Association of Bay Area Governments (ABAG) that plans, promotes and advocates for implementation of the Bay Trail. The Bay Trail is a planned continuous 400-mile bicycling and hiking corridor that, when complete, will encircle San Francisco and San Pablo bays and cross the major toll bridges in the region. The Bay Trail will pass through 47 cities and link the shoreline of all nine Bay Area counties. Enclosed for your reference are a map of the entire Bay Trail alignment and a fact sheet with additional information about the Bay Trail.

The Bay Trail Project is supportive of the goals of the restoration and management plan for Eden Landing Ecological Reserve. The restoration of tidal salt marsh and enhancement of seasonal wetland are likely to provide several significant benefits, including enhancement of habitat for endangered species and other wildlife, preservation of open space, and improvement of San Francisco Bay water quality. Also, we are also delighted that one of the project's major goals is to provide a Bay Trail connection through the site; this will improve nature-oriented recreational and educational opportunities, and contribute to the Bay Area's developing bicycle network.

We request that the subject EIR include a mention of the Bay Trail Plan in the document's section on plans and policies. For your information, State Senate Bill 100, cosponsored by the entire Bay Area legislative delegation and passed into law in 1987, directed ABAG to develop a plan "for a continuous recreational corridor which will extend around the perimeter of San Francisco and San Pablo Bays." SB 100 required that the Plan include a route for a bicycling and hiking trail, the relationship of the route to parks and other recreational facilities, and links to existing and proposed public

Administered by the Association of Bay Area Governments
P.O. Box 2050 • Oakland California 94604-2050
Joseph P. Bort MetroCenter • 101 Eighth Street • Oakland California 94607-4756
Phone: 510•464•7935
Fax: 510•464•7970

transportation facilities. Pursuant to SB 100, a plan for the Bay Trail was developed by an advisory committee that included representatives from a broad range of interests, including Federal, State, regional and local government agencies, environmental and recreational organizations, private landowners and large business corporations. The Bay Trail Plan was adopted by ABAG in 1989.

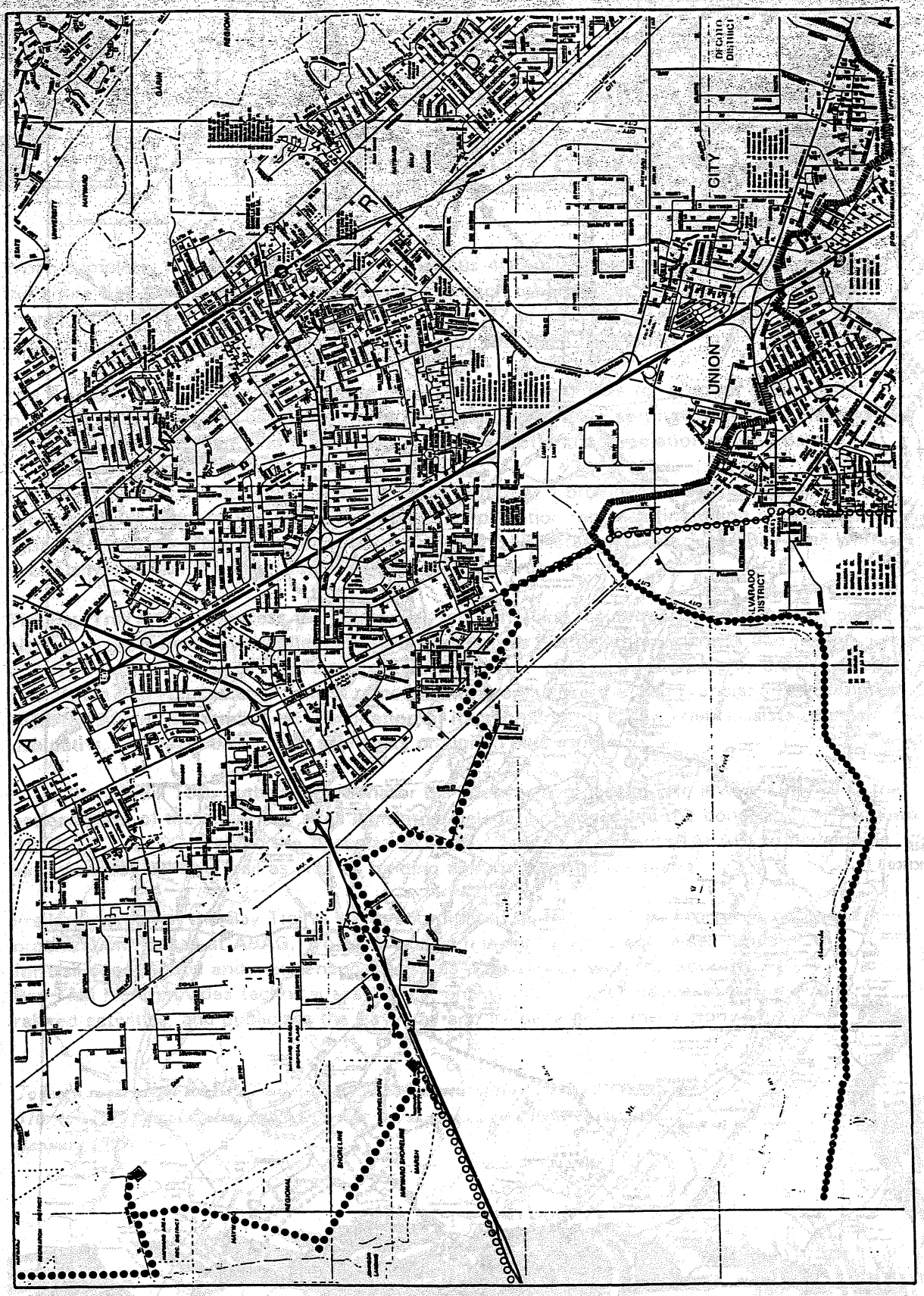
We also request that the EIR describe existing and proposed Bay Trail segments and other pedestrian and bicycle facilities in the project area. The EIR should also describe how the project-proposed trail will connect at its ends to the State Route 92 overpass and the proposed residential development east of the project site, and to other access points, including Eden Landing Road. The EIR should, of course, identify any potential significant impacts that the proposed project would have on the Bay Trail alignment. For your reference, I am enclosing one of our full-color maps of the Bay Trail alignment in the lower East Bay as well as a copy of our more detailed in-house map of the area. As you can see on the maps, the adopted Bay Trail alignment in the project area travels on State Route 92 (including on the San Mateo-Hayward Bridge), Eden Landing Road, Corporate Avenue, Arden Road, Baumberg Avenue, Industrial Boulevard and Hesperian Boulevard, and along the south side of Alameda Creek.

The Bay Trail is a unique regional resource that will provide residents of southern Alameda and the rest of the Bay Area with increased access to the outdoors and the Bay, inexpensive recreation, exercise and sightseeing opportunities, and greater transportation options. I offer you our assistance in providing a Bay Trail connection through Eden Landing Ecological Reserve. Please contact me at 510/464-7915 if you have questions about the comments in this letter, would like additional information about the Bay Trail, or need technical assistance on developing facilities for pedestrians and bicyclists.

Sincerely,

Niko Letunic
Bay Trail Planner

Enclosures



SAN FRANCISCO BAY TRAIL

	Proposed	Existing
Spine Trail	○○○○	●●●● (path) ■■■■ (bike lane)
Spur Trail	◎◎◎◎	◐◐◐◐
Connector Trail	|||||||||	(same)
Observation Platform	△	▲
Parking Area	(none proposed)	▣

Bay Trail: Alameda County

Map 5

Approximate Scale 0 .5 miles

N

Map copyrighted 1988 by the California State Automobile Association. Reproduced by permission. OABAG

YOUNTVILLE
99 APR 28 AM 10: 57
A

John E. Weber
303 Derby Ave.
Oakland, CA 94601
(510) 261-1900 - Fax: (510) 261-1918

April 22, 1999

California Department of Fish and Game
P.O. Box 47
Yountville, CA 94599

Subject: **California Department of Fish and Game Notice of Preparation of a Draft Environmental Impact Report for Eden Landing Ecological Reserve Restoration and Management Plan (Dated March 17, 1999)**

Gentlemen:

This is in response to your request for comments regarding the subject "Notice of Preparation."

While restoration of the Baumberg Tract has the potential for significant resource benefits for certain types of wildlife resources, we never the less have the following concerns regarding the plan.

1) **I.** **Land Use and Planning:** We have concerns regarding the potential for increases in the seasonal amounts of both surface and groundwater to impact adjacent areas which could have a significant impact on current authorized land uses in the adjacent areas.

2) **III.** **Geologic Problems:** It is indicated that "no impact or positive impacts will occur" within this category. We are concerned that the changes in adjacent surface and groundwater hydrology conditions may have a significant impact on the existing levees and existing stormwater drainage structures.

3) **VII.** **Biological Resources:** It is indicated that "no impact or positive impact will occur" within this category. How can the loss of existing seasonal wetlands not be considered an impact or be considered a positive impact? Furthermore, there seems to be no consideration of impacts to the wetland hydrology of adjacent areas in terms of potential increases in water levels and increases in soil salinity and resulting changes in vegetation types.

Sincerely,

John E. Weber

John E. Weber

STATE OF CALIFORNIA-BUSINESS, TRANSPORTATION AND HOUSING AGENCY GRAY DAVIS, Governor

DEPARTMENT OF TRANSPORTATION
P. O. BOX 23660
OAKLAND, CALIFORNIA 94623-0660
TELEPHONE (510) 286-4444
FAX (510) 286-5513

April 22, 1999

ALA092033
ALA-092-4.48
SCH #99032078

Mr. Carl Wilcox
California Department of Fish and Game
7329 Silverado Trail
Napa, CA 94558

Dear Mr. Wilcox:

Eden Landing Ecological Reserve Restoration & Management Plan

Thank you for including the California Department of Transportation (Caltrans) in the environmental review process for the above-referenced project. We have reviewed the Notice of Preparation dated March 17, 1999 and have the following comments to offer.

The Metropolitan Transportation Commission (MTC) is proposing to contribute funding for the construction of approximately 2.5 miles of the new recreational trail to be located along the periphery of the Eden Landing Ecological Reserve (Baumberg Tract). MTC will provide funds for the trail as part of the public access improvements proposed in conjunction with Caltrans' State Route 92/San Mateo-Hayward Bridge East Approach and Trestle Widening project.

The Environmental Impact Report (EIR) should evaluate the proposed trail alignment and its potential impact on the environment and identify mitigation measures where needed. In addition, the environmental document should address trail connections to the Bay Trail.

In the section "Project Description," last paragraph, the wording "pedestrian overpass" should read "bicycle/pedestrian overcrossing."

Please keep us informed of the project as it develops. Should you require further information or have any questions regarding this letter, please call Paul Svedersky of my staff at (510) 622-1639.

Sincerely,

HARRY Y. YAHATA
District Director

By: Jean CR Finney

JEAN C.R. FINNEY
District Branch chief
IGR/CEQA

c: Mosie Boyd (SCH)

United States Department of the Interior

FISH AND WILDLIFE SERVICE
San Francisco Bay National Wildlife Refuge Complex
P.O. Box 524
Newark, California 94560-0524
(510) 792-0222

FISH & GAME
APR - 6 1999
YOUNTVILLE

April 5, 1999

Carl Wilcox
California Department of Fish and Game
Central Coast Region
P.O. Box 47
Yountville, CA 94599

Dear Carl Wilcox,

This letter is written in response to the Notice of Preparation of a Draft Environmental Impact Report for the Eden Landing Ecological Reserve Restoration and Management Plan. Since the Eden Ecological Reserve is within the Congressionally authorized boundaries of the Don Edwards San Francisco Bay National Wildlife Refuge (Refuge), this letter represents the position of the Refuge. Additional comments addressing issues under the Fish and Wildlife Coordination Act, Clean Water Act, or Endangered Species Act may be sent under separate cover by the U.S. Fish and Wildlife Service's Sacramento Field Office.

We are encouraged by and supportive of the California Department of Fish and Game's proposal to restore the parcel to tidal salt marsh, seasonal wetland and salt panne/snowy plover habitat. Please advise us if we can be of assistance in the planning and/or management of this area.

Specific comments we have concerning the proposed project and the information provided in the Notice of Preparation are as follows:

1. The plan should address the management of the saltpanne/snowy plover habitat, including long-term control of vegetation and water level management.

2. Exotic species control should be part of the management plan with particular emphasis on mammalian predators, Spartina alterniflora and Lepidium latifolium. Control efforts for some species, such as Spartina alterniflora, may need to be conducted in adjacent tidal marshes prior to opening areas to tidal action in order to prevent colonization of this plant in the restoration area.

3. In review of recent restoration projects in the Bay Area, it is apparent that hydrologic models were not always accurate. If the restoration plan requires dredging and/or alteration of sloughs, it would be best if the alteration could be done in stages. After each stage is completed, the results should be evaluated to determine if the results match the predictions from the hydrologic models.

4. Public use should be designed as to prevent disturbance to wildlife using the restored areas. Particular care should be taken to prevent disturbance to the snowy plover's habitat.

5. The management plan should include actions to be taken, cost estimates for these actions and agencies responsible for these actions.

6. Monitoring protocols should be established for documenting wildlife use and habitat changes following restoration of the area.

Thank you for the opportunity to comments on this document. If you have any questions regarding these comments, please contact me at (510) 792-0222.

Sincerely,

Clyde Morris
Refuge Manager
Don Edwards San Francisco Bay NWR

cc: Dan Buford, FWS-ES, Sacramento

COUNTY OF ALAMEDA
PUBLIC WORKS AGENCY
DEVELOPMENT SERVICES DEPARTMENT
951 Turner Court, Room 100
Hayward, CA 94545-2698
(510) 670-6601
FAX (510) 670-5269

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LSA ASSOCIATES, INC.
PT. RICHMOND OFFICE

April 30, 1999

Zone No. 3A

Carl Wilcox
Environmental Services Supervisor
California Department of Fish & Game
Central Coast Region
P.O. Box 47
Yountville, CA 94599

Dear Mr. Wilcox:

Subject: Notice of Preparation of a Draft Environmental Impact Report

Reference is made to the Notice of Preparation of a Draft Environmental Impact Report for the Eden Landing Ecological Reserve Restoration and Management Plan. We have reviewed the documents submitted to us for this project and offer the following comments:

1. The Project Description refers to the relocation of a pump station. The Flood Control District operates a storm water pump station in the vicinity of the project; namely, the Eden Landing Pump Station. This pump station is located within the developed area just north of the project, at the intersection of Eden Landing Road and Arden Road. Based on the discussion, it appears that the pump station referred to in the Project Description is owned and operated by Cargill Salt Division, but please clarify.

2. The discharge line from the Eden Landing Pump Station is a 48-inch force main, approximately 1,600 feet in length, with a flap gate at Mount Eden Creek. In the improvement of the wetlands, measures need to be taken to ensure that this discharge line remains unaffected. Also, the existing road must remain to provide access to the outfall structure.

3. The work to be done in both Mount Eden Creek and North Creek may affect the depth of the water in Mount Eden Creek at the outfall of the discharge line from the Eden Landing Pump Station. By altering the hydraulic conditions at the outfall, the tail water, if affected, may impact the operation of the pumps. Also, will the new regime increase siltation at the outfall? An analysis will need to be made to determine the extent of any impacts.

4. Because of the close proximity of the proposed snowy plover and shorebird habit and nesting area to the Eden Landing Pump Station, the District is concerned about potential impacts on our ability to maintain and operate the pump station. Will any restrictions be imposed?

5. The proposed connection of North Creek with Old Alameda Creek flood control channel (also known as the Main Outlet Channel) may impact access along the north levee of the channel. If the intention is to breach the levee, a bridge will be necessary to provide continuous access along the levee.

6. An analysis will be necessary to address impacts the proposed North Creek connection may have on existing levels of flood protection for adjacent properties.

7. How will the project affect siltation in Old Alameda Creek, and who will be responsible for keeping the outflow channel from North Creek desilted?

If you have any questions, please call me at (510) 670-6613.

Very truly yours,

Andrew Otsuka
Development Services Department

EBDA

EAST BAY DISCHARGERS AUTHORITY
2651 Grant Avenue
San Lorenzo, CA 94580-1841
(510) 278-5910
FAX (510) 278-6547

A Joint Powers Public Agency

May 4, 1999

Mr. Carl Wilcox
Environmental Services Supervisor
California Department of Fish and Game
Central Coast Region
P. O. Box 47
Yountville, CA 94599

Comments on Notice of Preparation – Eden Landing Ecological Reserve Restoration and Management Plan

Dear Mr. Wilcox:

The East Bay Dischargers Authority appreciates the opportunity to comment on the Notice of Preparation (NOP) of a Draft Environmental Impact Report (DEIR) for the aforementioned restoration project. The Authority supports the development of marsh restoration projects along the Bay and within our property easements provided that all potential impacts on our property rights and our ability to operate and maintain our system are protected. Previous correspondence to you and to Steve Foreman, copies attached, have described the conditions under which the Authority would allow the property owner to construct any project within our easement rights-of-way.

According to the NOP, the Wildlife Conservation Board (WCB) is the property owner of 835 acres within the Baumberg Tract that will be used for the restoration project. The Authority will only allow the project to proceed if there is an agreement between WCB and the Authority that is of the same form as the agreement between the Authority and East Bay Regional Parks District for the Oro Loma Marsh. A copy of that agreement in draft form has been previously sent to you. A copy of the final agreement is enclosed for your information.

Since none of the documentation received from you to date has acknowledged the agreement requirement, the Authority believes that the NOP Checklist should be modified accordingly. Specific Checklist items include the following:

I. **LAND USE AND PLANNING.** c. Be incompatible with existing land use in the vicinity.

This item should be marked "Potentially Significant Unless Mitigation Incorporated". An agreement between WCB and the Authority would provide the required mitigation.

II. **TRANSPORTATION/CIRCULATION.** c. Inadequate emergency access or access to nearby uses.

CHAIR	VICE-CHAIR	COMMISSIONER	COMMISSIONER	COMMISSIONER	GENERAL MANAGER
William H. Ward	Pat Kite	Roland J. Dias	Harry Francis	Gordon A. Galvan	Charles V. Weir
City of Hayward	Union S.D.	Oro Loma S. D.	Castro Valley S.D.	City of San Leandro	

EAST BAY DISCHARGERS AUTHORITY
A Joint Powers Public Agency

This item should be marked "Potentially Significant Unless Mitigation Incorporated". An agreement between WCB and the Authority would provide the required mitigation.

IX. HAZARDS. b. Possible interference with an emergency response plan or emergency evacuation plan. c. The creation of any health hazard or potential health hazard.

Both of these items should be marked "Potentially Significant Unless Mitigation Incorporated". An agreement between WCB and the Authority would provide the required mitigation.

X. PUBLIC SERVICES. d. Maintenance of public facilities, including roads.

This item should be marked "Potentially Significant Unless Mitigation Incorporated". An agreement between WCB and the Authority would provide the required mitigation.

All of the above items have the potential to prevent the Authority from timely access to its forcemain system. In the event of an embergecy, it is imperative that the Authority have immediate access to all stations and the forcemain. Unnecessary delays could result in the release of chlorinated secondary effluent within the marsh project which could jeopardize public health and aquatic life.

The only way the Authority will allow the project to proceed is after a fully protective agreement with the Wildlife Conservation Board is in place. The agreement can reference responsibilities of state and federal agencies as in the agreement for the Oro Loma Marsh. The Authority believes that the NOP and the subsequent DEIR must acknowledge that the agreement is required.

Thank you again for the opportunity to comment on the NOP. We look forward to the completion of a successful EIR and ultimately a restoration project. Should you have any question, please feel free to give me a call.

Sincerely,

Charles V. Weir
General Manager

Enclosures

c: Charles T. Kilian, Legal Counsel

C:\DATA\Word Documents\General\BAUMBERG 003.doc

EBDA

EAST BAY DISCHARGERS AUTHORITY
2651 Grant Avenue
San Lorenzo, CA 94580-1841
(510) 278-5910
FAX (510) 278-6547

FILE

A Joint Powers Public Agency

July 30, 1997

Mr. Carl Wilcox
California Department of Fish & Game
P.O. Box 47
Yountville, CA 94599

Proposed Marsh Project for Baumberg Tract

Dear Mr. Wilcox:

Pursuant to our telephone conversation on July 17, 1997, I am enclosing a copy of the draft agreement between the Authority and East Bay Regional Parks District for the Oro Loma Marsh Project. The Authority will require a similar agreement with the agency that is responsible for the proposed marsh project for the Baumberg Tract.

In addition to the agreement, we will also require an engineering analysis to insure that any proposed construction or related activities will not have any negative impacts on the Authority's pipeline. Normally such an analysis can be included during the design of the marsh project.

The Authority is a supporter of wetlands projects, and is a co-permittee for the Hayward Shoreline Marsh. We look forward to working with you as your plans are developed. Should you have any questions or comments, please feel free to contact me or the Authority's Operations and Maintenance Manager, Karl Royer.

Sincerely,

Charles V. Weir
General Manager

Enclosure

c: Operations and Maintenance Committee
Edward E. Martins, Legal Counsel

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CHAIR	VICE-CHAIR	COMMISSIONER	COMMISSIONER	COMMISSIONER	GENERAL MANAGER
William H. Ward	Pat Kite	Roland J. Dias	Harry Francis	Gordon A. Galvan	Charles V. Weir
City of Hayward	Union S.D.	Oro Loma S. D.	Castro Valley S.D.	City of San Leandro	

EBDA

EAST BAY DISCHARGERS AUTHORITY
2651 Grant Avenue
San Lorenzo, CA 94580-1841
(510) 278-5910
FAX (510) 278-6547

A Joint Powers Public Agency

FILE

September 2, 1997

Mr. Steve Foreman, Project Manager
Resource Management International, Inc.
4340 Redwood Highway, Bldg. B
San Rafael, CA 94903-2104

Baumberg Tract Wetland Restoration Project

Dear Mr. Foreman:

This is in response to your August 28, 1997 letter to Mr. Karl Royer. The Authority appreciates receiving this information on the proposed project. I need to correct a misconception concerning your statement in the July 10, 1997 meeting summary that a break in the Authority's pipeline would not qualify as an emergency under the State ESA. You have indicated that the Authority's pipeline carries tertiary treated water. This is not correct. The pipeline carries secondary treated and disinfected wastewater. The effluent has a chlorine residual of 3-5 mg/L (parts per million). This level of chlorine residual would be highly toxic to aquatic organisms that presumably would populate the marsh. Therefore, a break in the Authority's pipeline should qualify as an emergency.

Your summary also mentions the Authority's concerns with the issue of endangered species. This is a critical issue, and can only be successfully resolved through the development of an agreement between the Authority and the corresponding "owner" of the marsh. Please refer to the enclosed July 30, 1997 letter to Mr. Carl Wilcox, California DFG. As noted in this letter, the Authority will require a similar agreement prior to authorizing any construction related to the proposed marsh.

Please keep us informed as to the status of the marsh project, and feel free to contact me or Karl Royer if you have any questions or need additional information.

Sincerely,

Charles V. Weir
General Manager

Enclosure

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CHAIR	VICE-CHAIR	COMMISSIONER	COMMISSIONER	COMMISSIONER	GENERAL MANAG
William H. Ward	Pat Kite	Roland J. Dias	Harry Francis	Gordon A. Galvan	Charles V. Weir
City of Hayward	Union S.D.	Oro Loma S. D.	Castro Valley S.D.	City of San Leandro	

DUPLICATE ORIGINAL

AGREEMENT AUTHORIZING CONSTRUCTION OVER REAL PROPERTY SUBJECT TO GRANT OF EASEMENT FOR THE ORO LOMA MARSH PROJECT

This Agreement, effective this 16th day of October, 1997, by and between The East Bay Dischargers Authority, a joint powers agency duly organized under the laws of the State of California, hereinafter referred to as AUTHORITY, and The East Bay Regional Park District, a California Special District, hereinafter referred to as DISTRICT.

WITNESSETH

WHEREAS, AUTHORITY is the owner of a perpetual easement and right of way, the terms of which are set forth in a copy of that Grant of Easement marked Exhibit "A" attached hereto and made a part hereof; and

WHEREAS, the property described in said "Grant of Easement" has been transferred by the original grantor and is now owned by DISTRICT; and

WHEREAS, DISTRICT desires to construct certain improvements over, along and upon the real property subject to AUTHORITY's hereinabove described perpetual easement; and

WHEREAS, AUTHORITY desires to grant DISTRICT the authority to construct said certain improvements over, along and upon said portion of the real property, subject to AUTHORITY's above-described perpetual easement so long as said improvements do not in any way diminish, limit, modify, alter, restrict, or interfere with AUTHORITY's

present and future full use and complete enjoyment of AUTHORITY's rights under the above-described "Grant of Easement".

NOW, THEREFORE, AUTHORITY authorizes DISTRICT to construct, reconstruct, and maintain the improvements shown on plans attached hereto as Exhibit "B", over, along and upon the parcel of real property subject to AUTHORITY's hereinabove described "Grant of Easement" upon the following terms and conditions, to wit:

(1) It is the DISTRICT's practice to develop a Memorandum of Understanding "MOU" with the appropriate state and federal agencies as to any DISTRICT projects that may impact listed species. These MOU's are intended to serve as incidental taking permits, in compliance with the Federal Endangered Species Act, the California Endangered Species Act, and the California Environmental Quality Act, and each represents a long-term maintenance responsibility undertaken by the DISTRICT to mitigate any taking or loss of habitat. The DISTRICT makes no representation as to the current existence of listed species on the property which may already implicate the Federal Endangered Species Act, the California Endangered Species Act, or the California Environmental Quality Act. If AUTHORITY should find it necessary to enter the property for repair, replacement, reconstruction, removal or maintenance of its facilities, it shall give DISTRICT thirty (30) days' written notice of its exercise of rights under this paragraph, which exercise shall be effective upon the expiration of thirty days from the date of mailing said notice. DISTRICT shall be allowed this time period in which to advise all state and federal agencies of the intended disruption of this property and advise on the impact to listed species. DISTRICT shall indemnify AUTHORITY for any and all increased costs of compliance with any applicable State and Federal environmental laws and regulations that are directly or proximately caused by the exercise of DISTRICT's rights under this Agreement.

(2) In the event of an emergency, AUTHORITY shall notify DISTRICT that it is required to remove all equipment, vehicles and other mobile items, etc., from designated portions of the easement. All items shall be removed at DISTRICT's expense within eight (8) hours of notification by AUTHORITY. If DISTRICT fails to act within eight (8) hours, AUTHORITY shall remove all equipment, vehicles, etc. and all expenses incurred by AUTHORITY shall be reimbursed by DISTRICT within thirty (30) days of receipt of an invoice. DISTRICT shall provide AUTHORITY with a contact and emergency telephone number for this purpose. DISTRICT shall also provide a written notice on each anniversary date of this Agreement, as to the name and telephone number of the emergency contact, or at any time that said contact is changed. Declaration of an emergency situation shall be at the sole and reasonable discretion of AUTHORITY.

(3) AUTHORITY acknowledges that the surface area above the easement is subject to the accumulation of rain water in the Bay Area's rainy season, however, in the non-rainy season, the surface area is normally in a dry state. Both parties herein acknowledge that the DISTRICT's project will result in tidal flooding throughout the year upon AUTHORITY's easement. Upon thirty (30) days' written notice, AUTHORITY may require DISTRICT to block the tidal levee shown in Exhibit "B" and, to the maximum extent possible, dewater the flooded areas above the AUTHORITY's pipeline in order to allow access to the pipeline for non-emergency repairs and/or maintenance. In the event of an emergency, the above notice provision does not apply and AUTHORITY shall notify DISTRICT that it is required to block the tidal levee and dewatering the area shall be at DISTRICT's expense and shall commence within twelve (12) hours of notification by AUTHORITY. If DISTRICT fails to initiate action within twelve (12) hours, AUTHORITY may initiate blocking of the levee and dewatering of the area; and all chargeable expenses incurred by AUTHORITY caused by non-action of the DISTRICT shall be reimbursed by DISTRICT. Whether for emergency or non-emergency repairs, the DISTRICT shall, within thirty (30) days of being invoiced by the AUTHORITY, pay for any and all increased costs

of repair and/or maintenance of the AUTHORITY's pipeline that are caused by the flooding of the easement area, beyond the usual level of flooding which may normally occur at that time of the year.

(4) DISTRICT shall assume responsibility and liability for taking all necessary steps to ensure that any AUTHORITY-required blocking of the tidal levee and dewatering of flooded areas occasioned by DISTRICT's project complies with all applicable state and federal environmental laws and assumes damages, if any, caused thereby.

(5) DISTRICT shall indemnify AUTHORITY from any and all liability to third parties by reason of any damage done to AUTHORITY's pipeline as a result of the improvements and construction provided for in this Agreement.

(6) All of DISTRICT's proposed improvements and construction over, along, upon, and under the real property subject to AUTHORITY's hereinabove described perpetual easement shall be subject to AUTHORITY review and written approval and authorization prior to commencement of construction.

(7) AUTHORITY shall have the right to enter and inspect at any time or times, without obtaining DISTRICT's consent, any and all of DISTRICT's construction over, along and upon the real property subject to AUTHORITY's hereinabove described perpetual easement.

(8) DISTRICT shall give five (5) days' written notice of its intent to commence work on the improvements approved and authorized by AUTHORITY.

(9) AUTHORITY shall have the right to cut and clear or to request cutting or clearing by DISTRICT's crews of any and all trees or brush now or hereafter on said strip

of land which may be a hazard to AUTHORITY's facilities or impede access to its facilities for purposes of repair, replacement, removal, reconstruction or maintenance. Such trees and brush shall not be indiscriminately removed. During any major reconstruction, repair or replacement, AUTHORITY will supply all safety devices, barricades, fencing or security personnel which may be necessary to protect park visitors from any and all construction activities. DISTRICT shall cooperate with AUTHORITY to take steps to protect visitors access to the easement area during any major maintenance, reconstruction, repair, or replacement activities.

(10) DISTRICT shall install, at DISTRICT's expense, steel marking posts at the north and south ends of the property at the centerline of the AUTHORITY's easement. The steel posts shall be painted white and the AUTHORITY will complete the proper identification marking in accordance with Underground Service Alert requirements.

(11) AUTHORITY has completed an engineering review of the construction plans and proposed marsh enhancement and has determined that there will be no potential adverse impacts to the AUTHORITY's pipeline. Should there be any proposed modifications to the use of the property, DISTRICT shall notify AUTHORITY and receive written authorization from AUTHORITY for the change in use.

(12) Except insofar as specifically stated herein, it is expressly understood by the parties herein, that this Agreement does not in any way alter, expand, modify, or terminate any of AUTHORITY's rights, duties, and powers under the hereinabove described "Grant of Easement", nor shall this Agreement be construed as a waiver by AUTHORITY of any of its rights, powers, and duties under the hereinabove described "Grant of Easement". This Agreement expressly entered into by the parties for the specific purpose of allowing DISTRICT to construct and enjoy the use of the improvements described herein so long as said improvements do not in any way

diminish, limit, modify, alter, restrict, or interfere with AUTHORITY's present and future full use and complete enjoyment of AUTHORITY's right under the above-described "Grant of Easement".

(13) AUTHORITY acknowledges that DISTRICT retains a right of ingress and egress across and along that parcel of real property subject to AUTHORITY's hereinabove described perpetual easement, subject to the restrictions in the "Grant of Easement", and may therefore enter on the easement area for purposes of performing the operations required to construct the improvements authorized and approved by AUTHORITY.

(14) DISTRICT shall repair any damage caused by it, its employees, or agents, to AUTHORITY's facilities, and shall indemnify AUTHORITY against any loss and damage caused by the exercise of DISTRICT's rights under this Agreement or by any wrongful or negligent act or omission of DISTRICT or of its agents or employees in the course of their employment. DISTRICT shall also indemnify AUTHORITY for any and all increased costs of access, maintenance, repair, or replacement to AUTHORITY's pipeline that are directly or proximately caused by the exercise of DISTRICT's rights under this Agreement.

(15) AUTHORITY approved means of ingress and egress to the force main for the purpose of routine maintenance will be provided through the construction of this project. Once the access is built, a description of said strip of land will be provided by DISTRICT to AUTHORITY. This access will be obtained without the danger of disturbing any listed species or destroying any habitat. AUTHORITY shall have access to and from said property and pipeline located thereon over and across DISTRICT's land by means of existing roads and lanes or other such routes as shall cause the least inconvenience to DISTRICT and interference with park uses consistent with AUTHORITY's Grant of Easement as set forth in Exhibit "A".

(16) Nothing herein contained shall be construed as a release or waiver by either AUTHORITY or DISTRICT of any claims and/or cause of action either may now have or acquire in the future in connection with either party's construction of additional improvements or alterations of existing improvements in such a way as to cause an unreasonable interference with either AUTHORITY's rights under the above-described "Grant of Easement" or DISTRICT's enjoyment and use of its improvements.

(17) This Agreement shall run with the land and shall be binding on and shall enure to the benefit of AUTHORITY, DISTRICT, their successors and assigns.

(18) The real property affected by this Agreement authorizing construction over real property subject to grant of easement is situated in the County of Alameda, State of California and is more particularly described in Exhibit "C" attached hereto and made a part hereof by this reference.

(19) All notices to be served on the parties shall be done so at the following address or at such changed address as specified by the applicable party from time to time:

AUTHORITY: East Bay Dischargers Authority
2651 Grant Avenue
San Lorenzo, CA 94580-1841

DISTRICT: East Bay Regional Park District
2950 Peralta Oaks Court
Oakland, CA 94605

IN WITNESS WHEREOF, the parties hereto have caused this Agreement to be executed in duplicate by their respective officials thereunto duly authorized.

APPROVED AS TO FORM

Ted C. Radosevich
Legal Counsel for District

EAST BAY REGIONAL PARK DISTRICT

By: Pat O'Brien, General Manager

APPROVED AS TO FORM

Edward E. Martins
Legal Counsel for Authority

EAST BAY DISCHARGERS AUTHORITY

By: Charles V. Weir, General Manager

C:\WPDOCS\AGREMNTS\OLMARSH.AGT

RE:4609 IM:549

76-196325

EXHIBIT A

CERTIFICATE OF ACCEPTANCE

THIS IS TO CERTIFY that the interest in real property conveyed by that Grant of Sanitary Sewer Easement dated the 9th day of November, 19 76, from the City of Hayward to the East Bay Dischargers Authority, a joint powers agency, is hereby accepted by the Manager of the Authority and the Chairman of the governing body of the Authority acting under the Authority of the joint powers agreement and pursuant to the authorization conferred by Resolution of the Commission on the 14th day of October, 19 76, and the grantee consents to recordation thereof by its duly authorized officers.

DATED November 9, 1976

EAST BAY DISCHARGERS AUTHORITY

BY: Jack D. Maltester
Chairman

BY: Wayne A. Bruce
Manager

PUBLIC AGENCY

STATE OF CALIFORNIA)
COUNTY OF ALAMEDA) ss

On NOV 9 1976, before me, the undersigned, a Notary Public in and for said State, personally appeared Jack D. Maltester and Wayne A. Bruce, known to me to be the Chairman and Engineer-Manager of the East Bay Dischargers Authority and known to me to be the persons who executed the within instrument on behalf of said political subdivision and acknowledge to me that such political subdivision executed the same. WITNESS my hand and official seal.

OFFICIAL SEAL
EDWARD E. MARTINS
NOTARY PUBLIC - CALIFORNIA
PRINCIPAL OFFICE IN
ALAMEDA COUNTY
My Commission Expires June 14, 1978

Edward E. Martins

RE:4609 IM:550

EAST BAY DISCHARGERS COMMISSION

EAST BAY DISCHARGERS AUTHORITY
ALAMEDA COUNTY, CALIFORNIA

RESOLUTION NO. 76-77

INTRODUCED BY Commissioner Oakes, seconded by Commissioner Vargas

RESOLUTION AUTHORIZING EXECUTION
OF CERTIFICATE OF ACCEPTANCE OF SANITARY SEWER EASEMENT

WHEREAS, on January 16, 1975, the East Bay Dischargers Authority Commission authorized acquisition of an easement from the City of Hayward; and

WHEREAS, the City of Hayward expects to convey said easement to Authority on November 11, 1976; and

WHEREAS, acceptance of said easement by Authority is necessary prior to recordation; and

WHEREAS, a copy of the proposed grant of sanitary sewer easement is attached hereto and appears to be in proper form;

NOW, THEREFORE, BE IT RESOLVED that the East Bay Dischargers Authority accepts said grant of sanitary sewer easement in the form substantially as attached and hereby authorizes the Chairman and the Manager to execute a Certificate of Acceptance and to take such other steps as are necessary to consummate the agreement.

HAYWARD, CALIFORNIA October 14, 19 76

ADOPTED BY THE FOLLOWING VOTE:

AYES: Members Simpson, Vargas, Weiss, Oakes, Chairman Maltester

NOES: None

ABSENT: None

Jack D. Maltester
CHAIRMAN
EAST BAY DISCHARGERS COMMISSION

ATTEST: Wayne A. Bruce
MANAGER
EAST BAY DISCHARGERS AUTHORITY

Recorded at Request of

East Bay Dischargers Authority

When recorded mail to:

East Bay Dischargers Authority
22300 Foothill Blvd., Suite 602
Hayward, CA 94541

NO TAX DUE
EXEMPT TRANSFER

Space above for Recorder's Use

CONSTRUCTION PROJECT NO._____

EBDA PARCEL NO._____

Legal Counsel for East
Bay Dischargers Authority

GRANT OF EASEMENTS

THIS INDENTURE, made this _____ day of _____, 19___, between the CITY OF HAYWARD, A Municipal Corporation, 22300 Foothill Blvd., Hayward, California 94541 _____, Grantor, and the EAST BAY DISCHARGERS AUTHORITY, a public entity of the State of California, Grantee;

W I T N E S S E T H:

That Grantor, in consideration of the benefits resulting to said grantor, and other valuable considerations, the receipt of which is hereby acknowledged, does hereby grant and convey to Grantee, its successors and assigns, a perpetual easement and right of way any and all powers conferred upon said Grantee by law, including laying down, installing, constructing reconstructing, removing, replacing, repairing, maintaining, operating, and using as Grantee may see fit for the

transmission of wastewater or related substances, a pipe or pipelines and all necessary and required appurtenances thereto, in, under, along and across any part of that certain real property in the County of Alameda, State of California, described in Exhibit "A" attached hereto and made a part hereof,

TOGETHER with the right of ingress to and egress from said perpetual easement and right of way at all times to enter in, over and upon said right of way and every part thereof, and also to use said perpetual easement and right of way for all purposes reasonably connected with the full and complete enjoyment of the rights hereby granted.

The Grantor and the Grantor's heirs, successors or assigns shall not place or permit to be placed on said perpetual easement and right of way any building or structure, nor do nor allow to be done anything which may interfere with the full enjoyment by the Grantee of the rights herein granted, nor shall Grantor or Grantor's heirs, successors or assigns cause or permit any excavation or the placement of any fill within said perpetual easement and right of way without the prior written consent of Grantee.

TO HAVE AND TO HOLD all and singular the above

mentioned and described easement and right of way unto Grantee, its successors and assigns forever, solely for the objects and purposes above stated and for no other object or purpose.

That Grantor, in consideration of the benefits resulting to said grantor from the construction of a pipe or pipelines and other valuable considerations, the receipt of which is hereby acknowledged, does hereby further grant and convey to Grantee, its successors and assigns, a construction easement in, through, along and under the real property hereinafter described, for the purposes of operating, storing and maintaining equipment, and performing such other operations as required to accomplish said project, said easement to terminate on the adoption of a Resolution of Acceptance of the above referenced construction project by the Commission of the East Bay Dischargers Authority or on the _____ day of _____, 19___, whichever occurs first.

The real property affected by this construction easement is situated in the County of Alameda, State of California, and is more particularly described in Exhibit "B" attached hereto and made a part hereof.

IN WITNESS WHEREOF, the Grantor has executed this deed the day and year first above written.

CITY OF HAYWARD
A Municipal Corporation

BY: _____
City Manager

Grantor

STATE OF CALIFORNIA)
COUNTY OF ALAMEDA)ss:

On _____, before me, the undersign a Notary Public in and for said State, personally appeared _____, known to me to be the person who executed the within instrument on behalf of the municipal corpor therein named, and acknowledged to me that such municipal corpor executed the same.

WITNESS my hand and official seal.

_____
Notary Public

Steve Foreman

From: Carl Wilcox[SMTP:CWILCOX@hq.dfg.ca.gov]
Sent: Monday, May 17, 1999 6:45 AM
To: steve.foreman@LSA-Assoc.com
Subject: Eden Landing -Forwarded

NMFS NOP comments

Dear Carl:

Per our phone conversation yesterday, I am responding to CDFG's Notice of Preparation of a Draft Environmental Impact Report on the Eden Landing Ecological Reserve Restoration and Management Plan.

Briefly, while we support the restoration, preservation, and enhancement of the Baumberg Tract, NMFS will require additional environmental information for evaluating the environmental impacts of the project.

That information includes: the presence/absence of listed salmonids in the project area, the expected use of the restored tidal marshes by salmonids (steelhead and chinook salmon), and an evaluation of the potential impacts to salmonids as a result of the proposed project. In particular, the EIR should address impacts associated with water quality issues (e.g., turbidity, water temperature, salinity and toxics), stranding, and predation.

Thank you for the opportunity to comment on the Notice of Preparation.

Laura Hamilton
Fisheries Biologist
National Marine Fisheries Service
Santa Rosa, CA
phone: (707) 575-6082
fax: (707) 578-3435
email: Laura.Hamilton@noaa.gov

TABLE OF CONTENTS

FINAL ENVIRONMENTAL IMPACT REPORT EDEN LANDING ECOLOGICAL RESERVE (BAUMBERG TRACT) RESTORATION AND MANAGEMENT PLAN AND RESPONSES TO COMMENTS

SCH #99032078

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2.0	Corrections and Modifications to the DEIR	2-1
3.0	Comments and Responses	3-1

Appendices

A Notice of Preparation and EIR Mailing List

SECTION 1 INTRODUCTION

1.1 CALIFORNIA ENVIRONMENTAL QUALITY ACT PROCESS

On August 18, 1999 the California Department of Fish and Game (CDFG) released the Draft Environmental Impact Report (DEIR) for the Eden Landing Ecological Reserve Restoration and Management Plan for public review. The 45-day public review and comment period for the DEIR ended on October 10, 1999.

The DEIR and this Responses to Comments document constitute the Final EIR for the proposed Project.

After examining the FEIR, CDFG will determine whether or not to certify that the FEIR has been completed in compliance with CEQA, that the FEIR was presented to the decision-making body of the CDFG, and that the decision-making body reviewed and considered the information contained in the FEIR prior to approving, modifying, or rejecting the Project.

In order for a lead agency to approve a project (after certifying the FEIR), it must prepare written findings for each significant adverse environmental effect identified in the DEIR. Findings must be accompanied by a brief explanation of the rationale for each finding and should indicate that either:

- Changes or alterations have been required in, or incorporated into, the project which mitigate or avoid the significant effects on the environment;
- Those changes or alterations are the responsibility and jurisdiction of another public agency and have been, or can and should be, adopted by that agency; or
- Specific economic, legal, social, technological, or other considerations, including the consideration for the provision of employment opportunities for highly trained workers, make infeasible the mitigation measures or alternatives identified in the DEIR.

1.2 ORGANIZATION OF THE FINAL EIR

This document is organized as follows:

Section 1: Introduction. This section introduces the reader to the requirements of a Final EIR and to the organization of this Responses to Comments document. Section 1 also contains a summary of the process for soliciting public and agency comment during the DEIR review period.

Section 2: Corrections and Modifications to the DEIR. This section identifies the changes that were made to the DEIR in response to comments received during the DEIR review period.

Section 3: Comments and Responses. This section contains the comment letters received on the DEIR, and the corresponding responses to each comment. In addition, this section contains the comments received during the public meeting, and the corresponding responses to each comment.

1.3 PUBLIC PARTICIPATION AND REVIEW

CDFG notified all Responsible, Trustee and Reviewing agencies, interested groups, organizations, and individuals that a DEIR had been completed for the proposed Project. CDFG used several methods to notice the availability of the DEIR and to solicit input during the review period, including:

- A Notice of Preparation (NOP), including the Initial Study was circulated, on March 17, 1999 for the EIR. The NOP was circulated through the State Clearing House and copies were sent to Responsible, Trustee and Reviewing agencies, adjacent property owners, selected interest groups, organizations and individuals. The NOP a comments on the NOP are included in Appendix B. of the DEIR.

- A Notice of Completion (NOC) and eleven copies of the DEIR were filed with the State Clearinghouse on August 18, 1999. An official 45-day state review period for the DEIR was established by the State Clearinghouse, ending on October 10, 1999.

- Copies of the DEIR were sent to Responsible, Trustee and Reviewing agencies, and selected interested groups, organizations, and individuals (see Appendix A).

- CDFG held a public meeting on October 5, 1999 at the Hayward Shoreline Inerpretive Center, in the City of Hayward to solicit comments on the DEIR.

SECTION 2 CORRECTIONS AND MODIFICATIONS TO THE DEIR

2.1 CORRECTIONS

The following corrections to the DEIR have been made in response to public and agency comments.

Section 2.0 Project Description

Section 2.2, page 6, first paragraph: Southern Pacific is changed to Union Pacific Railroad.

Section 2.3, Page 8 - Figure 2: Pond 12 is changed to pond 11.

Section 2.3, page 10, paragraph 2, sentence 6, is changed to read: The Oliver West property is currently used.....

Section 2.5.4 Utilities and Public Services

Page 22, Paragraph 3, is modified as follows: " To minimize constraints on EBDA's access to repair their pipeline the top of the berm will be designed to an elevation above the highest tide, the vegetation on the top of the berm would be characteristic of uplands." ~~would be designed to within an elevation suitable for high marsh community establishment (MHHW plus 0.5 feet), but not an elevation that would create upland conditions. This is necessary to minimize creating upland habitats and upland travel corridors for red fox and other undesirable, introduced species.~~ Side slopes will be mild at 10:1 to facilitate the movement of small mammals and provide a gradual transition for marsh vegetation. A similar type of berm was incorporated into the Roberts Landing (San Leandro) tidal marsh restoration project in San Leandro for emergency access and has worked well for that purpose.

Page 23, bullet 3, under protection measures/conditions, is changed to read: For non-emergency repairs in ~~and adjacent to restored tidal marshes~~, habitat suitable for salt marsh harvest mice, as determined by the Department of Fish and Game," fabric or heavy gage plastic fences shall be erected around work areas and along access routes. Areas within these exclusion zones shall be trapped and all salt marsh harvest mice and special status species shall be removed prior to construction. Exclusion fences shall be maintained in working condition through completion of the work.

Section 2.5.7 Construction Period Resources Protection Measures

Page 29, paragraph 2, is modified to read.as follows: ~~For channel excavation within the existing marsh in the lower and upper Mt. Eden Creek channel segments, fabric (silt fence) or heavy gage plastic fences will be erected along the edges of the excavation areas.~~ Excavation within the lower and upper Mt. Eden Creek channel segments will be minimized to the maximum extent possible to

limit take of salt marsh harvest mice. The DFG will obtain the necessary authorizations from the U. S. Fish and Wildlife Service under Section 7 of the Federal Endangered Species Act. ~~These constructions areas shall be trapped and all salt marsh harvest mice and special status species shall be removed prior to construction in order to prevent take of the salt marsh harvest mouse. The exclusion fences shall be maintained in working condition through completion of the work.~~ Additionally, no construction work/channel excavation shall occur within 700 feet of clapper rail nesting habitat during the nesting season between March 15 and August 1, unless prior monitoring studies indicate no clapper rails nesting activity. This timing constraint is limited to the lower 1,000 feet of the Mt. Eden Creek channel.

Section 3.1.3 Impacts and Mitigation Measures

Page 38, paragraph 2, sentence 6, is corrected to read: "A 2 to 3 ppt increase would be equal to a maximum increase of 10 to 11 percent in salinity of the bay water even if tidal volumes are minimal and only cover the site with a few inches of water." ~~A 2 to 3 ppt increase would equal to a maximum increase of 10 to 11 percent even tidal volumes of bay water were minimal and only covered the site with a few inches of water.~~

Section 3.2.1 Biological Resource, Setting

Page 47, paragraph added to the end salt marsh harvest mouse discussion: "The salt marsh harvest mouse is listed as a fully protected species in section 4700 of the California Fish and Game Code. As such take is prohibited. To avoid prohibited take under the section 4700, project proponents are required to trap and relocate salt marsh harvest mice for projects adversely affecting occupied habitat. Under Fish and Game Code section 1001 the Department is authorized to take any mammal species for scientific or propagation purposes. The purpose of the Project is the creation and enhancement of habitat for the California clapper rail, salt marsh harvest mouse and western snowy plover. The Project will adversely affect a maximum of 4.8 acres of salt marsh harvest mouse habitat to dredge a tidal channel necessary to create 570 acres of habitat suitable for the propagation of the species."

Section 3.2.3 Significant Impacts

Page 53, Impact B-4, is modified as follows: Construction associated with the proposed restoration project would potentially result in the direct mortality of ~~special status species~~ "salt marsh harvest mice" and/or temporary disturbance impacts to snowy plover and California clapper rail breeding habitat on the project site.

Page 53, Mitigation B-4, second paragraph, is modified to read as follows: ~~For channel excavation within the existing marsh in the lower and upper Mt. Eden Creek channel segments, fabric (silt fence) or heavy gage plastic fences will be erected along the edges of the excavation areas.~~ "Excavation within the lower and upper Mt. Eden Creek channel segments will be minimized to the maximum extent possible to limit take of salt marsh harvest mice. The DFG will obtain the necessary authorizations from the U. S Fish and Wildlife Service under Section 7 of the Federal Endangered Species Act. The purpose of the Project is the creation of 570 acres of habitat suitable for the salt marsh harvest mouse which will offset any direct and indirect impacts to the species. While some mortality will occur, substantial habitat will remain in the affected and adjacent areas to repopulate new habitat created by the Project." ~~These constructions areas shall be trapped and all salt marsh harvest mice and special status species shall be removed prior to construction in order to prevent take of the salt marsh harvest mouse. The exclusion fences shall be maintained in working condition through completion of the work.~~

~~Additionally,~~

No construction work/channel excavation shall occur within 700 feet of clapper rail nesting habitat during the nesting season between "February 1" ~~March 15~~ and ~~August~~ "September" 1, unless prior monitoring studies indicate no clapper rails nesting activity. This timing constraint is limited to the lower 1,000 feet of the Mt. Eden Creek channel.

Section 3.3.3 Impacts and Mitigation Measures

Page 56, Impact C-1, first paragraph, added to the end of the paragraph: "The East Bay Dischargers Authority has required that before the tidal restoration of any of it's perpetual easement occurs that an operating agreement be in place with the Department of Fish and Game. The agreement would protect EBDA from increased costs of maintaining, repairing and replacing their pipeline that would result for the project."

Page 57, Mitigation C-2b, is rewritten to read: "The Department of Fish and Game will enter into an operation agreement with the EBDA to address it's concerns about the effects of the project on it's perpetual easement before implementing restoration work affecting the easement. The Department will work with PG&E to assure access to their facilities is maintained. The following measures are incorporated into the project description." ~~The following measures are incorporated into the project description and should be formalized in an operational agreement with the two entities to mitigate potential effects on EBDA and PG&E facilities:~~

Page 59, Mitigation C-2b, bullet 3) is reworded to read: For non-emergency repairs in ~~and adjacent to restored tidal marshes~~ "habitat suitable for salt marsh harvest mice, as determined by the Department of Fish and Game," fabric or heavy gage plastic fences shall be erected around work areas and along access routes. Areas within these exclusions zones shall be trapped and all salt marsh harvest mice and special status species shall be removed prior to construction. Exclusion fences shall be maintained in working condition through completion of the work.

Page 59, Mitigation C-2b, bullet 5) is reworded to read: Emergency repair work shall be completed as soon as feasible. ~~, a schedule and plan for repair and restoration shall be submitted to DFG and FWS within 5 working days of the emergency.~~

Page 59, Mitigation C-2b, bullet 8) first sentence is reworded to read: All excavated material "placed in wetlands" shall be placed on mats, thick plastic sheeting or tarps;

Page 60 and 61, second Impact C-4 and Mitigation C-4: These are mis- numbered and have been identified as Impact C-5 and Mitigation C-5.

Section 3.4 Cultural and Historic Resources

Page 65, the first sentence under Impacts and Mitigation Measures has been reworded as follows: "Two prehistoric sites and one historic site which may be potentially significant resources and potentially eligible for nomination to the National Register or California Register are present on the site." ~~Three cultural resource sites, two prehistoric and one~~

~~historic site, are present on the site which may potentially significant resources an potentially eligibility for nomination to the National Register or California Register.~~

SECTION 3 COMMENTS AND RESPONSES

Index to Comments

Letter	Commenter
	Federal Agencies - None
	State Agencies
A	Robert Gross, California Department of Transportation
	Local Agencies
B	Viola Saima-Barklow and Janice Delfino, Hayward Area Shoreline Planning Agency
C	Brian Wiese, East Bay Regional Park District
D	Gary Calarne, City of Hayward Community and Econcomic Development
E	William Lepere, Alameda County Public Works Agency
F	Charles T. Kilian, East Bay Dischargers Authority
	Public - None

Comments and Responses From October 5, 1999 Public Meeting

STATE OF CALIFORNIA - BUSINESS, TRANSPORTATION AND HOUSING AGENCY GRAY DAVIS, Governor

DEPARTMENT OF TRANSPORTATION
P O BOX 23660
OAKLAND, CA 94623-0660
(510) 286-4444
TDD (510) 286-4454

October 8, 1999

LETTER A

Mr. Carl Wilcox
Environmental Services Supervisor
California Department of Fish and Game
Central Coast Region
P.O. Box 47
Yountville, CA 94599

Dear Mr. Wilcox:

Thank you for the opportunity to comment on the Draft Environmental Impact Report for the Eden Landing Ecological Reserve (Baumberg Tract) Restoration and Management Plan (SCH #99032078).

Caltrans, and our partners at the Federal Highway Administration, are very interested in any impacts your project might have on cultural resources potentially eligible for the National Register of Historic Places. Of particular concern, is the historic Eden Landing archaeological site which has not been evaluated for eligibility. From your discussions in the Draft EIR, it appears that the planned restoration work will not have an effect on this site. However, in the event there is a change in the restoration plan, we would like to be informed. Please send us a copy of the Final EIR for our review and assurance as soon as it becomes available. 1

In addition, in the unlikely event cultural resources are uncovered or inadvertently disturbed during construction, we would also request that you notify us as soon as possible.

Thank you for your consideration in this matter. If you have any questions, I can be reached at (510) 286-5623.

Sincerely,

HARRY Y. YAHATA
District Director

By

ROBERT GROSS
District Office Chief
Office of Environmental Planning, South

cc: R.C. Slovensky, Sara Purcell – FHWA

Letter A Response - California Department Of Transportation

1. The development of the Eden Landing Ecological Reserve Restoration and Management Plan has carefully considered potential impacts to the historical site at Eden Landing in consultation with the Department of Transportation. The Department of Fish and Game will continue to coordinate with the Department of Transportation on the final design and implementation of the plan. Mitigation measure D-1 requires that construction work be halted within 30 feet of any cultural resources which may be uncovered during construction. The Department of Fish and Game will notify the Department of Transportation as requested if such a situation arises.

LETTER B

Hayward Area Shoreline Planning Agency

B

Citizens Advisory Committee

Parks Division
1099 "E" Street, Hayward, CA 94541
(510) 881-6715 Fax (510) 881-6763

October 20, 1999

Carl Wilcox, Environmental Services Supervisor
California Department of Fish and Game
Region 3 Headquarters
7329 Silverado Trail
Napa, CA 94558

RE: DRAFT ENVIRONMENTAL IMPACT REPORT (DEIR), EDEN LANDING ECOLOGICAL RESERVE (BAUMBERG TRACT) RESTORATION AND MANAGEMENT PLAN

Dear Mr. Wilcox:

Thank you for the opportunity to comment on the Draft Environmental Impact Report (DEIR), Eden Landing Ecological Reserve (Baumberg Tract) Restoration and Management Plan. We appreciate your meeting with the Citizens Advisory Committee (CAC), the Technical Advisory Committee, and interested parties on October 5, 1999. Thank you for taking the time to address the issues the CAC raised in its letter of April 19, 1999 in response to the Notice of Preparation of a Draft EIR for the Eden Landing project. Unfortunately, our letter was not included in the DEIR. (Refer to the attached copy.)

The CAC believes that the Eden Landing Ecological Reserve Plan is worthy of support, and we hope it will be successful. Please keep the CAC informed as the plan progresses. We have the following additional items we would like addressed in the Final EIR:

- There are concerns that the Lepidium growing in the northern portion of the Perry Gun Club (Pond 20B) must be controlled. Is it possible to bring in bay water to this area to control this noxious weed? | 1
- How will the spread of Spartina alterniflora be prevented from entering the North Creek area once the opening has been cut into Old Alameda Creek? | 2
- How will the islands planned for Pond 15B be managed to control vegetation? | 3
- Figure 4- Preferred Project: There should be clarification of the markings for the proposed Bay Trail. The markings indicate two types of trail. The Plan should provide an opportunity for the Bay Trail to exit at | 4

Corrections:

- Page 6; 2.2 - Southern Pacific Railroad should be changed to Union Pacific Railroad.
- Page 8; Figure 2 - Pond 12 should be Cargill's Pond 11.
- Page 10 - The Oliver West property was not used for ornamental gladioli production.
- Page 38; second paragraph - The statement beginning, "A 2 to 3 ppt increase would equal to a maximum increase..." is unclear because it is incomplete.
- Page 62; Historic Overview - Change "bailed" hay to baled hay.
- Page 65; first paragraph under Impacts and Mitigation Measures - The first sentence is unclear because it is incomplete.

5

We would appreciate your consideration in making reference to areas such as the Snowy Plover areas in the Plan as Snowy Plover Preserves. On another issue, even though funding is often difficult, it is important to seek sufficient funding to provide adequate personnel for maintenance of the facilities.

Thank you for taking the Hayward Area Shoreline Planning Agency's (HASPA) Plan into consideration and planning a wetland restoration and enhancement project that would be consistent with the goals of HASPA.

Sincerely,

Viola Saima-Barklow

Viola Saima-Barklow
Co-Chairperson

Janice Delfino

Janice Delfino
Co-Chairperson

VSB:JD:jn

Enclosure

certified to Carl 4/22
referred to Carl per JD 9/14

Hayward Area Shoreline Planning Agency

Citizens Advisory Committee

Parks Division
1099 "E" Street, Hayward, CA 94541
(510) 881-6715 Fax (510) 881-6763

April 19, 1999

Carl Wilcox, Environmental Services Supervisor
California Department of Fish and Game
Central Coast Region
P.O. Box 47
Yountville, CA 94599

RE: NOTICE OF PREPARATION OF A DRAFT ENVIRONMENTAL IMPACT REPORT EDEN LANDING ECOLOGICAL RESERVE RESTORATION AND MANAGEMENT PLAN

Dear Mr. Wilcox:

Thank you for the opportunity to comment on the Notice of Preparation of a Draft Environmental Impact Report (DEIR) for the Eden Landing Ecological Reserve. On April 8, 1999, the Hayward Area Shoreline Citizens Advisory Committee reviewed the above.

- The major goals of the plan are to restore 570 acres to tidal marsh by restoring tidal influence to 515 acres of inactive salt ponds. 25 acres of interior levees and roads would be removed and tidal influence would be established to 30 acres of diked marsh and active salt ponds.

- Snowy plover habitat would be provided on 126 acres of former salt ponds, 95 acres of existing seasonal wetlands will be maintained.

In addition to the comments above, please refer to the attached document which specifically refers to items on the checklist.

The objectives of the The Hayward Area Shoreline Planning Agency are to protect environmental resources by preservation of wildlife habitat, preserve historical resources and provide recreational opportunities such as enhancement of the Bay Trail for public use. 1A

We hope that the HASPA Plan be incorporated into the Environmental Impact Report for the Eden Landing Ecological Reserve which we believe is worthy of support.

Sincerely,

Viola Saima-Barklow :g
Viola Saima-Barklow
Co-Chairperson

Janice Delfino :g
Janice Delfino
Co-Chairperson

VSB:JD:ga

Enclosure

NOTICE OF PREPARATION
DRAFT ENVIRONMENTAL IMPACT REPORT
EDEN LANDING ECOLOGICAL RESERVE

NOTICE OF PREPARATION	COMMENT	
Project Description: *Restore 570 acres tidal salt marsh by: restoring tidal...*	What does it refer to? Be more specific. Total acreage adds up to 791 acres instead of the 835 acres.	2A
Project Description: *Tidal influence to the site will be restored by dredging Mt. Eden Creek.*	The map should clearly identify areas to be dredged.	3A
Location of Project *a) First Paragraph* *b) Second Paragraph*	a) Southern Pacific Railroad should be Union Pacific Railroad. b) Ownership of the area at the mouth of Mt. Eden Creek has not been fully fully established and is in dispute between State Lands Commission and Cargill Salt. Will the dredging be delayed due to this dispute?	4A
Page 3 *III. Geologic Problems*	CAC had concerns about the effects of liquefaction on the project and the effect on trails, levees and adjacent properties.	5A
Page 4 *. a. Changes in absorption ...*	Incorrectly checked. Should be "Potentially Significant Impact."	6A
Page 6 *XI. Public Service* *c. Schools* *d. Maintenance of facilities...*	c. Should be marked "No Impact" d. Should be marked "Potentially Significant unless mitigation incorporated" A full-time employee should be assigned for predator management and maintenance of trail.	7A
Page 6 *XIV. Cultural Resources*	Historic Eden Landing will be preserved. Dr. Cogswell stated that Eden Landing was not always at the same place. Even though there were three studies done on the site, during excavation, an on-site archeologist should be present and a Response Plan in place. Informational signs should be included in the plan especially for the Archimedes Screw. Address preservation of the former Perry Gun Club building and artesian well.	18A 18b 18c
Page 7 *XVI. Mandatory Findings* *a. Does the project have...*	The box for "No Impact or Positive Impact" should also be checked because purchase of the Baumberg Tract for $12 million has a positive impact on wetland and wildlife preservation.	9A
xplanation of Checklist Responses *XI. b. No change in the level of...*	Misspelled "trial," should be "trail."	

Letter B Response - Hayward Area Shoreline Planning Agency

1. The long term plans for the Perry Gun Club (pond 20B) have not been finalized. The implementation of the restoration and management plan will include exotic plant species control program. This program is described in general terms on Page 30. Lepidium is a known invasive and problematic species which the Department has spent considerable effort in controlling in other locations. Lepidium will grow in the presence of salt water. Limited introductions of bay water may not fully control this species. Control will likely involve a combination of water management, mechanical control and pesticide use.

2. As described in the DEIR, the spread of non-native cordgrasses and in particular *Spartina alternaflora* into the reserve once tidal action has been reintroduced is anticipated. The Department will implement a control program for *Spartina alternaflora* and other exotic species on the reserve (see Project Description, page 30) and will cooperate with regional control efforts for this and other species. The effects of control efforts for exotic plants are discussed on pages 30 (Project Description) and 81 (Cumulative Impacts, Biological Resources) of the DEIR.

3. The islands planned for Pond 15B are designed to be low such that the island can be fully to partially covered with salt water during the late summer/fall flood period once snowy plover nesting activity has been completed. See page 21 of the Project Description for a summary of the anticipated water management for this area. The flooding regime is in part intended to maintain salt levels in the ponds to discourage plant growth. If the annual flooding does not adequately control the vegetation on the islands, other measures such as hand control, herbicides, or adding salt or oyster shells may be required.

4. Figure 4 shows the proposed alignment of the Bay Trail within the Reserve and a second segment that would allow a direct trail through the Reserve to connect to a proposed pedestrian overpass over Highway 92. At the time of the publication of the Draft Management Plan and DEIR, a final decision on Highway 92 pedestrian overpass had not been made. The pedestrian overpass will be constructed by Caltrans as part of the Highway 92 widening project. The figure also shows the location or route of the trail as shown in the Bay Trail Plan. This is depicted primarily for comparison purposes. These features/trail segments are clearly labeled on the figure.

   The comment letter cuts off the end portion of the comment and it is unclear where the commentor is indicating the Plan should provide an opportunity for the Bay Trail to exit. We assume the reference is the ability for the path to continue southward and then eastward out to and across old Alameda Creek. This route was considered in the Draft Restoration and Management Plan. However, the levees to the east and south are private property and are not owned or controlled by the Department. The Plan does not prohibit the potential for the trail to be extended to the south should access become available at some point in the future.

5. The corrections for page 6 (Southern Pacific to Union Pacific Railroad), page 8 - Figure 2 (pond 12 to pond 11), page 10 (Oliver West gladioli production), and page 62 (bailed to baled) are noted and will be made.

The statement on page 38 should read:

"A 2 to 3 ppt increase would be equal to a maximum increase of 10 to 11 percent in salinity of the bay water even if tidal volumes are minimal and only cover the site with a few inches of water."

The first sentence on page 65 under Impacts and Mitigation Measures has been reworded as follows:

"Two prehistoric sites and one historic site which may be potentially significant resources and potentially eligible for nomination to the National register or California Register are present on the site."

Responses to HASPA NOP Comments not included in Appendix A of Draft EIR.

1.a Comment noted, Section 2.6.2 of the EIR addresses the relationship of the Project to the Hayward Area Shoreline Planning Agency. The issue is also addressed in Appendix A, Explanation of Checklist Responses I.a.

2. a Comment noted. The actual area of restoration and management affects 791 acres. The remaining 44 acres consists of retained and new levees and other uplands onsite.

3. a Comment noted

4. a Comment noted

5. a This issue is addressed in Section 5.2.3 of the EIR. Liquifaction potential on adjacent properties is an existing condition which would not be affected by the Project.

6. a This issue is addressed in Appendix A, Explanation of Checklist Responses IV.a. The impact is not considered potentially significant, although the restoration could prove beneficial.

7. a. Comments noted.

8. a Comment noted. This issue is addressed in Section 3.4 of the EIR.

b See Section 3.4 and Mitigation Measure D-1 (page 66) in the EIR.

c Informational signs are discussed in Section 3.4, page 67 of the EIR. Only one

Archimedes Screw is present on the site. It is located in the Snowy Plover management area and will not be accessible to the public.

(Add to final EIR)
The former Perry Gun Club building has been evaluated for its historical significance in historical evaluations for the project; Cultural Resources Baseline Assessment, Baumberg Tract Wetlands Restoration, William Self and Associates 1997. The building was found to be of recent construction and not historically significant. It will be removed as part of the Project. The well will be left in its current condition.

9. a Comment noted

REGIONAL PARKS

EAST BAY REGIONAL PARK DISTRICT

65 YEARS

LETTER C

BOARD OF DIRECTORS
Beverly Lane
President
Ward 6
Carol Severin
Vice-President
Ward 3
John Sutter
Treasurer
Ward 2
Ayn Wieskamp
Secretary
Ward 5
Ted Radke
Ward 7
Doug Siden
Ward 4
Jean Siri
Ward 1

Pat O'Brien
General Manager

October 1, 1999

Carl Wilcox
California Department of Fish and Game
PO Box 47
Yountville, CA 94599

RE: Eden Landing Ecological Reserve Restoration and Management Plan, Draft EIR

Dear Carl:

Thank you for providing the East Bay Regional Park District with a copy of the Eden Landing EIR. Because the Park District will be directly involved in the wetland restoration, under contract with the Department of Fish and Game, and will be solely responsible, outside of that contract, for providing the Bay Trail segment, the following comments relate only to the public access aspects of the plan.

Figure 9, Bay Trail Alternatives, should be corrected to be consistent with the text and with Figure 8, and show the Bay Trail in the eastern portion of the property running along the existing levee road between ponds 1B and 7B. In addition, the trail should be shown running westerly of Eden Landing Road, to the Oliver Salt Works. The Bicycle-Pedestrian overcrossing over Route 92 is an approved and funded project, to be built by Caltrans. The overcrossing will land at the cul-de-sac of Point Eden Way, and the trail will enter the property through the Oliver Salt Works or the adjacent business park, adjacent to Pond 16B. The District will have to improve the levee leading from that point east to Eden Landing Road. This segment should be shown as part of the alignment. 1 2

Regarding construction activities, dredging or soil removal to accomplish tidal restoration should, as far as possible, reserve dredge spoils for the purpose of improving levees at the northern edge of the property and constructing the trail. Any excess spoils should, if possible, be used to fill the swale to the north of this levee (shown in the Restoration an Management Plan, fig. 18), which has no habitat value or relation to the tidal restoration. 3

Thank you for your consideration of these comments. Please feel free to contact me at (510) 544-2623 with any questions.

Sincerely,

Brian Wiese
Advance Planning

2950 Peralta Oaks Court P.O. Box 5381 Oakland, CA 94605-0381
www.ebparks.org TDD: 510 633-0460 TEL: 510 635-0135 FAX: 510 569-4319

Letter C Response - East Bay Regional Park District

1. The correct trail alignment is shown on Figure 4 (Preferred Project) and Figure 8 (Facilities Relocation). Figure 9 will be modified to depict the correct alignment.

2. At the time of the preparation of the DEIR the authors were unaware that the overcrossing had been approved and funded by Caltrans. The FEIR recognizes that the project will be built. The trail locations shown in the DEIR are schematic and intended to show the general alignments and routes in a manner suitable for assessing impacts and mitigation measures. The information presented in the DEIR and on Figures 4 and 9 is consistent with the information presented in the comment.

3. The Restoration and Management Plan anticipates that dredged material and material removed in lowering levees and dikes will be used to improve levees and in constructing the trail. The construction details, locations, and use of excess materials will be developed in the final construction plans for the project.

LETTER D

CITY OF
HAYWARD
HEART OF THE BAY

October 8, 1999

Mr. Carl Wilcox
Environmental Services Supervisor, Central Coast Region
California Department of Fish and Game
P.O. Box 47
Yountville, CA 94599

Re: Draft EIR for Eden Landing Ecological Reserve

Dear Mr. Wilcox:

On behalf of the City of Hayward, we thank you for the opportunity to review and comment on the Draft Environmental Impact Report on the Restoration and Management Plan for the Eden Landing Ecological Reserve. We have reviewed the DEIR and offer the following comments:

1) It is noted that seasonal wetlands are proposed for Ponds 1B and 20B, which adjoin the Weber property and Oliver West property, respectively. Since portions of the Weber property are also proposed as seasonal wetlands in the South of Route 92 Specific Plan, the DEIR should address any opportunities for coordinated management of these wetland areas. In addition, it is noted that the restoration plan does not rule out the possibility of converting the seasonal wetlands to tidal marsh in the future. It seems that this DEIR should address any potential impacts on the adjoining Weber and Oliver West properties. 1

2) It is noted that snowy plover habitat is proposed for the northwestern portion of the reserve, including the Caltrans parcel on the south side of Route 92. The adjoining Oliver saltworks plant site is envisioned as a possible interpretive center or museum. However, the City of Hayward General Plan designates this parcel as Industrial and the parcel has industrial zoning. The DEIR should address any potential impacts on future industrial use of this property given the proposed establishment of snowy plover habitat on the Caltrans parcel. 2

We look forward to receiving a copy of the Final Environmental Impact Report. Should you have any questions regarding the above comments, please call me at (510) 583-4226.

Sincerely,

Gary Calame

Gary Calame, AICP
Senior Planner

DEPARTMENT OF COMMUNITY AND ECONOMIC DEVELOPMENT
NEIGHBORHOOD AND ECONOMIC DEVELOPMENT

777 B STREET, HAYWARD, CA 94541-5007
TEL: 510/583-4250 • FAX: 510/583-3650 • TDD: 510/247-3340

Letter D Response - City of Hayward

1. The analysis and preparation of the Restoration and Management took into account the potential for portions of the Weber parcel to be managed for seasonal wetlands as identified in the South of Route 92 Specific Plan. It also assumed that it would be logical, although not required, to jointly manage the Weber property and Pond 20B in a consistent manner. Because the final plans and outcome/approvals for development and uses on the Oliver West parcel and the Weber properties have not been finalized, the decision was made to basically maintain the existing management regime for Pond 20B in order not to bias or affect future decisions and land uses on these adjoining properties.

2. The Caltrans parcel on the south side of Route 92 is considered existing snowy plover habitat. It is not proposed to be turned into snowy plover habitat. Snowy plover nesting and wintering use has been documented in the series of ponds in the former Oliver saltworks south of Route 92 which includes the Caltrans parcel. The Caltrans parcel is to be managed in the future to maintain and enhance habitat values for the snowy plover. The proposed Restoration and Management Plan for the Eden Landing Reserve does not address the Oliver Saltworks plant site. The establishment or consideration of the use of this site for a museum or interpretive center is not part of this project.

   The management of the Caltrans parcel to improve snowy plover habitat would not materially affect uses on the adjoining parcel. Any industrial uses would already need to take into account its potential effects on the existing habitat in the pond. This will not change with the proposed management.

COUNTY OF ALAMEDA
PUBLIC WORKS AGENCY
DEVELOPMENT SERVICES DEPARTMENT
951 Turner Court, Room 100
Hayward, CA 94545-2698
(510) 670-6601
FAX (510) 670-5269

LETTER E

September 27, 1999

California Department of Fish and Game
PO Box 47
Yountville, CA 94599

Attn.: Carl Wilcox

Dear Mr. Wilcox:

Subject: Eden Landing Ecological Reserve Restoration and Management Plan
Draft Environmental Impact Report

We have reviewed the Draft Environmental Impact Report (DEIR) for the Eden Landing Ecological Reserve Restoration and Management Plan and have the following comments:

1. The viewing platform and the construction for restoration of tidal conditions in the vicinity of the Flood Control District Pump Station must not conflict with future maintenance and operation of the Station or Outfall facility. 1

2. Will the new or improved Endangered Species Habitat restrict the District's ability to maintain the outfall structure from the District Pump Station? This should be addressed in the DEIR. 2

3. A new bridge structure should be installed at the proposed levee breach into the Old Alameda Creek for the District to continue to provide maintenance services along the Creek. 3

4. Page 36 of the DEIR, Section 3.1.3 Impact W-1 discusses improvements to the drainage patterns and tidal patterns providing scour to deepen and widen the Mt. Eden and Old Alameda Creek. Have there been any Hydraulic Analysis to substantiate this? 4

5. Page 60 of the DEIR, Section3.3.3 Impact C-4 discusses reduced siltation at the outfall structure from the District Pump Station due to an increased Tidal Prism in Mt. Eden Creek. Have there been any Hydraulic Analysis to substantiate this. It has been our experience that depending on the velocities, adding a tidal influence will promote deposit of silt in the affected areas. The District is concerned that added silt at the outfall structure would significantly reduce the operation of the District Station. 5

Mr. Carl Wilcox September 27, 1999

We thank you for opportunity to review the DEIR and look forward to working with you in future on this project. If you have any questions please feel free to contact me at 510-670-5260.

Very truly yours,

William Lepere

William Lepere
Development Services

cc: Tom Hinderlie
Fred Wolin

Letter E Response - County of Alameda Public Works Agency

1. The Restoration and Management Plan has taken into account the presence of the pump station, stormwater force main, and outfall. The pump station is located off the reserve in an existing industrial area and the proposed public access and viewing platform will be located in areas that will not interfere with the operation of these facilities. The plan includes retention of the existing right-of-way and access over the force main and to the outfall. Mitigation measure C-4, page 60 also requires that the force main and outfall be identified on any construction plans and prohibits any alteration of these facilities without prior permission from the ACFCD.

   The potential effects of the tidal restoration is discussed on page 60 of the DEIR. No adverse impacts are anticipated.

2. The outfall structure is located in documented, existing habitat for the salt marsh harvest mouse and within Waters of the United States. Any current maintenance activities are already required to comply with applicable regulations and requirements under Section 10 of the Rivers and Harbors Act, Section 404 of the Clean Water Act, and the state and federal Endangered Species Acts to not adversely impact endangered species or their habitat. It would be appropriate to add the ACFCD facilities on the reserve to Mitigation Measure C-2b which addresses the procedures and requirements to minimize the creation and enhancement of additional endangered species habitats in the reserve.

3. The project description includes a bridge across the proposed levee breach on Old Alameda Creek. The Department of Fish and Game as noted in the DEIR would like to eliminate this bridge if ACFCD agrees to alternative access. This issue is discussed on pages 60 and 61 of the DEIR.

4. The hydraulic analyses used to calculate the estimated channel widths and depths are presented in the Final Restoration and Management Plan on pages 61 to 71 and in the Technical Appendix.

5. The hydraulic analyses used to calculate the estimated channel widths and depths are presented in the Final Restoration and Management Plan on pages 61 to 71 and in the Appendix. The storm drain outfall has an invert elevation near 4 feet. The outfall currently discharges onto a concrete apron that is approximately at equal elevation with the adjacent marsh (3.5 to 4 feet). There is currently only a narrow, 2 to 3 foot wide channel downstream of the outfall. The expected tidal regime is expected to have a MHHW elevation in the range of 2.7 to 3 feet in the vicinity of the outfall. Any significant siltation which might occur would be at elevations below the existing marsh plain elevation (i.e. in the channels) and below the elevation of the outfall. This information is discussed on page 60 of the DEIR.

LETTER F

Law Offices of Charles T. Kilian

10320 S. De Anza Boulevard, Suite 1-D • Cupertino 95014 • Telephone: (408) 777-3403 / FAX: (408) 777-3401

Charles T. Kilian
Eileen Murray

FISH & GAME
OCT 8 1999
YOUNTVILLE

October 7, 1999

California Department of Fish and Game
Central Coast Region
P. O. Box 47
Yountville, CA 94599

Attn: Carl Wilcox

Re: *Comments for Draft Environmental Impact Report (DEIR), Eden Landing Ecological Reserve Restoration and Management Plan*

This office represents the East Bay Dischargers Authority, a joint powers agency located at 2651 Grant Avenue, San Lorenzo, California 94580-1841. The Authority membership consists of the cities of Hayward and San Leandro as well as Union Sanitary District, Oro Loma Sanitary District, and Castro Valley Sanitary District. The Authority has, among other things, the power to plan for, acquire, construct, manage, operate, and control facilities for the collection, transmission, treatment, reclamation, sale, and disposal of wastewater.

For a number of years, the Authority has maintained an existing forcemain system in a portion of the project area. The forcemain system carries secondarily treated and disinfected waste water. The effluent has a chlorine residual of 3-5 mg/L (parts per million). This level would be highly toxic to aquatic organisms that presumably would populate Eden Landing Marsh.

The Authority operates this forcemain system by virtue of a permanent easement acquired from the then property owners by eminent domain. The easement is for "laying down, installing, constructing, re-constructing, removing, replacing, repairing, maintaining, operating, and using for the transmission of wastewater, or related substances, an underground pipe or pipelines and necessary and required appurtenances thereto."

The easement also provides that the owners of the property "may not place or permit to be placed on such permanent easement and right-of-way any building or structure

(except fences, pavement, utilities and the like), nor shall [the owners] cause or permit the placement of any fill within such permanent easement. . .in excess of 8 feet NGS datum without prior written consent of EBDA, which consent shall not be unreasonably withheld." A copy of the Final Order of Condemnation for EBDA's easement is attached to this letter for your review.

The Authority is in receipt of a Draft Environmental Impact Report (DEIR) and Draft Eden Landing Ecological Reserve Restoration and Management Plan prepared by LSA Associates, Inc. for the Department. The DEIR seeks to "evaluate the potential environmental impacts resulting from the proposed restoration and management of the Eden Landing Ecological Reserve (Baumberg Tract)" over which the Authority's perpetual easement and right of way extends.

Over two years ago, the general manager of the Authority, Charles V. Weir, having discovered the existence of the proposed marsh project, sent a letter dated July 30, 1997, to Mr. Carl Wilcox of the Department of Fish and Game, suggesting that the Department and the Authority enter into an operational agreement regarding the Authority's continued use, construction, maintenance and operation of its forcemain system. Mr. Weir also enclosed a copy of a similar agreement between the Authority and the East Bay Regional Parks District for the Oro Loma Marsh Project. (A copy of this letter is attached).

Thereafter, on September 2, 1997, Mr. Weir sent a letter to Steve Foreman, the project manager for Resource Management International, Inc., a consultant for the Marsh project reiterating the need for an agreement between the Authority and the "owner" of the Marsh regarding the continued operation and maintenance of the Authority's forcemain system. No efforts to arrive at an agreement on the part of the Department or its consultants were thereafter forthcoming. (A copy of this letter is attached).

Prior to completion of the DEIR, the Department sent to Mr. Weir a Notice of Preparation of a DEIR (NOP) together with an NOP Checklist of environmental issues, none of which made reference to the Authority's concerns. Accordingly, Mr. Weir sent a letter to the Department dated May 4, 1999 (a copy of which is attached) listing specific areas which needed to be addressed in the DEIR and stating flatly that:

> The only way the Authority will allow the project [the Marsh Restoration] to proceed is after a fully protective agreement with [the owner].

The completed DEIR was made available in August of 1999. None of the Authority's issues were addressed. Instead, a series of operational rules and regulations were unilaterally included in the DEIR and the Management Plan, many of which are not

agreeable to the Authority. The Authority has the following specific objections and comments to the DEIR and Restoration Plan:

1) The DEIR fails to acknowledge the Authority's agreement requirement other than in passing on page 83. The tone of the EIR appears to be that the project will simply go forward with or without the Authority's agreement. 1

2) Page 6 of the environmental Checklist attached to the DEIR is inadequate in that it claims that there will be no impacts on "local or regional water treatment or distribution facilities." This was cited in the Authority's May 4, 1999 letter. As drafted, the DEIR is inadequate in that it fails to acknowledge the impacts and therefore fails to provide any mitigation. 2

3) Pages 22-24 of the DEIR describe how the "owners" of the property intend to allow the Authority's access to its own forcemain system. While the Authority has no objection to the "berm" concept contained therein, and normally will not need to use the proposed berm for routine inspections, the Authority does object to the following:

a) The description of the "permitted" use of the berm for repairs or leaks on the pipeline, is improper. The Authority is not required, nor will it seek, permits from other agencies for routine or emergency repairs of its pipeline. The purpose of an agreement (as described by Mr. Weir in copious correspondence) is to deal with the issue by mutual agreement and not by unilateral imposition of a perceived solution. 3

b With respect to the repair activities described on page 23, it should be the responsibility of the lead agency and the "owners" to secure the cuts in the berm to block tidal flow if the Authority is required to make any repair on its pipeline. It would be improper for the Authority to charge its rate payers for these costs. 4

c) Most of the provisions on pages 23 and 24, (protection measures conditions) are unacceptable because of the increased unreimbursed costs to the Authority and its rate payers caused by the project. The Authority will attempt to comply with these provisions to the best of its ability <u>only</u> if the lead agency or "owners" pay the additional costs. If not, then the agency will repair its system to its standards only, without any approvals from the lead agency or "owners". 5

d) The notice requirements contained on pages 23 and 24 are not acceptable. The Authority can give 12-hour notice of an emergency repair but will not submit a work plan within 5 days of an emergency. The Authority will respond to an emergency immediately and provide the lead agency and owner a report after the fact. The Authority also will continue to store equipment on the easement and while taking into account the avoidance of sensitive areas, the Authority insists on responding to 6

problems as quickly as possible to avoid civil fines and penalties from the Regional Water Quality Control Board.

e) The comments described in a) through d) above apply to pages 57-59 (Mitigation Measure C2a) and to page 61 for mitigation C-4. 7

4) Similar mitigation language contained in pages 22-24, 57-59 and page 61 of the DEIR also appears in the management plan document. The above-described comments to the DEIR also apply to the management plan language. 8

Pursuant to Section 15086 of the California Environmental Quality Act (CEQA) Guidelines, the Authority request that the Department consult with the Authority concerning the EIR before it is certified. The Authority also specifically requests, pursuant to section 15088 of the Guidelines, that the lead agency respond to these comments in writing. 9 10

It is submitted that without substantial changes in those portions of the DEIR referred to above, that the lead agency cannot make the findings contained in section 15091 of the guidelines and therefore the lead agency cannot certify the EIR nor can it impose, unilaterally, mitigation, monitoring or reporting requirements as contained in section 15097 of the guidelines. 11

In sum, the Authority has long been a supporter of wetlands projects and is, in fact, a co-permittee for the Hayward Shoreline marsh project. However, progress can only be made for the Eden Landing Project if the Authority's concerns are straightforwardly addressed; otherwise, the Authority will have no choice but to oppose the project as well as the EIR.

Sincerely,

Charles T. Kilian

ss

Enclosures

cc: Charles V. Weir

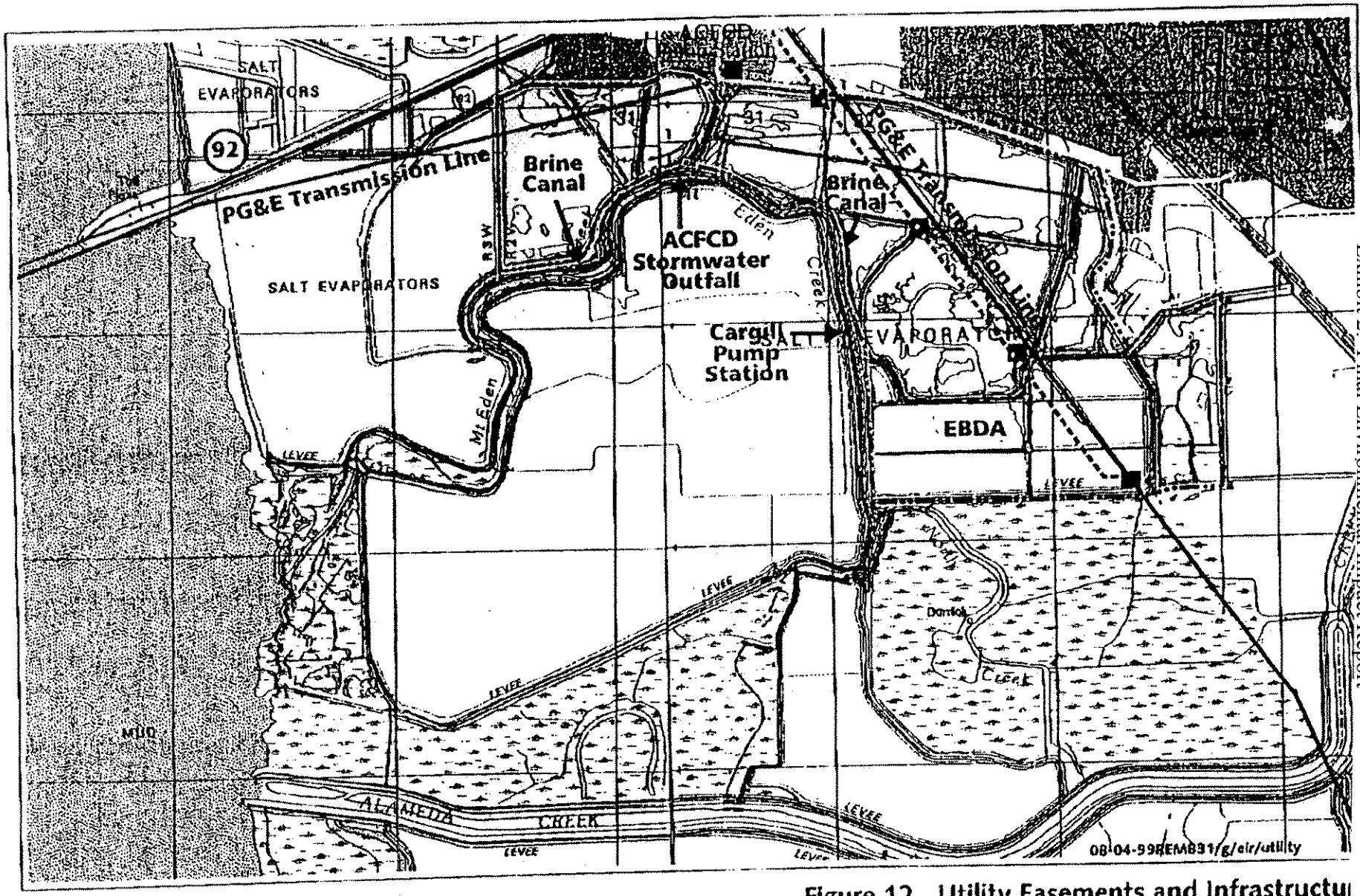

Figure 12. Utility Easements and Infrastructu

N

Scale in feet

■ EBDA Wastewater Line Access Portals

EDEN LANDING ECOLOGICAL RESERVE
RESTORATION AND MANAGEMENT PL

EBDA

EAST BAY DISCHARGERS AUTHORITY
2651 Grant Avenue
San Lorenzo, CA 94580-1841
(510) 278-5910
FAX (510) 278-6547

A Joint Powers Public Agency

FILE

July 30, 1997

Mr. Carl Wilcox
California Department of Fish & Game
P.O. Box 47
Yountville, CA 94599

Proposed Marsh Project for Baumberg Tract

Dear Mr. Wilcox:

Pursuant to our telephone conversation on July 17, 1997, I am enclosing a copy of the draft agreement between the Authority and East Bay Regional Parks District for the Oro Loma Marsh Project. The Authority will require a similar agreement with the agency that is responsible for the proposed marsh project for the Baumberg Tract.

In addition to the agreement, we will also require an engineering analysis to insure that any proposed construction or related activities will not have any negative impacts on the Authority's pipeline. Normally such an analysis can be included during the design of the marsh project.

The Authority is a supporter of wetlands projects, and is a co-permittee for the Hayward Shoreline Marsh. We look forward to working with you as your plans are developed. Should you have any questions or comments, please feel free to contact me or the Authority's Operations and Maintenance Manager, Karl Royer.

Sincerely,

Charles V. Weir
General Manager

Enclosure

c: Operations and Maintenance Committee
Edward E. Martins, Legal Counsel

C:\WPDOCS\GENERAL\BAUMBERG.001

CHAIR
William H. Ward
City of Hayward

VICE-CHAIR
Pat Kite
Union S.D.

COMMISSIONER
Roland J. Dias
Oro Loma S. D.

COMMISSIONER
Harry Francis
Castro Valley S.D.

COMMISSIONER
Gordon A. Galvan
City of San Leandro

GENERAL MANAGER
Charles V. Weir

EBDA

EAST BAY DISCHARGERS AUTHORITY
2651 Grant Avenue
San Lorenzo, CA 94580-1841
(510) 278-5910
FAX (510) 278-6547

A Joint Powers Public Agency

FILE

September 2, 1997

Mr. Steve Foreman, Project Manager
Resource Management International, Inc.
4340 Redwood Highway, Bldg. B
San Rafael, CA 94903-2104

Baumberg Tract Wetland Restoration Project

Dear Mr. Foreman:

This is in response to your August 28, 1997 letter to Mr. Karl Royer. The Authority appreciates receiving this information on the proposed project. I need to correct a misconception concerning your statement in the July 10, 1997 meeting summary that a break in the Authority's pipeline would not qualify as an emergency under the State ESA. You have indicated that the Authority's pipeline carries tertiary treated water. This is not correct. The pipeline carries secondary treated and disinfected wastewater. The effluent has a chlorine residual of 3-5 mg/L (parts per million). This level of chlorine residual would be highly toxic to aquatic organisms that presumably would populate the marsh. Therefore, a break in the Authority's pipeline should qualify as an emergency.

Your summary also mentions the Authority's concerns with the issue of endangered species. This is a critical issue, and can only be successfully resolved through the development of an agreement between the Authority and the corresponding "owner" of the marsh. Please refer to the enclosed July 30, 1997 letter to Mr. Carl Wilcox, California DFG. As noted in this letter, the Authority will require a similar agreement prior to authorizing any construction related to the proposed marsh.

Please keep us informed as to the status of the marsh project, and feel free to contact me or Karl Royer if you have any questions or need additional information.

Sincerely,

Charles V. Weir
General Manager

Enclosure

C:\WPDOCS\GENERAL\BAUMBERG.002

CHAIR	VICE-CHAIR	COMMISSIONER	COMMISSIONER	COMMISSIONER	GENERAL MANAGE
William H. Ward	Pat Kite	Roland J. Dias	Harry Francis	Gordon A. Galvan	Charles V. Weir
City of Hayward	Union S.D.	Oro Loma S. D.	Castro Valley S.D.	City of San Leandro	

EBDA

EAST BAY DISCHARGERS AUTHORITY
2651 Grant Avenue
San Lorenzo, CA 94580-1841
(510) 278-5910
FAX (510) 278-6547

INCLUDED IN THE EIR

A Joint Powers Public Agency

May 4, 1999

Mr. Carl Wilcox
Environmental Services Supervisor
California Department of Fish and Game
Central Coast Region
P. O. Box 47
Yountville, CA 94599

October 11

K

Comments on Notice of Preparation – Eden Landing Ecological Reserve Restoration and Management Plan

Dear Mr. Wilcox:

The East Bay Dischargers Authority appreciates the opportunity to comment on the Notice of Preparation (NOP) of a Draft Environmental Impact Report (DEIR) for the aforementioned restoration project. The Authority supports the development of marsh restoration projects along the Bay and within our property easements provided that all potential impacts on our property rights and our ability to operate and maintain our system are protected. Previous correspondence to you and to Steve Foreman, copies attached, have described the conditions under which the Authority would allow the property owner to construct any project within our easement rights-of-way.

According to the NOP, the Wildlife Conservation Board (WCB) is the property owner of 835 acres within the Baumberg Tract that will be used for the restoration project. The Authority will only allow the project to proceed if there is an agreement between WCB and the Authority that is of the same form as the agreement between the Authority and East Bay Regional Parks District for the Oro Loma Marsh. A copy of that agreement in draft form has been previously sent to you. A copy of the final agreement is enclosed for your information.

Since none of the documentation received from you to date has acknowledged the agreement requirement, the Authority believes that the NOP Checklist should be modified accordingly. Specific Checklist items include the following:

I. **LAND USE AND PLANNING.** c. Be incompatible with existing land use in the vicinity.

This item should be marked "Potentially Significant Unless Mitigation Incorporated". An agreement between WCB and the Authority would provide the required mitigation.

II. **TRANSPORTATION/CIRCULATION.** c. Inadequate emergency access or access to nearby uses.

CHAIR
William H. Ward
City of Hayward

VICE-CHAIR
Pat Kite
Union S.D.

COMMISSIONER
Roland J. Dias
Oro Loma S. D.

COMMISSIONER
Harry Francis
Castro Valley S.D.

COMMISSIONER
Gordon A. Galvan
City of San Lorenzo

GENERAL MANAGER
Charles V. Weir

EAST BAY DISCHARGERS AUTHORITY
A Joint Powers Public Agency

This item should be marked "Potentially Significant Unless Mitigation Incorporated". An agreement between WCB and the Authority would provide the required mitigation.

IX. **HAZARDS.** b. Possible interference with an emergency response plan or emergency evacuation plan. c. The creation of any health hazard or potential health hazard.

Both of these items should be marked "Potentially Significant Unless Mitigation Incorporated". An agreement between WCB and the Authority would provide the required mitigation.

X. **PUBLIC SERVICES.** d. Maintenance of public facilities, including roads.

This item should be marked "Potentially Significant Unless Mitigation Incorporated". An agreement between WCB and the Authority would provide the required mitigation.

All of the above items have the potential to prevent the Authority from timely access to its forcemain system. In the event of an embergecy, it is imperative that the Authority have immediate access to all stations and the forcemain. Unnecessary delays could result in the release of chlorinated secondary effluent within the marsh project which could jeopardize public health and aquatic life.

The only way the Authority will allow the project to proceed is after a fully protective agreement with the Wildlife Conservation Board is in place. The agreement can reference responsibilities of state and federal agencies as in the agreement for the Oro Loma Marsh. The Authority believes that the NOP and the subsequent DEIR must acknowledge that the agreement is required.

Thank you again for the opportunity to comment on the NOP. We look forward to the completion of a successful EIR and ultimately a restoration project. Should you have any question, please feel free to give me a call.

Sincerely,

Charles V. Weir
General Manager

Enclosures

c: Charles T. Kilian, Legal Counsel

C:\DATA\Word Documents\General\BAUMBERG 003.doc

Letter F Response - Law Offices of Charles T. Kilian, East Bay Dischargers Authority

1. The Department of Fish and Game recognizes the East Bay Dischargers Authority's (EBDA) requirement for and operation agreement for activities affecting their easement on the Eden Landing Ecological Reserve. The plan has been designed to maintain and or enhance access for inspection and maintenance of EBDA's facilities. The proposed restoration and management plan is fully consistent with the East Bay Dischargers Authority (EBDA) easement. As pointed out on pages 1 and 2 of the comment letter, the only prohibited activities within the easement are 1) the placement of any buildings or structure (except fences, pavement, utilities and the like) and 2) cause or permit the placement of fill in the easement in excess of 8 feet NGS datum without prior written consent of EBDA. The proposed restoration plan does not propose any buildings, structures or fill in excess of 8 feet NGS within the easement. Nothing in the easement specifically requires the owner of the property to enter into a separate agreement for land uses which would occur over the easement. While a separate agreement is not explicitly required, the Department of Fish and Game is coordinating with EBDA and intends to enter into a mutually acceptable operating agreement as part of project implementation. Section 3.3.3. of the EIR will be revised to reflect this comment. Mitigation C-2b will be revised to more clearly identify the need to enter into and operational agreement with EBDA as part of the Project.

2. The checklist is part of the environmental document to determine if there is a potential for significant adverse impacts and the need for preparation of an EIR. The discussion for item XII, Utilities and Service Systems, in the checklist and contained in the DEIR Appendix does note that "The project will affect the EBDA waste water line." The DEIR also provides considerable discussion on the potential impacts to local and regional utilities, including EBDA. Various measures are also included to mitigate adverse impacts. Potential impacts to EBDA and other utilities are discussed on pages 56 to 61 (Impacts and Mitigation Measures), pages 72, 73, 74, and 77 (Alternatives), and pages 82 and 83 (Cumulative Impacts). The DEIR provides several mitigation measures to address potential adverse impacts to the EBDA pipeline. These measures include C-2a, C-2b, and C-3 and are presented on pages 57 to 60 of the DEIR.

3. The majority of the pipeline easement lies within lands currently subject to regulation under Sections 401 and 404 of the Federal Clean Water Act, Section 10 of the Rivers and Harbors Act, and State of California under the Porter-Cologne Act. The project site, including portions of the EBDA easement, provides habitat for the state and federally listed endangered salt marsh harvest mouse and the federally listed threatened western snowy plover and is designated as essential habitat in the Recovery Plan for the California clapper rail and salt marsh harvest mouse (USFWS 1984). Under current site conditions, activities which would require excavating and side-casting of material to expose the pipeline for repair or maintenance or which could result in the "take" of threatened or endangered species requires that EBDA obtain appropriate authorizations and permits from several agencies including the U.S.

Corps Army Corps of Engineers, U.S. Fish and Wildlife Service, California Department of Fish and Game and California Regional Water Quality Control Board.

The pipeline easement provides the right of EBDA to enter the property and easement to maintain and operate the pipeline. The easement does not, however, obviate EBDA's need to apply for and obtain appropriate permits and authorizations prior to conducting regulated activities such as those described above. The purpose of the measures described in Mitigation Measure C-2b is to incorporate the necessary permitting for EBDA's normal and emergency operation and maintenance activities into the Eden Landing approvals through the Corps, U.S. Fish and Wildlife Service, California Department of Fish and Game, and Regional Water Quality Control Board. This will minimize EBDA's level of effort required to obtain the necessary authorizations to conduct work activities within the easement in the future.

4. Under the proposed restoration and management plan the majority of the EBDA easement through the salt ponds on the project site will be raised above wetland elevations and out of the jurisdiction of the agencies identified in response to comment 3. This will be a substantial benefit to EBDA and it's rate payers since there regulatory burden will be substantially reduced.

   The project will also construct turnarounds on the berm at each breach. This material can be used to block the breach in the event that dewatering is required to perform repairs. This should be a rare occurrence since the majority of the easement, other that the breaches will not be subject to inundation, as it now is periodically. The majority of the easement crosses old salt ponds which contain standing water for significant periods of time (3 to 6 months) in most years. Under current conditions, it would be EBDA's responsibility to de-water the entire pond or cell if the repair activity occurred during a period when the pond contained water.

   The Department of Fish and Game is will work with EBDA on this issue as part of the negotiations for an operating agreement for the easement.

5. As noted in response to comment 4 the project will reduce EBDA's existing regulatory burden by removing the majority of the easement from wetlands jurisdiction. In those remaining areas which would be subject to regulation the Department of Fish and Game does not believe the provisions will require additional costs to EBDA and its rate payers. Many of the provisions are standard requirements of the necessary authorizations which would be required before EBDA could implement any repair or maintenance activities on the pipeline even under current conditions. As noted in response to comment E-3 above, the incorporation of these measures into the Restoration and Management Plan will reduce EBDA's costs and time frames for obtaining the necessary approvals from the Corps of Engineers, U.S. Fish and Wildlife Service, California Department of Fish and Game, and California Regional Water Quality Control Board for operation and maintenance activities.

6. The Department of Fish and Game will work with EBDA to determine mutually acceptable notification requirements for the work plan. The Department of Fish and

Game recognizes EBDA's need and obligation to respond to emergencies in an expedient manner. As stated in the above comments, the purpose of the measures described on pages 23 and 24 is to minimize paper work and efforts required to obtain approvals for required emergency and normal operation and maintenance activities while minimizing potential adverse impacts to wetlands and endangered species.

7. See response to comments E-3 through E-6 above.

8. See response to comments E-3 through E-6 above.

9. Section 15086 of CEQA Guidelines requires the lead agency, in this case the Department of Fish and Game, to consult with and request comments on the Draft EIR. The Department has had ongoing discussions with EBDA prior to and during the comment period on the EIR. The Department plans to continue working with EBDA to develop and mutually agreeable operating agreement for the easement. CEQA does not require that other sorts of agreements or approvals be finalized prior to certification of the EIR.

10. This document constitutes the written responses to the comments received on the Draft EIR as required under Section 15088 of the CEQA Guidelines.

11. Section 15091 of the CEQA Guidelines relates to specific findings that have to be made by a lead agency after an EIR has been certified if one of the conditions listed in Section 15091 (a) 1 through 3 exists. The comment that the EIR cannot be certified is not supported by this section of the CEQA Guidelines. Section 15097 of the Guidelines requires the lead agency to adopt and implement a Mitigation Monitoring or Reporting Program. Section 15097 does not prohibit the imposition of mitigation measures. EBDA would not be responsible for monitoring requirements associated with the restoration and management of the Eden Landing Ecological Reserve. EBDA, however, may be responsible for monitoring of their future activities which could occur in the Eden Landing Ecological Reserve.

EBDA

EAST BAY DISCHARGERS AUTHORITY
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A Joint Powers Public Agency

October 6, 1999

Mr. Charles T.Kilian
Law Offices
10320 S. DeAnza Blvd, Ste 1-D
Cupertino, CA 95014

Mr. Kilian,

I understand you are reviewing the Draft Environmental Impact Report (DEIR) for the Eden Landing Ecological Reserve (ELER) as it relates to EBDA's Right of Way (ROW) . I am enclosing two additional documents to assist you with this endeavor. The first is a map from the DEIR with EBDA's forcemain location highlighted on it. The second is the "Final Order of Condemnation". This ROW runs through the entire ELER. It was acquired from Leslie Salt in 1979, apparently through condemnation. If you have any questions regarding the ELER, ROW or any of our records, please contact me during Chuck's absence.

Sincerely,

Karl Royer
O&M Manager

Enclosures:
(1) Map from DEIR
(2) Final Order of Condemnation

Post-it® Fax Note 7671

Date 10/6	# of pages ▸ 28
To Chuck Kilian	From
Co./Dept.	Co. EBDA
Phone #	Phone #
Fax #	Fax #

CHAIR	VICE-CHAIR	COMMISSIONER	COMMISSIONER	COMMISSIONER	GENERAL MANAGER
Pat Kite	Roland J. Dias	Harry Francis	Gordon A. Galvan	William H. Ward	Charles V. Weir
Union S.D.	Oro Loma S. D.	Castro Valley S.D	City of San Leandro	City of Hayward	

Comments to the Draft EIR for the Eden Landing Ecological Reserve Restoration and Management Plan (Baumberg Tract), from the public meeting of October 5, 1999, 7:00 to 9:00 PM, Hayward Area Recreation District Shoreline Interpretive Center, Hayward.

Comments:

When was the adjoining 33 acre Oliver Tract acquired? 1

How will it be managed? 2

Public access:

- Will an overlook be constructed as part of the trail? 3
- When will the overcrossing of Highway 92 be completed and will it hold up this project? 4
- What's happening at the Oliver Tract end of the trail system? 5
- Will trail be closed during nesting season? 6
- Will there be dogs allowed? 7
- Where will the parking be located and how much? 8
- Are there conflicts between birders and hunters and how will they be minimized? 9
  Comment: Hayward is considering banning hunting.

Management/construction questions:

- Where are the bridges? 10
- Will EBDA berm divide the tidal marsh? 11
- Will the moat function and how? 12
- An engineering study indicated that sedimentation would be an issue? Is this true? 13
- How will Lepidium be managed on the north Perry site? 14
- Will tidal marsh affect the Webber property due to higher water table? 15
- Will additional lands be acquired to the east and how will they be managed? 16
- Are there pond turtles to worry about? 17

Miscellaneous:

- There are potential impacts to plovers on the Caltrans property if work is done on the Oliver plant site. 18
- How will archaeological sites on-site, if found, be addressed and dealt with during construction?. 19
- Why does the Plan refer to 1000 acres? 20
- Former "Leslie Salt Site" mislabeled. Always was Cargill. 21
- Odd lines at the North Creek channel in the proposed project figure (Figure 4) need to be labeled. 22
- Whales Tail marsh figure implies that it is public, when, in fact, it is owned by Cargill. 23
- Figures should be clearer on which is public land and which is Cargill's. 24
- Bay Trail on Figure 4 is unclear. 25
- Clarify details of trail (cross sections, locations, etc.) 26

October 5, 1999 Public Meeting Responses

1. The 33 acre Oliver Tract is not part of the Project. It is being considered for purchase by another public agency as mitigation for wetland impacts associated with a project elsewhere.

2. If acquired it would be managed in a manner consistent with the snowy plover management area which it is contiguous with.

3. An overlook may be constructed as part of the trail if feasible. It would be located near Pond 14 at the end of Eden Landing Road.

4. The Highway 92 pedestrian overcrossing is not directly related to the Project and does not affect it's implementation schedule. The trail constructed as part of the Project will be compatible with the trail extension from the overpass.

5. The eastern terminus of the trail on the Project site is unknown at this time. It is anticipated based on the South of Highway 92 Specific Plan that the trail would link up with a trail which is part of proposed development on the Oliver West Parcel. If this development does not proceed the trail would end in the southeastern corner of the project site at the current Cargill Salt levee.

6. Closure of the western section of the trail during the western snowy plover breeding season awaits a formal consultation on the project with the U. S. Fish and Wildlife Service under Section 7 of the Endangered Species Act. Trail closure is not currently proposed as a mitigation measure since use of the trail during the breeding season is not considered a significant impact. The trail will be separated from the snowy plover management area by a moat and a fence. No landscaping will be allowed which could serve as nesting or perching habitat for potential pedators.

7. If dogs are allowed on the Ecological Reserve they will have to be leashed. The issue has not been determined by the Department or the East Bay Regional Park District (EBRPD).

8. A staging area will be located at the Eden Landing Road entrance to the Ecological Reserve. It is anticipated that parking will be provided. The number of spaces has not been determine. It is estimated that it will be six to ten. Parking would be located in uplands at the entrance gate which are highly disturbed and were formerly use as the project office site by the Shorelands Company.

9. Interaction between the public and duck hunters using the Cargill salt ponds will be minimized. The public trail will be separate from the access road used by Cargill and hunters accessing duck clubs in the salt ponds. The Ecological Reserve will be closed to hunting. The Ecological Reserve other than the trail will be closed to public access. The Cargill ponds will remain private property closed to the public and accessable for hunting under duck club leases issued by Cargill. The Department and EBRPD will patrol the

area and enforce posted regulations and closures.

10. The location of the three bridges which would potentially be constructed are shown on Figure 8. of the EIR. The Department is working with Cargill and the Alameda Flood Control District to reduce the number of bridges which need to be built.

11. The EBDA berm will divide the tidal marsh. It will have three breaches to allow tidal flows to move across the EBDA easement. These can be filled in the event of emergencies to allow repairs.

12. The moat associated with the Oliver West project is not related to the Project. It is being evaluated as a separate project by the City of Hayward.

13. Sedimentation associated with the Oliver West project moat is not related to the Project as discussed in 12 above.

14. See response to comment B.1.

15. The effect of the project on flooding of adjacent properties is addressed in Section 3.1.1 of the EIR. No significant affect was identified.

16. No additional purchases of lands to the east of the Project site are proposed. If such an acquisition were to occur a separate management plan would be prepared which would be subject to a separate environmental review process independent of the Project.

17. Pond turtles have not been documented from the Project site. No suitable habitat is present on the site.

18. The Oliver plant site is not part of the Project. Any work done there would be subject to separate review and permitting.

19. See Section 3.5, Mitigation Measure D-1 on page 66 of the EIR.

20. The text describes the Project as affecting 1000 acres. This acreage figure includes lands owned by the State Lands Commission and Cargill Salt Company which would be affected by the Project. These lands are primarily in Mt. Eden Creek.

21. Comment noted.

22. Comment noted.

23. Comment noted.

24. Comment noted.

25. See Response to Comment Letter B, number 4.

26. A typical cross section of the trail is presented in Figure 10 of the Draft EIR, page 28.

APPENDIX A

Notice of Preparation and Draft EIR mailing List

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Findings Related to the Environmental Impact Report for the Eden Landing Ecological Reserve Restoration and Management Plan

Lead Agency: California Department of Fish and Game, Central Coast Region

The California Department of Fish and Game (Department) hereby adopts the following findings related to the Eden Landing Ecological Reserve Restoration and Management Plan (the "Project"). The Project requires certification of a Final Environmental Impact Report (EIR) dated March 2000 (SCH#99032078).

1.0 Introduction and Procedural History

A. Purpose of the findings

These findings relate to the EIR for the Project. These findings are made and adopted by the Department in satisfaction of state requirements relative to the review, analysis, consideration, and approval of the Project. These findings also provide the written analysis and conclusions of the Department regarding the Project. These findings are divided into general sections. Each of these sections is further divided into subsections, each of which addresses a particular topic and/or requirement of law. At times, these findings refer to materials in the administrative record which are available from the Department.

B. Project

The Project consists of the restoration and enhancement of approximately 835 acres of tidal marsh and inactive salt evaporation ponds in the City of Hayward, Alameda County. The project will restore full tidal action to 570 acres of inactive salt ponds, in so doing 27 acres of new wetlands would be created by lowering or removing levees. The Project will also enhance 126 acres of salt panne/snowy plover breeding habitat and maintain 95 acres of existing diked salt marsh. The Department acquired the property in 1997 for the purpose of protecting, restoring and enhancing wetlands and habitat of state and federally listed endangered species. The Project also serves as mitigation for impacts associated with two projects the Dixon Landing/Route I-880 interchange in the Cities of Milpitas and Fremont and the City of San Jose's waste water discharges to south San Francisco Bay.

The Department evaluated five alternatives for restoration of the site in the Draft EIR and determined the proposed Project was the environmentally superior alternative (Draft EIR, Section 4.3).

C. Environmental Impact Report

The Department prepared an Environmental Impact Report in compliance with the CEQA Guidelines Section 15226. The Department issued a Notice to Preparation (NOP), including and Initial Study, on March 17, 1999 for the EIR.

A Draft EIR was issued for public review on August 18, 1999 for a 45-day public review period, ending on October 10, 1999. Approximately 60 copies of the Draft EIR were distributed to Responsible Agencies, other agencies, community and environmental groups, and members of the public requesting a copy of the document. A public meeting was held by the Department on October 5, 1999 in Hayward. A total of six comment letters were received on the Draft EIR, all from public agencies. The comments and responses to comments are contained in Section 3.0 of the Final EIR.

The Final EIR was published on March 20, 2000.

D. EIR Certification

On April 19, 2000, the Department:

(1) Certified that: (a) the EIR was completed in compliance with CEQA; (b) the Department reviewed and considered the information contained in the EIR prior to making a decision on the Project; and (c) the EIR represents the Department's independent judgement and analysis;

(2) Adopted these findings;

and

(3) Approved the Mitigation Monitoring and Reporting Program ("MMRP").

E. Administrative Record

The following constitutes the record for the proceeding: (1) information, notes, and surveys created, kept and/or maintained by the Department and relevant to this Project; (2) all documents, written memoranda, comments, and exhibits submitted to the Department during the preparation of the EIR; (3) all notices to the public concerning the EIR; (4) notes from the public meeting held on the EIR; (5) the Draft EIR, Final EIR, the Final Restoration and Management Plan for the Eden Landing Ecological Reserve and all other documents referenced in them or incorporated by reference; (6) these findings; (7) the MMRP; (8) the Notice of Determination; and (9) any additional items not included above if they are required by law. [See Cal. Public Resources Code Section 21167.6(e).]

2.0 Findings Regarding Less-Than-Significant Impacts

Direct, indirect, and cumulative impacts of the Project were evaluated in the Final EIR for a variety of environmental issue areas, including those identified in the Environmental Checklist, as required by CEQA. The following environmental impacts were determined to be less than significant based upon technical analyses in the Initial Study (Appendix A of the EIR), prepared and attached to the Notice of Preparation and the EIR, including the use of significance thresholds where available and appropriate:

Exhibit 2: Final Environmental Impact Report

To: Dexter 2nd copy

From: Brad

EBRPD
MAR 29 2000
Adv. Planning, Land Acq.

Final Environmental Impact Report
Eden Landing Ecological Reserve Restoration and Management Plan
SCH # 99032078

Date: March 27, 2000

To: BRIAN WIESE
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OAKLAND CA 94605-0381

From: California Department of Fish and Game — Lagency
Central Coast Region
P. O. Box 47
Yountville, CA 94599

Subject: Final Environmental Impact Report (FEIR), Eden Landing Ecological Reserve Restoration and Management Plan

The Department of Fish and Game, as the Lead Agency, has prepared a final environmental impact report for the project identified below. The FEIR evaluates the impacts associated with implementation of the Eden Landing Ecological Reserve Restoration and Management Plan on biological resources, Soils, Hydrology and Water Quality, Land Use, Utilities and Public Services, Cultural Resources and Recreation. The FEIR also contains Corrections and Modifications to the Draft EIR and Responses to Comments received on the Draft EIR. These sections which combine with the Draft EIR constitute the FEIR for the Eden Landing Ecological Reserve Restoration and Management Plan.

Attached for your information and review is the Final EIR. As provided in Section 15089(6) of the CEQA Guidelines, any comments you may have should focus on the response to comments received on the Draft EIR.

The Department of Fish and Game will certify the FEIR April 7, 2000.

Project Description: Restoration of 1,000 acres of inactive salt evaporation ponds to tidal marsh and managed seasonal wetlands. The project will involve, dredging of tidal channels, construction and removal of levees, and installation of water control structures. The project will enhance habitats for endangered species and wetland associated fish and wildlife. An alignment for the Bay Trail is identified through the project site and impacts are assessed.

Project Location: The project is located on the former Cargill Baumberg Plant site at the end of Eden Landing Road, City of Hayward, Alameda County.

Comments on the Final EIR are due to the California Department of Fish and Game by 5:00 P.M. on April 6, 2000.

Comments should be sent to:

California Department of Fish and Game
P.O. Box 47
Yountville, CA 94599
Attn.: Carl Wilcox

Requests for information or questions concerning the FEIR should be directed to Mr. Carl Wilcox, Habitat Conservation Manager, at (707) 944-5525.

Enclosure

CEQA: California Environmental Quality Act

JUL - 3 2001

Appendix D

NOTICE OF DETERMINATION

To: [X] Office of Planning and Research
1400 Tenth Street, Room 121
Sacramento, CA 95814

[ ] County Clerk
County of

From: (Public Agency) CA Dept of Fish & Game
Central Coast Region
P. O. Box 47
Yountville, CA 94599

Subject: **Filing of Notice of Determination in compliance with Section 21108 or 21152 of the Public Resources Code.**

Project Title

Eden Landing Ecological Reserve (Baumberg Tract) Restoration & Management Plan

State Clearinghouse Number (If submitted to Clearinghouse)	Contact Person	Area Code/Telephone/Extension
1999032078	Carl Wilcox	(707) 944-5525

Project Location:

City of Hayward, Alameda County

Project Description:
Restoration of 835 acres of inactive salt evaporation ponds to tidal marsh and managed seasonal wetland. Identification and assessment of a Bay Trail alignment through the project site.

This is to advise that the Department of Fish and Game (Lead Agency or Responsible Agency) has approved the above described project on 4-20-00 (Date) and has made the following determinations regarding the above described project:

1. The project [ ]will [X]will not] have a significant effect on the environment.
2. [X] An Environmental Impact Report was prepared for this project pursuant to the provisions of CEQA.
   [ ] A Negative Declaration was prepared for this project pursuant to the provisions of CEQA.
3. Mitigation measures [[X]were [ ]were not] made a condition of the approval of the project.
4. A statement of Overriding Considerations [ ]was [ ]was not] adopted for this project.

This is to certify that the final EIR with comments and responses and record of project approval is available to the General Pu blic at:

Dept. of Fish & Game, Central Coast Region, 7329 Silverado Trail, Napa, CA 94558

Date received for filing and posting at OPR:

Signature (Public Agency) — Regional Manager — *Title*

Revised March 1986