



US Army Corps
of Engineers.

SAN FRANCISCO DISTRICT

PUBLIC NOTICE

Regulatory Branch
333 Market Street
San Francisco, CA 94105

NUMBER: 24627S – Eden Landing Ecological Reserve
DATE: December 29, 1999
RESPONSE REQUIRED BY: January 29, 2000

PROJECT MANAGER: Molly Martindale TELEPHONE: (415) 977-8448 Email: mmartindale@spd.usace.army.mil

I. INTRODUCTION: The California Department of Fish and Game [Contact: Carl Wilcox, (707) 944-5500] has applied for a Department of the Army permit to place at least 6.5 acres (ac.) of fill in wetlands to reconfigure the site previously known as the Baumberg Tract.

The Baumberg Tract is located to the south of Highway 92 and east of the San Mateo Bridge Toll Plaza, at the end of Eden Landing Road (Figures 1 & 2). The site name has been changed to Eden Landing Ecological Reserve (Reserve). This application is being processed pursuant to the provisions of Section 404 of the Clean Water Act (33 U.S.C. 1344) and Section 10 of the Rivers and Harbors Act of 1899 (33 U.S.C. 403).

An additional approximately 25,00 linear feet (96,500 cubic yards (cy)) of fill will be placed in the form of side-castings during excavation of interior channels. These side-castings would be no more than 0.5-foot above the adjoining ground, and no more than 40 feet in length per section. The sections would be placed on alternating sides of the channel.

Also, 144,000 cy of material resulting from the lowering of existing levees will be spread out over surrounding land surface to a depth of no greater than 0.5 foot. (Note that development of tidal marsh will require sediment deposition in any case.)

II. PROJECT DESCRIPTION: The Reserve site consists of approximately 835 ac. of inactive salt production ponds, diked salt marsh, seasonal/ruderal

wetlands, and portions of Mt. Eden Creek (Figure 3). The project would restore tidal action and establish salt marsh on 570 ac., which are now abandoned salt ponds (515 ac.), roads and levees (25 ac.), and active salt ponds (30 ac.) (Table 1) (Figures 4 – 10).

The approximately 124 ac. of existing snowy plover habitat, plus an additional 2 ac., would be enhanced by adding a perimeter moat (to boost production/brood survival) and by seasonal flooding (to maintain high soil salinity levels and discourage vegetation) (Figure 11). Two small islands would be constructed in the snowy plover area to provide additional nesting and roosting sites. Thirty-seven ac. (37 ac.) of abandoned salt pond would be converted to seasonal marsh, resulting in a post-project total of 95 ac. of seasonal wetlands. Finally, 6.5 ac. of existing salt pond would be filled to make a levee for the North Channel.

The project would: create a high marsh berm to provide for emergency access to the East Bay Dischargers Authority Wastewater pipeline (Figure 12); relocate some existing salt processing facilities (Figure 13); install water control structures; support a section of the Bay Trail (Figures 14 & 15); and remove unnecessary levees and dikes in the interior of the restoration area.

III. PURPOSE AND NEED: The purpose of this project is to reconfigure the former Baumberg Tract to benefit the salt marsh harvest mouse (SMHM), clapper rail, and snowy plover. Participation in the project will also satisfy mitigation requirements for the Caltrans/ City of Fremont/City of Milpitas Dixon

Landing Road Interchange Project (21.4 ac. for 15.8 ac. of impacts) and for a City of San Jose National Pollution Discharge Elimination System (NPDES) permit (380 acres) from the Regional Water Quality Control Board (RWQCB).

IV. STATE APPROVALS: The applicant has been notified to contact the Regional Water Quality Control Board, Bay Area Region, to determine the need for State water quality certification. If the State Water Resources Control Board determines that this project is consistent with the California Water Quality Control Plan, requirements adopted by the Regional Board and Sections 301, 302, 303, 306 and 307 of the Clean Water Act, the State will issue a Certificate of Conformance with Water Quality Standards to the project proponent. Those parties concerned with any water quality problems that may be associated with this project should write to the Executive Officer, California Regional Water Quality Control Board, San Francisco Bay Region, 1515 Clay St. - Suite 1400, Oakland, California 94612.

The applicant has also been notified to contact the San Francisco Bay Conservation and Development Commission (BCDC) in order to ensure that the project is consistent with the State's Coastal Zone Management Program.

V. ANTICIPATED IMPACTS TO THE AQUATIC ENVIRONMENT: The Corps of Engineers is assessing the environmental impacts of the action proposed in accordance with the requirements of the National Environmental Policy Act of 1969 (Public Law 91-190), and pursuant to the Council on Environmental Quality's Regulations, 40 CFR 1500-1508, and Corps of Engineers' Regulations, 33 CFR 230 and 325, Appendix B.

A. Physical/Chemical Characteristics and Anticipated Changes

Substrate (Physical/Chemical) - Water control structures will be installed so that the 126 acres of post-project snowy plover ponds can be flooded as needed to increase the salinity level of the pond substrate. This would discourage plant growth and maintain the open areas needed by the plovers and other shorebirds. This would be considered an

indirect*, major, long-term, beneficial effect.

Currents/Circulation - The project would enhance circulation within and to the Reserve by excavating and realigning the North Creek and Mount Eden Slough channels. This would be a direct, major, long-term, beneficial effect.

Drainage Patterns - New interior channels would be excavated to promote efficient tidal drainage and transport of sediment throughout the restoration areas. This would be a direct, major, long-term, beneficial effect.

Water Quality - The reintroduction of tidal influence to the project site would generally improve hydrologic functions and water quality near the project in San Francisco Bay. Water-borne pollutants that may be discharged or carried into the project site by Mt. Eden Creek or North Creek would be naturally filtered by marsh vegetation and by entrapment of sediment on the developing marsh plain. This would be an indirect, moderate, long-term, beneficial effect.

B. Biological Characteristics and Anticipated Changes

Wetlands (Special Aquatic Sites) - Full tidal action would be restored to 570 acres which presently support abandoned salt ponds (515 acres), levees (25 acres), and diked marsh/active salt ponds (30 acres). It is intended that tidal marsh vegetation become established in these areas as sedimentation raises the substrate elevation to the appropriate levels. This recreation of former salt marsh habitat would be an indirect, major, long-term, beneficial effect.

Endangered Species - SMHM, clapper rail, and snowy plover are present on the project site. The 570 ac. of new tidal marsh would benefit both the SMHM and the clapper rail. (12.6 ac of this new tidal marsh represents a 2:1 compensation for SMHM impacts by the Dixon Landing Road Interchange project). The

* In this document the term "indirect" is applied to effects that will occur later in time, such as the development of marsh vegetation as sediment accumulates. Although the effects addressed are key parts of the project, they will, by design, not be present instantaneously upon completion of the reconfiguration work.

snowy plover would benefit from the enhancement of 124 ac. of existing habitat plus the creation of 2 ac. of new habitat. These would be indirect, major, long-term, beneficial effects.

Habitat for Fish, Other Aquatic Organisms, and Wildlife - Shorebirds and waterfowl presently use the site, the use varying by season and extent of water present. The post-project extent of use will depend on how much marsh vegetation has become established. Eventually there will be much less open area available for shorebirds and waterfowl than there is now, however, the 126 acres of snowy plover area, Pond 1B, and four additional panne ponds to be constructed in 8B and 9B will provide continuing shorebird and waterfowl habitat. This would be a direct, moderate, long-term, somewhat adverse, effect on shorebird and waterfowl habitat. In the short term, shorebird and waterfowl use may increase.

C. Cultural Resources - Three cultural resource sites, two prehistoric sites, and one historic site (Dixon Landing) are present on the site. All restoration construction work would avoid the two prehistoric sites. The primary project activities are: removing levees, some channel excavation, and flooding of previously diked areas. Channel excavation would be at least 1 foot above the anticipated minimum historic basement elevation of the channel, and historic levees could not be taken below 1-2 feet above their historic elevation. Should any cultural resources be uncovered during construction, work within 30 feet would be halted and an archaeologist consulted to develop and implement procedures to determine the significance of the find. Means of protecting it would be determined and implemented.

VI. SUMMARY OF INDIRECT IMPACTS: Due to the gradual process of marsh development (and of salt concentration in the snowy plover areas) most of the project impacts are indirect. Beneficial indirect impacts include the control of plant growth in the snowy plover/shorebird habitat, the improvement of local water quality, and the gradual development of 37 acres of marsh (for use by SMHM and clapper rail) on what is now abandoned salt pond. The primary adverse indirect impact would be the gradual loss of some existing shorebird and waterfowl habitat.

VII. SUMMARY OF CUMULATIVE IMPACTS: The proposed project will be a beneficial addition to a number of existing and proposed restoration projects along the east and west margins of South San Francisco Bay.

Other restoration projects which have occurred on the east side of south San Francisco Bay (Bay) include: Oro Loma Marsh (150 ac. tidal marsh, 1998, Roberts Landing (128 ac. tidal marsh), San Leandro Shoreline (172 acres of tidal marsh, 1994), and Martin Luther King Jr. Regional Shoreline Wetlands Project (33 acres of tidal marsh and 13 acres of seasonal wetland enhancement/creation, 1998). These projects represent a total of 483 ac. of tidal restoration and 13 ac. of seasonal marsh enhancement/creation. The proposed Eden Landing project would double the amount of restored tidal marsh on the east side of the Bay, and more than triple the amount of enhanced/created seasonal wetland.

In addition, the Hayward Area Recreation District is planning an enhancement for snowy plover (acreage unknown) on the Oliver property to the north of Highway 92 which is just to the north of the Eden Landing Road project.

Also, several projects are being proposed along the west side of the Bay including Bair Island (1400 ac. tidal marsh, 2002?), Outer Bair Island (ac. unknown, 2000?), and Deep Water Slough Island (30 ac., 2000?).

VIII. EVALUATION OF ALTERNATIVES: Evaluation of this activity's impacts on the public interest will also include application of the guidelines promulgated by the Administrator of the Environmental Protection Agency under Section 404(b) of the Clean Water Act (33 U.S.C. Section 1344(b)). An evaluation pursuant to the Section 404(b)(1) Guidelines indicates that the project is water dependent.

Although an alternatives analysis is not required for the 404(b)(1) process, the applicant considered several alternative designs under the state California Environmental Quality Act (CEQA) process.

The applicant considered four alternatives: 1) Snowy Plover Habitat Management (Figure 16), 2) Maximization of Tidal Restoration (Figure 17), 3) Hybrid Alternative (Proposed Project), and 4) No Project. These alternatives were evaluated based on:

- a) ability to achieve restoration and management goals;
- b) costs, logistics, and technology for implementing the desired restoration;
- c) compatibility with existing infrastructure and utilities; and
- d) compatibility with existing site values.

Although tidal marsh would be massed closer to the Bay, the principal disadvantage of Alternative 2 is the conversion of existing high value snowy plover and shorebird habitat to tidal marsh. Alternative 1 would have similar results and would have greater impacts to cultural resources. The No Project alternative would not fulfill the project objectives for tidal restoration and marsh habitat creation associated with established recovery plans for the SMHM and California clapper rail. Therefore, the preferred alternative (the proposed project) is Alternative 3.

Within Alternative 3, an alternative channel alignment is also being considered for approximately 4300 feet of the lower Mt. Eden Creek Channel (Figure 18). This alternative would relocate the new Mt. Eden Slough channel into the Cargill Salt Company's active intake pond (#10). This alternative is being considered to avoid the loss of 3.8 acres of existing marsh in the Mt. Eden Creek channel. The alternative would also result in the loss of approximately 11.9 acres of active salt pond. Approximately 5.4 acres of the salt pond would be filled for construction of a new levee and 6.5 acres of the existing pond would be converted to tidal channel and eventually tidal marsh/mudflat. The existing Pond 10 levee along Mt. Eden Creek would be removed/excavated to restore elevations suitable for tidal marsh. This would provide approximately 6.5 acres of tidal marsh/new wetland to offset the loss due to the new Pond 10 levee.

X. CONCLUSIONS AND RECOMMENDATIONS: Based on an analysis of the above identified impacts, a preliminary determination has

been made that it will not be necessary to prepare an Environmental Impact Statement (EIS) for the subject permit application. The Environmental Assessment for the proposed action has, however, not yet been finalized, and this preliminary determination may be reconsidered if additional information is developed.

XI. PUBLIC INTEREST EVALUATION: The decision whether to issue a permit will be based on an evaluation of the probable impacts, including cumulative impacts, of the proposed activity and its intended use on the public interest. Evaluation of the probable impacts the proposed activity may have on the public interest requires a careful weighing of all those factors, which become relevant in each particular case. The benefits that reasonably may be expected to accrue from the proposal must be balanced against its reasonably foreseeable detriments. The decision whether to authorize a proposal, and if so the conditions under which it will be allowed to occur, are therefore determined by the outcome of the general balancing process. That decision will reflect the national concern for both protection and utilization of important resources. All factors that may be relevant to the proposal must be considered, including the cumulative effects thereof. Among those are conservation, economics, aesthetics, general environmental concerns, wetlands, cultural values, fish and wildlife values, flood hazards, floodplain values, land use, navigation, shore erosion and accretion, recreation, water supply and conservation, water quality, energy needs, safety, food and fiber production, mineral needs, considerations of property ownership, and, in general, the needs and welfare of the people.

XII. PUBLIC COMMENT:

A. Request for Comments. The Corps of Engineers is soliciting comments from the public, Federal, State and local agencies and officials, Indian Tribes, and other interested parties in order to consider and evaluate the impacts of this proposed activity. Any comments received will be considered by the Corps of Engineers to determine whether to issue, modify, condition or deny a permit for this proposal. To make this decision, comments are used to assess impacts on endangered species, historic properties, water quality, general environmental effects, and the other public

interest factors listed above. Comments are used in the preparation of an Environmental Assessment and/or an Environmental Impact Statement pursuant to the National Environmental Policy Act. Comments are also used to determine the need for a public hearing and to determine the overall public interest of the proposed activity.

B. Information for Commenters. Interested parties may submit, in writing, any comments concerning this activity. Comments should include the applicant's name, the number, and the date of this Notice and should be forwarded so as to reach this office within the comment period specified on page one of this Notice. Comments should be sent to Attention: Regulatory Branch - 8th Floor, Corps of Engineers, 333 Market Street, San Francisco, CA, 94105-2197. It is Corps policy to forward any such comments that include objections to the applicant for resolution or rebuttal. Any person may also request, in writing, within the comment period of this Notice that a public hearing be held to consider this application. Requests for public hearings shall state, with particularity, the reasons for holding a public hearing. Additional details may be obtained by contacting the applicant whose phone number is indicated in the first paragraph of this Notice, or by contacting Molly Martindale of our office at telephone (415) 977-8448. Details on any changes of a minor nature that are made in the final permit action will be provided on request.

Proposed Project:	Existing Conditions				Post Project
Restored Conditions/Habitat Types	Abandoned Salt Pond	Roads & Levees	Active Salt Ponds	Seasonal Marsh	Habitat Acres
Tidal salt marsh	515	25	30		570
Salt Pan/Snowy Plover	124	2			126
Seasonal Marsh	37			58	95
North Channel Levee			6.5		6.5

Purpose: Wetland
Restoration and Habitat
Management

Eden Landing Ecological Reserve,
Hayward, California

Near: San Francisco Bay,
Mt. Eden Creek, and Old
Alameda Creek

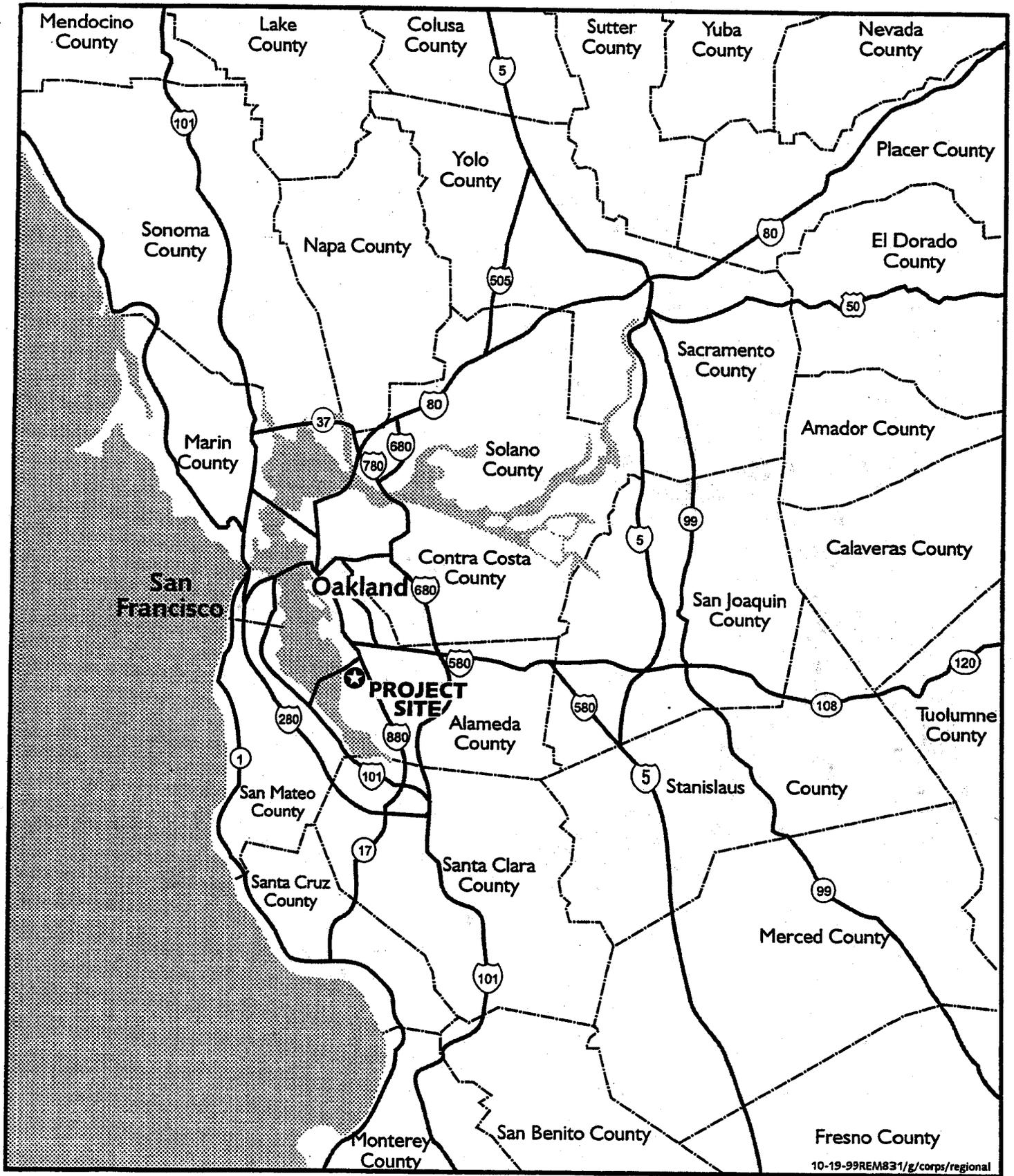
Table 1

Datum: NGVD

Comparison of Habitat Acreage for
Existing and Post Project
Conditions

County of Alameda

Applicant: The California
Department of Fish and
Game



10-19-99REM831/g/corps/regional

Purpose: Wetland Restoration and Management
Datum: NGVD

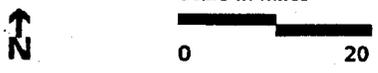
EDEN LANDING ECOLOGICAL RESERVE RESTORATION AND MANAGEMENT PLAN

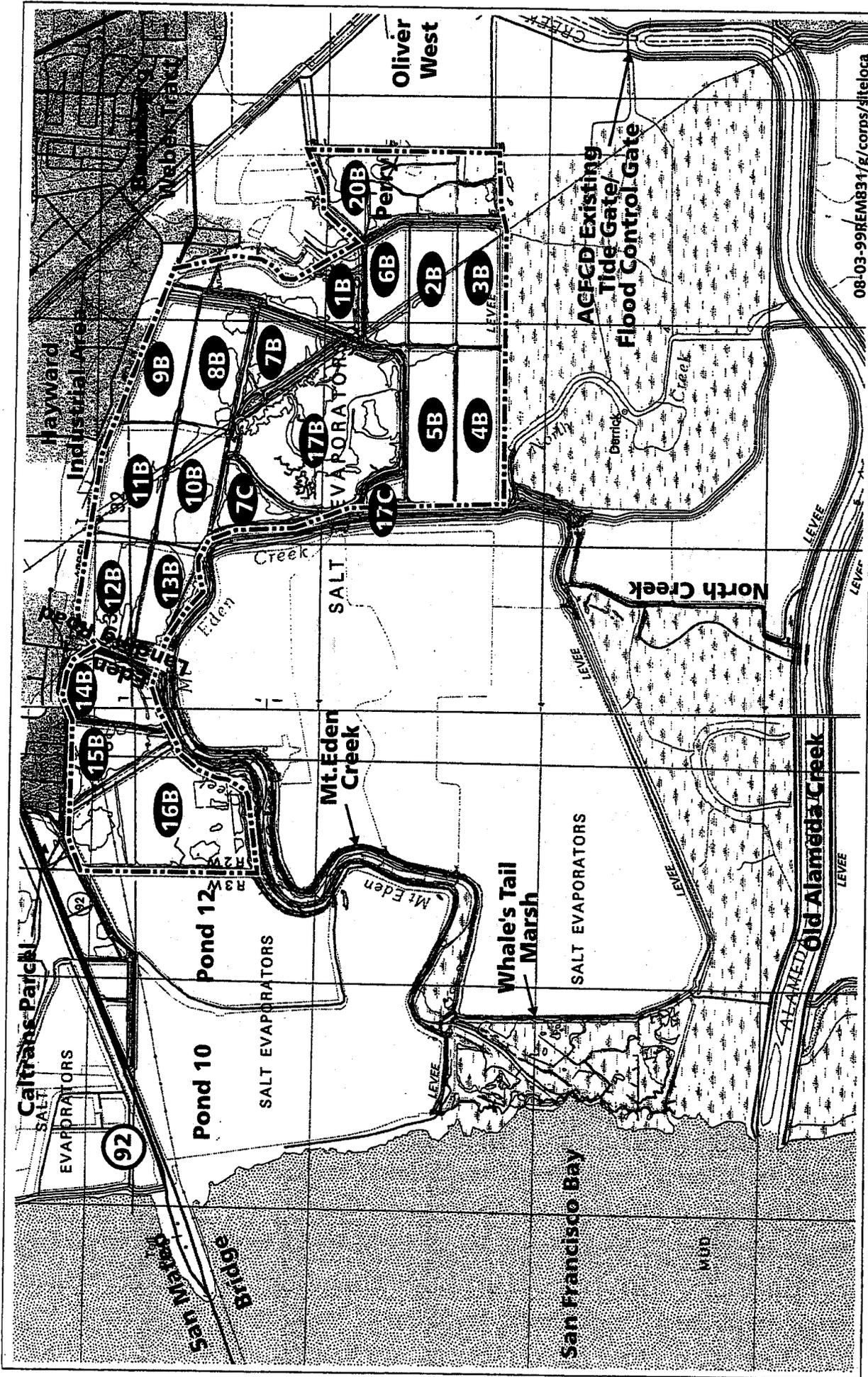
Near: San Francisco Bay, Old Alameda Creek and Mt. Eden Creek
County: Alameda

Figure 1

Regional Site Location Map

State: California
Application by: California Department of Fish and Game
 P.O. Box 47
 Yountville, CA 94599





Purpose: Wetland Restoration and Management
 Datum: NGVD
 Scale in feet
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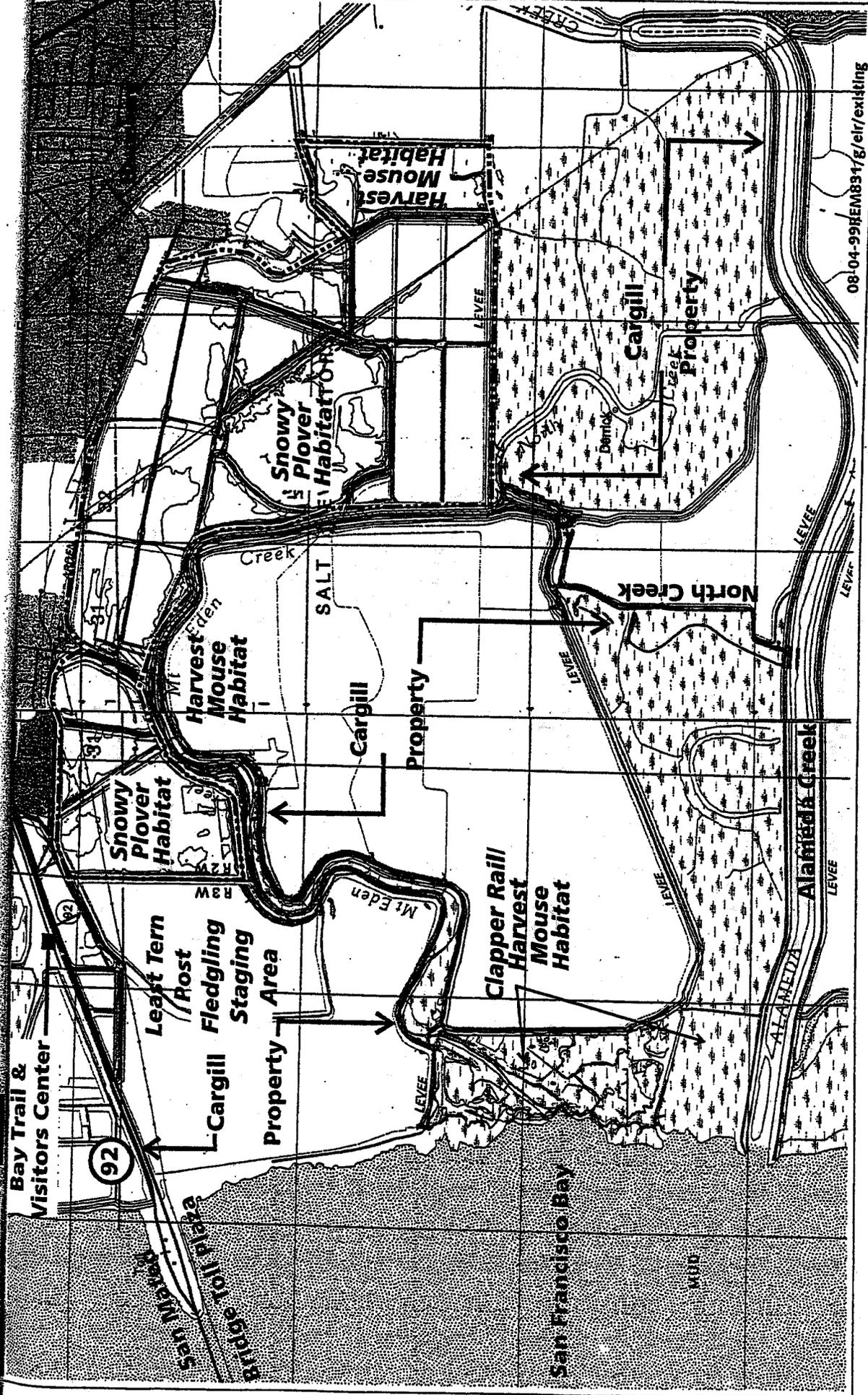
EDEN LANDING ECOLOGICAL RESERVE
 RESTORATION AND
 MANAGEMENT PLAN
 Figure 2
 Site Location and Place Names

Near: San Francisco Bay, Old Alameda
 Creek and Mt. Eden Creek
 County: Alameda
 State: California
 Application by: California Department of
 Fish and Game PO. Box 47
 Yountville, CA 94599

08-03-99REM831/g/corps/siteloca



Scale in feet



08-04-99/EM831/g/eir/existing



Scale in feet

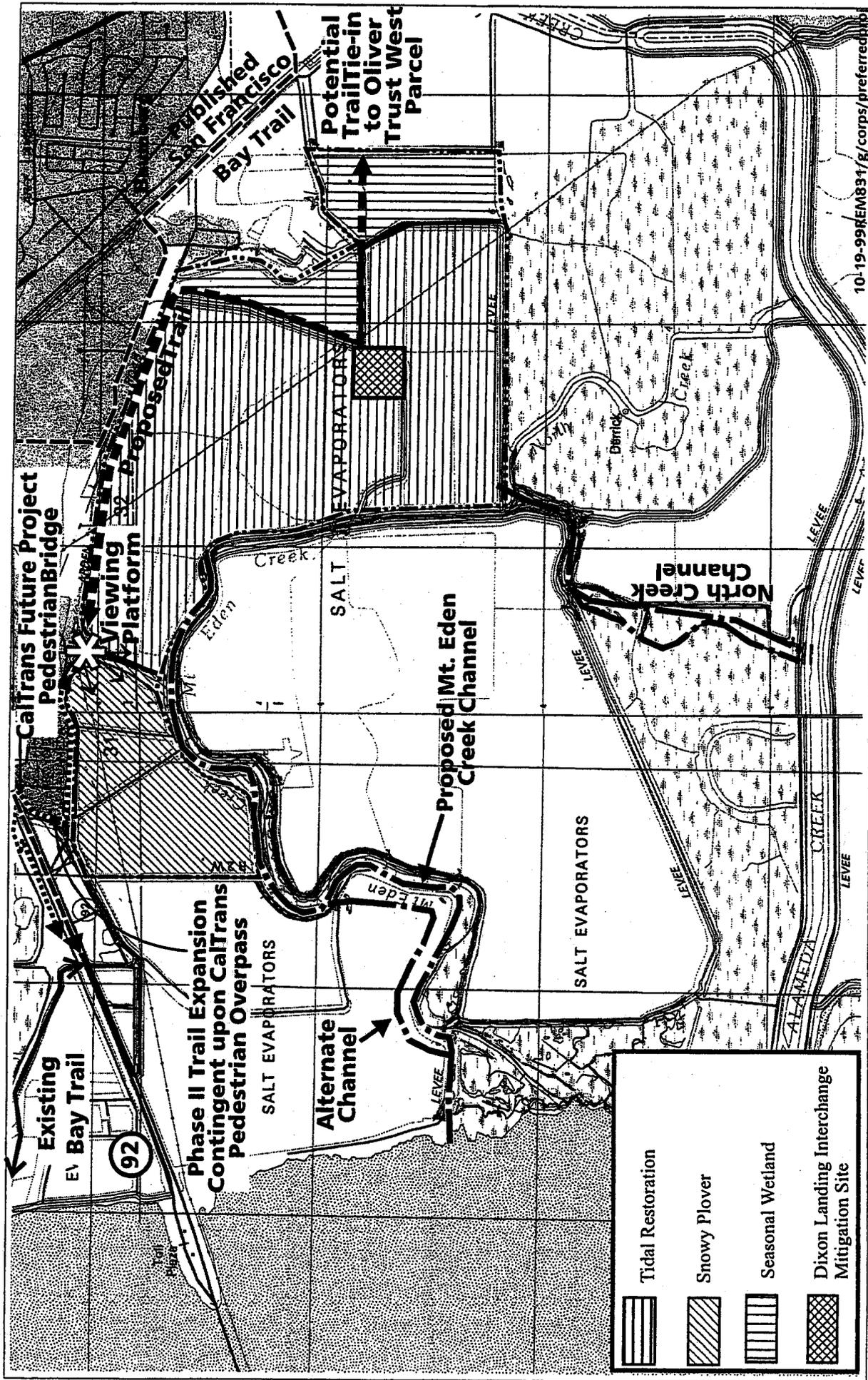
0 2000

Existing Conditions

Figure 3

EDEN LANDING ECOLOGICAL RESERVE
RESTORATION AND MANAGEMENT PLAN





10-19-99REM831/g/corps/preferred

**EDEN LANDING ECOLOGICAL RESERVE
RESTORATION AND
MANAGEMENT PLAN**

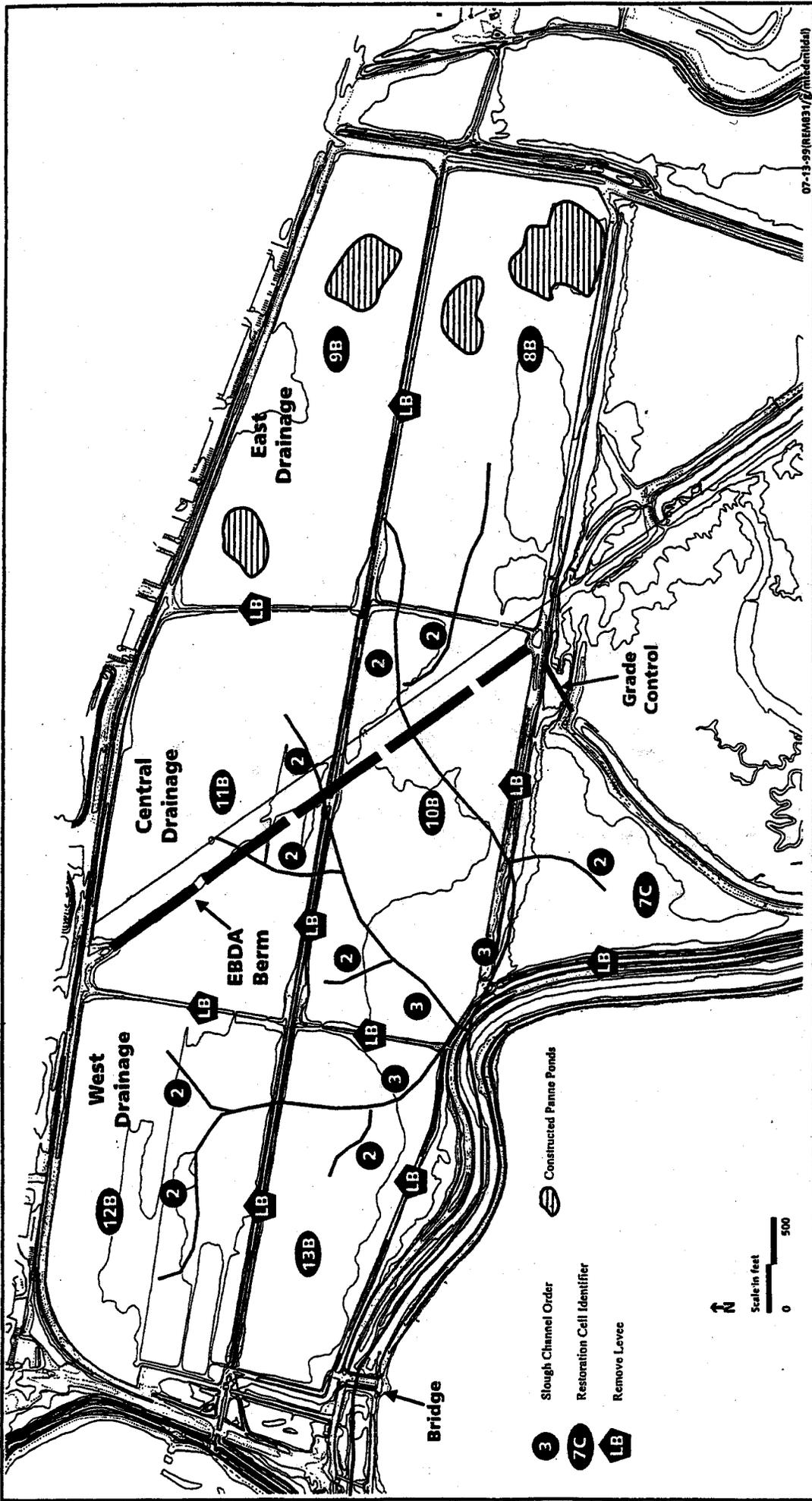
**Purpose: Wetland Restoration
and Management**
Datum: NGVD

Near: San Francisco Bay, Old Alameda
Creek and Mt. Eden Creek
County: Alameda
State: California
Application by: California Department of
Fish and Game P.O. Box 47
Yountville, CA 94599

Figure 4

Preferred Plan





Purpose: Wetland Restoration and Management

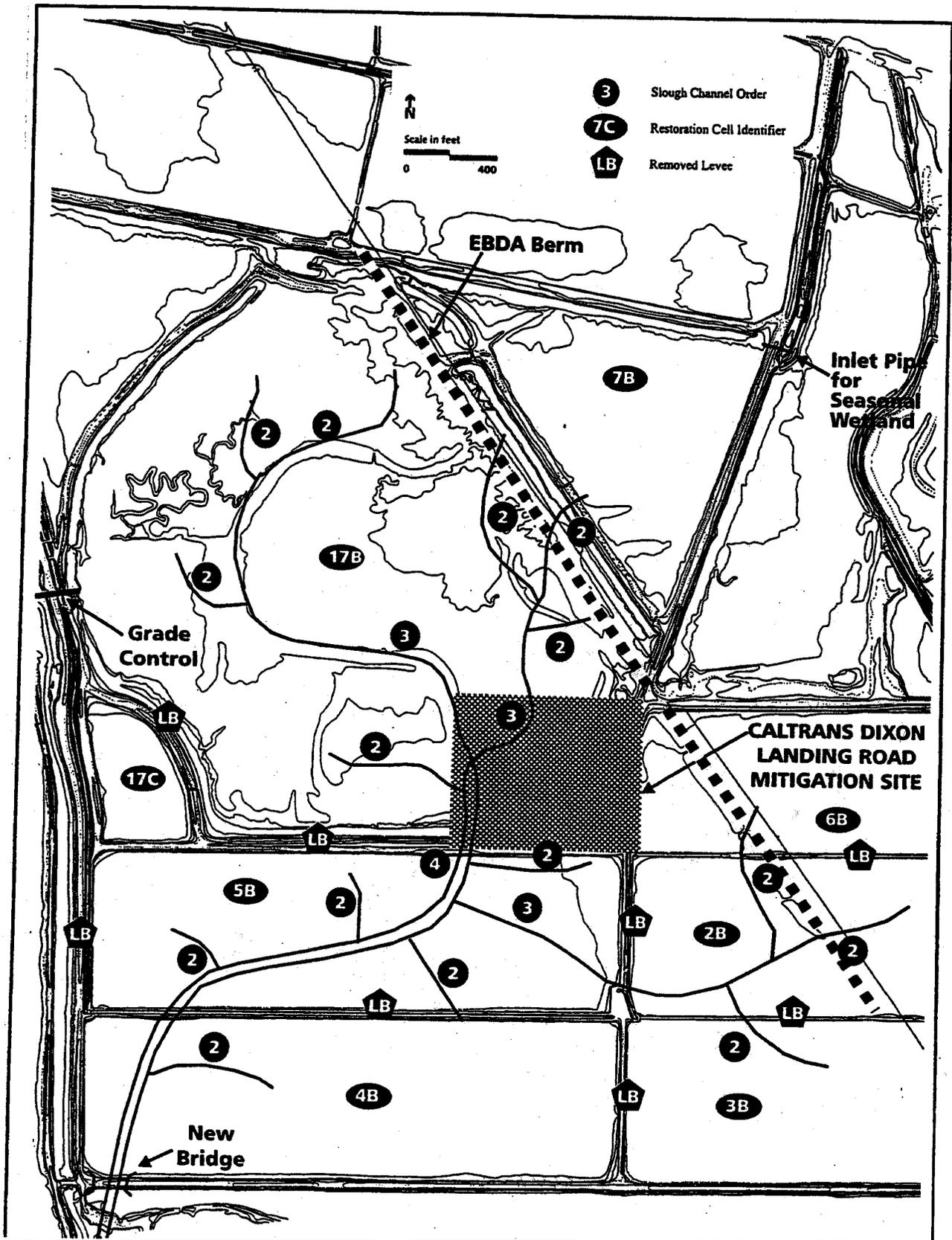
Eden Landing Ecological Reserve Restoration and Management Plan

Near: San Francisco Bay, Mt. Eden Creek, and Old Alameda Creek
 County: Alameda
 State: California
 Applicant: The California Department of Fish and Game

Datum: NGVD

Figure 5

Plan Form of Tidal Drainage For Mt. Eden Slough Restoration Area



Purpose: Wetland Restoration and Management

Datum: NGVD

Eden Landing Ecological Reserve Restoration and Management Plan

Figure 6

Plan Form of Tidal Drainage For North Creek Slough Restoration Area

Near: San Francisco Bay, Mt. Eden Creek, and Old Alameda Creek

County: Alameda

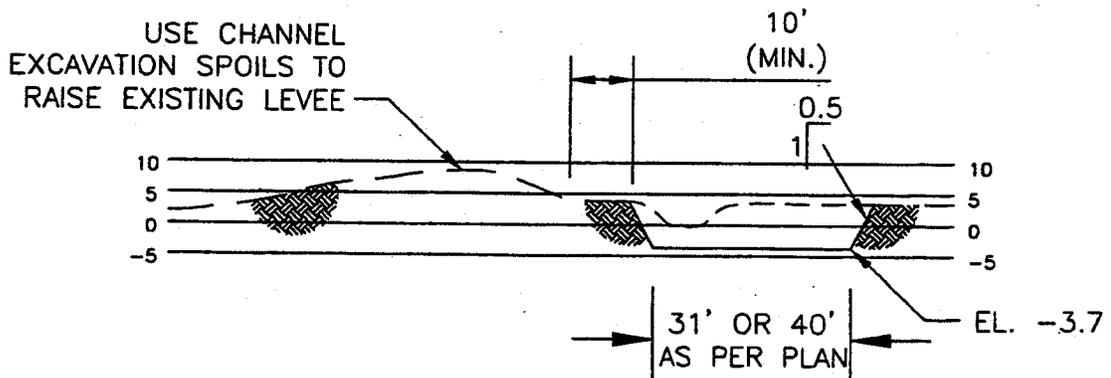
State: California

Applicant: The California Department of Fish and Game

CROSS-SECTIONS

LEGEND:

- PROPOSED
- - - - - EXISTING TO REMAIN
- - - - - EXISTING TO BE CHANGED



CROSS-SECTION A
1
1"=30'

Purpose: Wetland Restoration and Management

Eden Landing Ecological Reserve Restoration and Management Plan

Near: San Francisco Bay, Mt. Eden Creek, and Old Alameda Creek

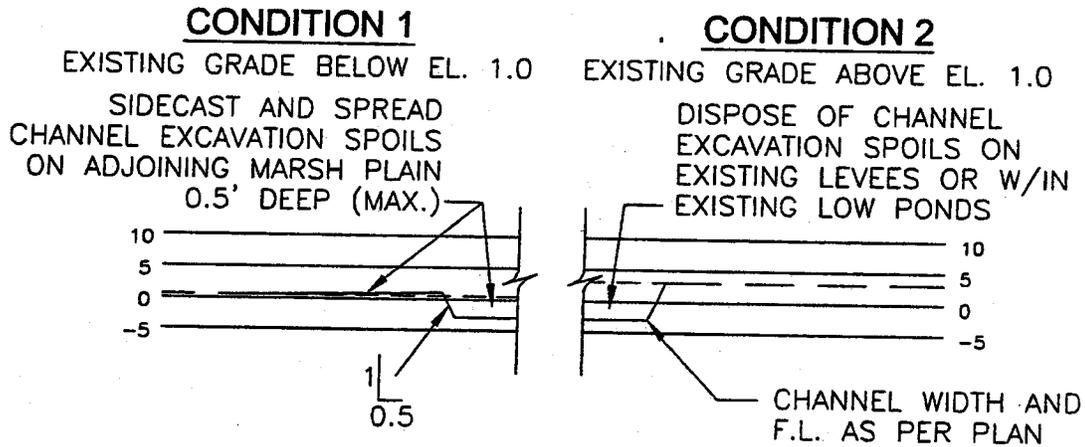
Datum: NGVD

Figure 7

County: Alameda
State: California

Representative Cross-Section
Mt. Eden Creek Channel

Applicant: The California Department of Fish and Game



CROSS-SECTION
TYPICAL CHANNEL
EXCAVATION
 1"=30'

Purpose: Wetland Restora-
 tion and Management

Eden Landing Ecological Reserve
 Restoration and Management Plan

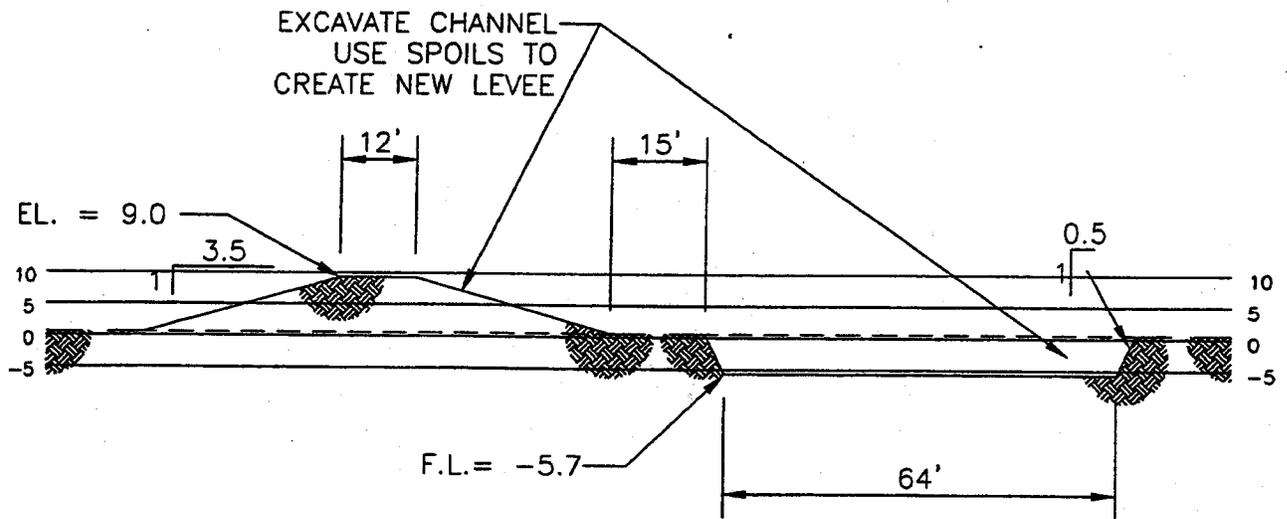
Near: San Francisco Bay,
 Mt. Eden Creek, and Old
 Alameda Creek

Datum: NGVD

Figure 8

Cross-Section of
 Typical Channel Excavation

County: Alameda
 State: California
 Applicant: The California
 Department of Fish and
 Game



CROSS-SECTION $\frac{H}{5}$
1"=30'

Purpose: Wetland Restoration and Management

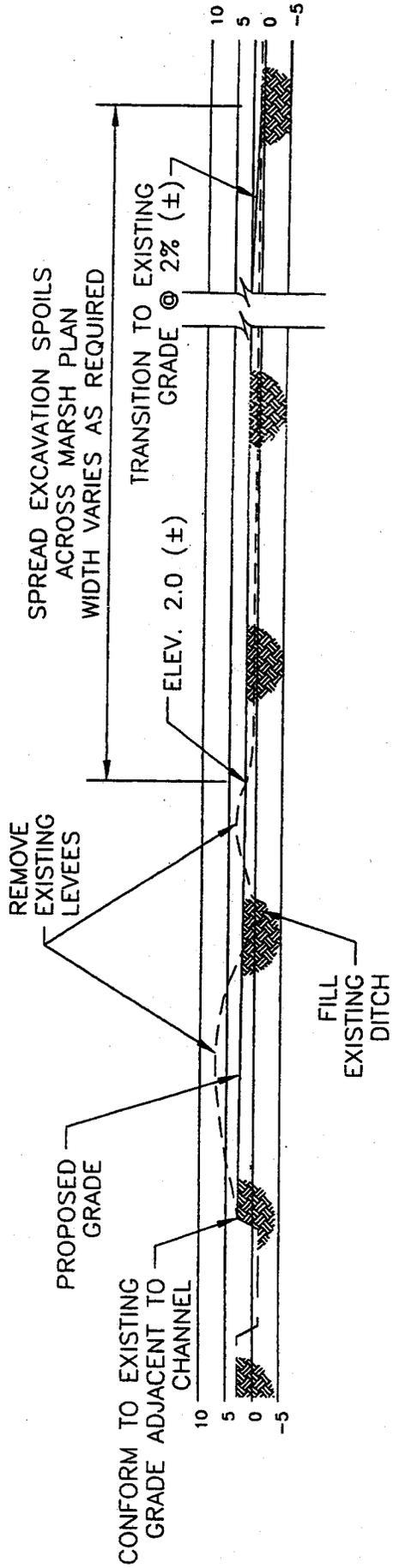
Datum: NGVD

Eden Landing Ecological Reserve
Restoration and Management Plan

Figure 9

Cross-Section of
New North Creek Channel and
New Levee

Near: San Francisco Bay,
Mt. Eden Creek, and Old
Alameda Creek
County: Alameda
State: California
Applicant: The California
Department of Fish and
Game



CROSS-SECTION F
5
1" = 30'

Purpose: Wetland Restoration and Management

Eden Landing Ecological Reserve Restoration and Management Plan

Near: San Francisco Bay, Mt. Eden Creek, and Old Alameda Creek

County: Alameda

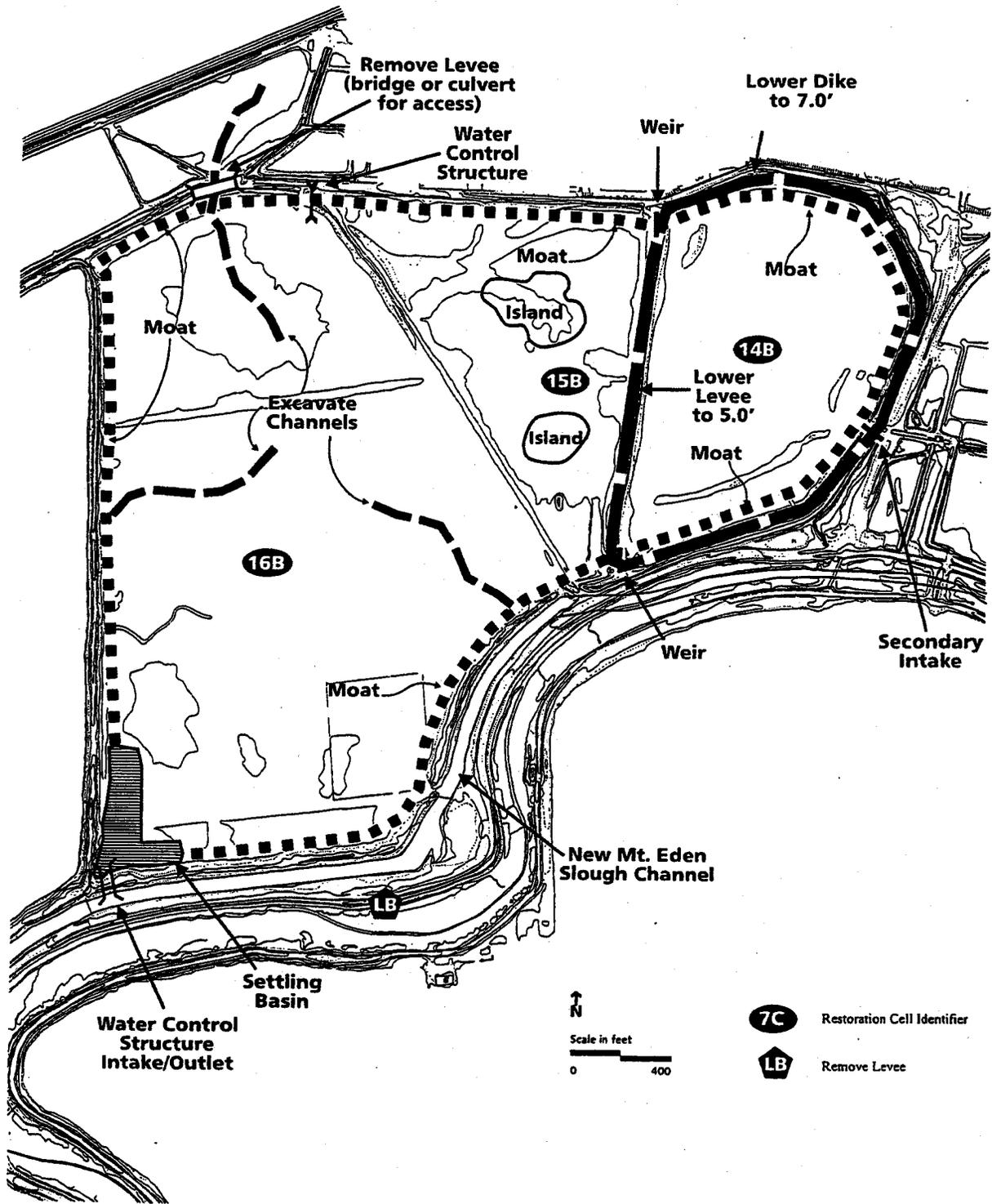
State: California

Applicant: The California Department of Fish and Game

Datum: NGVD

Figure 10

Representative Cross-Section of Existing Levee Removal



Purpose: Wetland Restoration and Management

Eden Landing Ecological Reserve Restoration and Management Plan

Near: San Francisco Bay, Mt. Eden Creek, and Old Alameda Creek

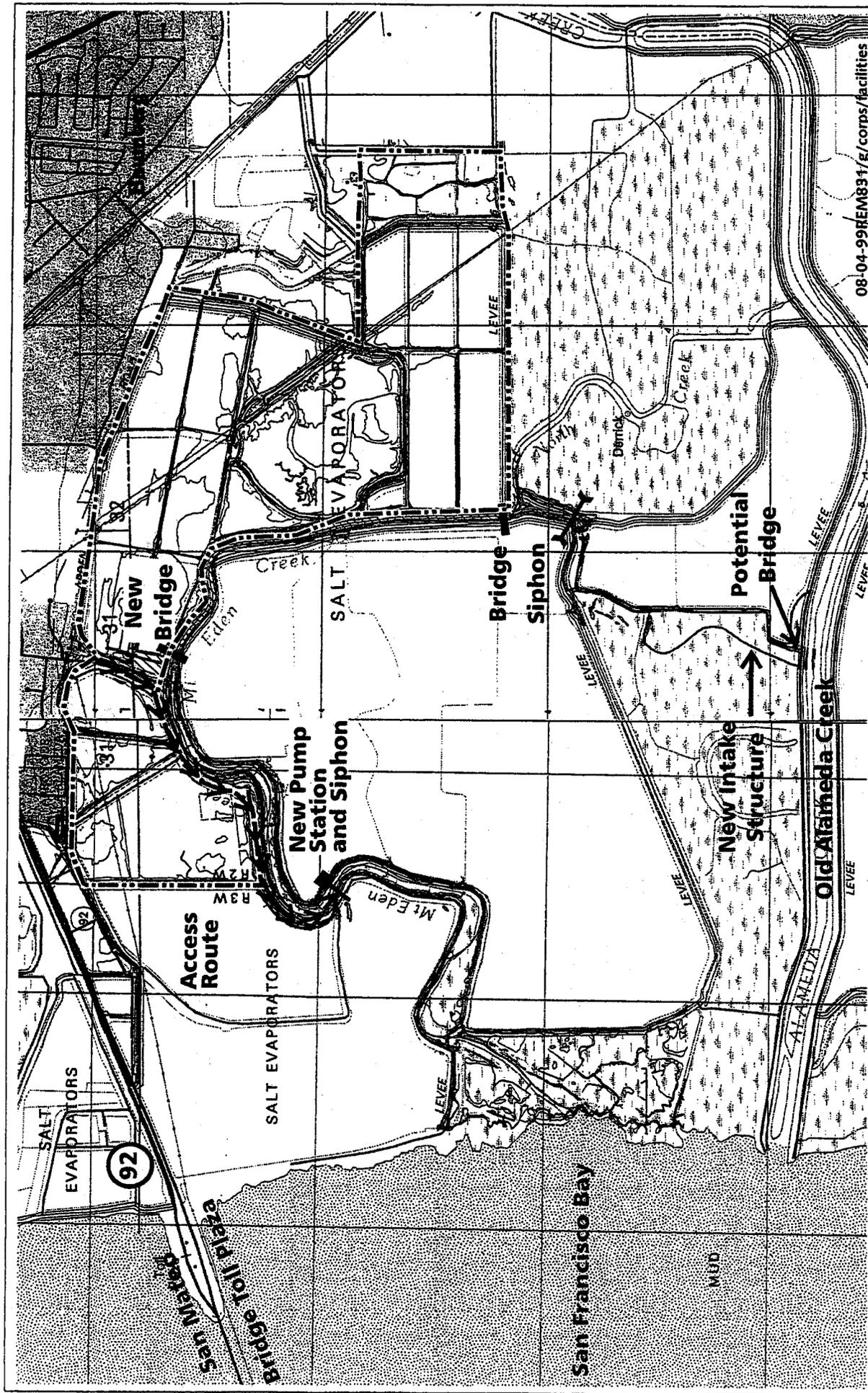
Datum: NGVD

Figure 11

Plan Form Snowy Plover Management Area

County: Alameda
State: California

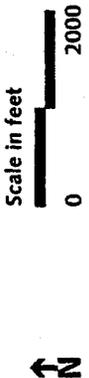
Applicant: The California Department of Fish and Game



Purpose: Wetland Restoration and Management
 Datum: NGVD

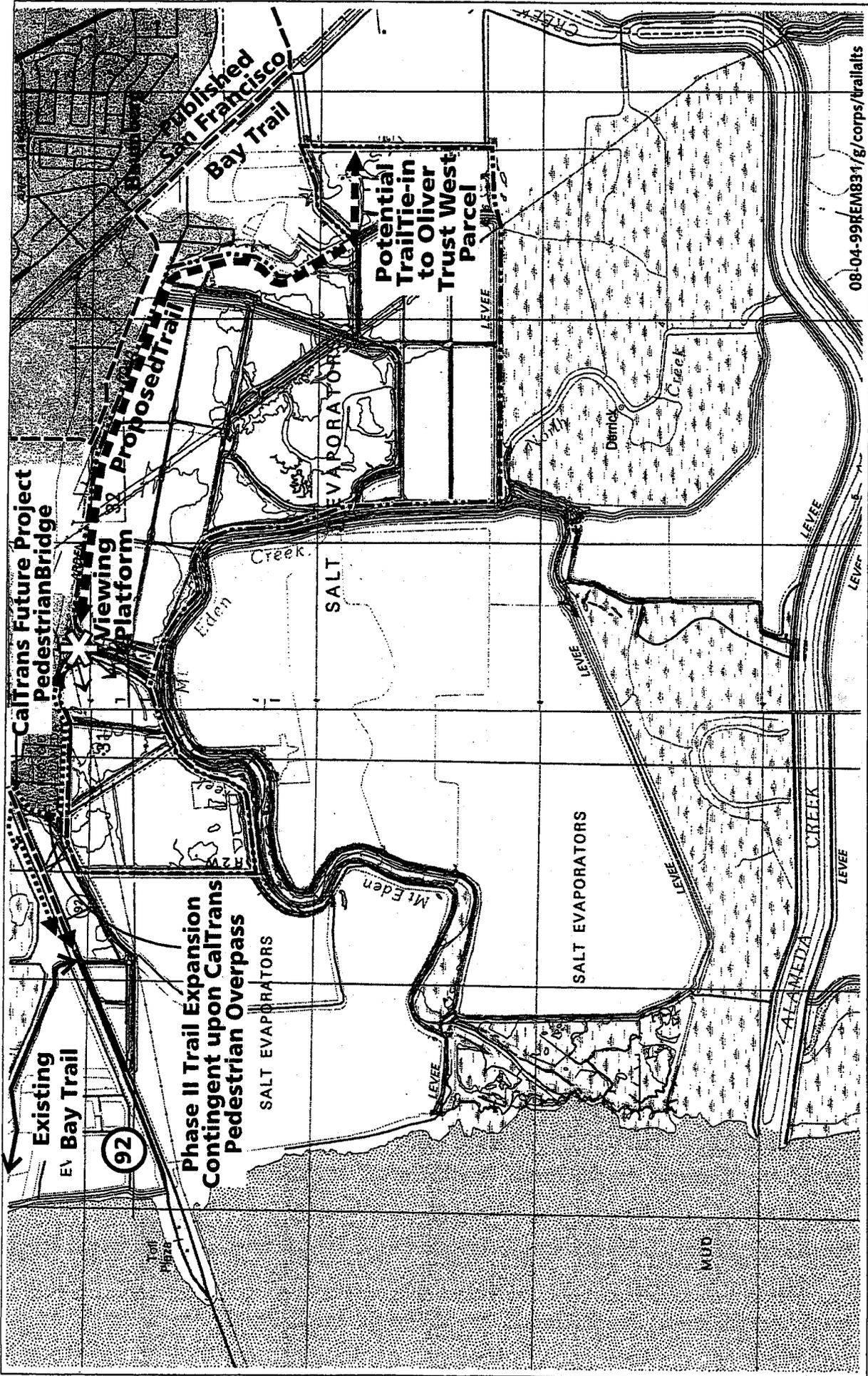
EDEN LANDING ECOLOGICAL RESERVE
 RESTORATION AND
 MANAGEMENT PLAN

Figure 13



Near: San Francisco Bay, Old Alameda
 Creek and Mt. Eden Creek
 County: Alameda
 State: California
 Application by: California Department of
 Fish and Game P.O. Box 47
 Yountville, CA 94599

Facilities Relocation



08-04-99REM831/g/corps/trailalts

Purpose: Wetland Restoration and Management
Datum: NGVD

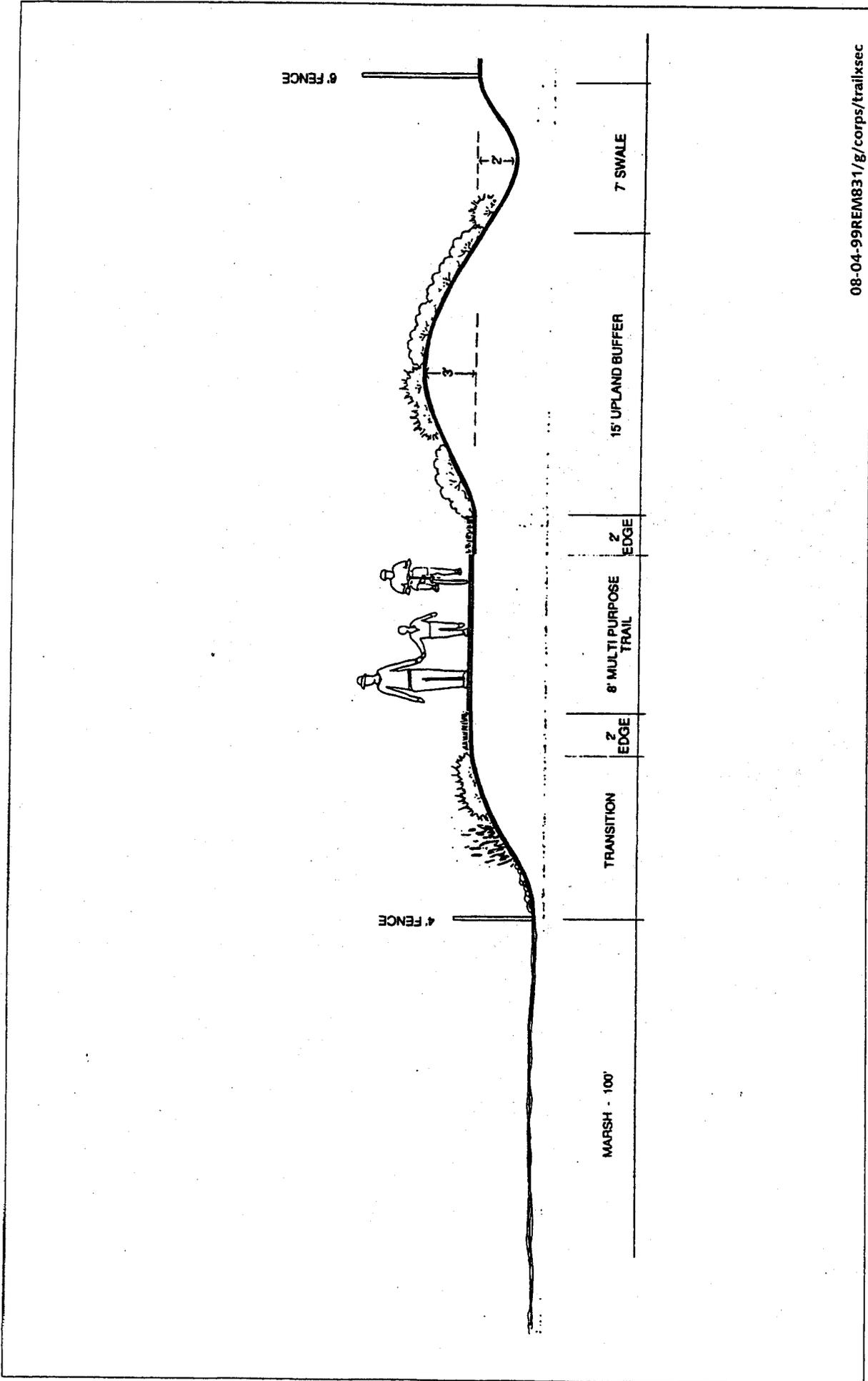
EDEN LANDING ECOLOGICAL RESERVE RESTORATION AND MANAGEMENT PLAN

Figure 14

Scale in feet
 0 2000
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Near: San Francisco Bay, Old Alameda Creek and Mt. Eden Creek
County: Alameda
State: California
Application by: California Department of Fish and Game P.O. Box 47 Yountville, CA 94599

Bay Trail Alternatives



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

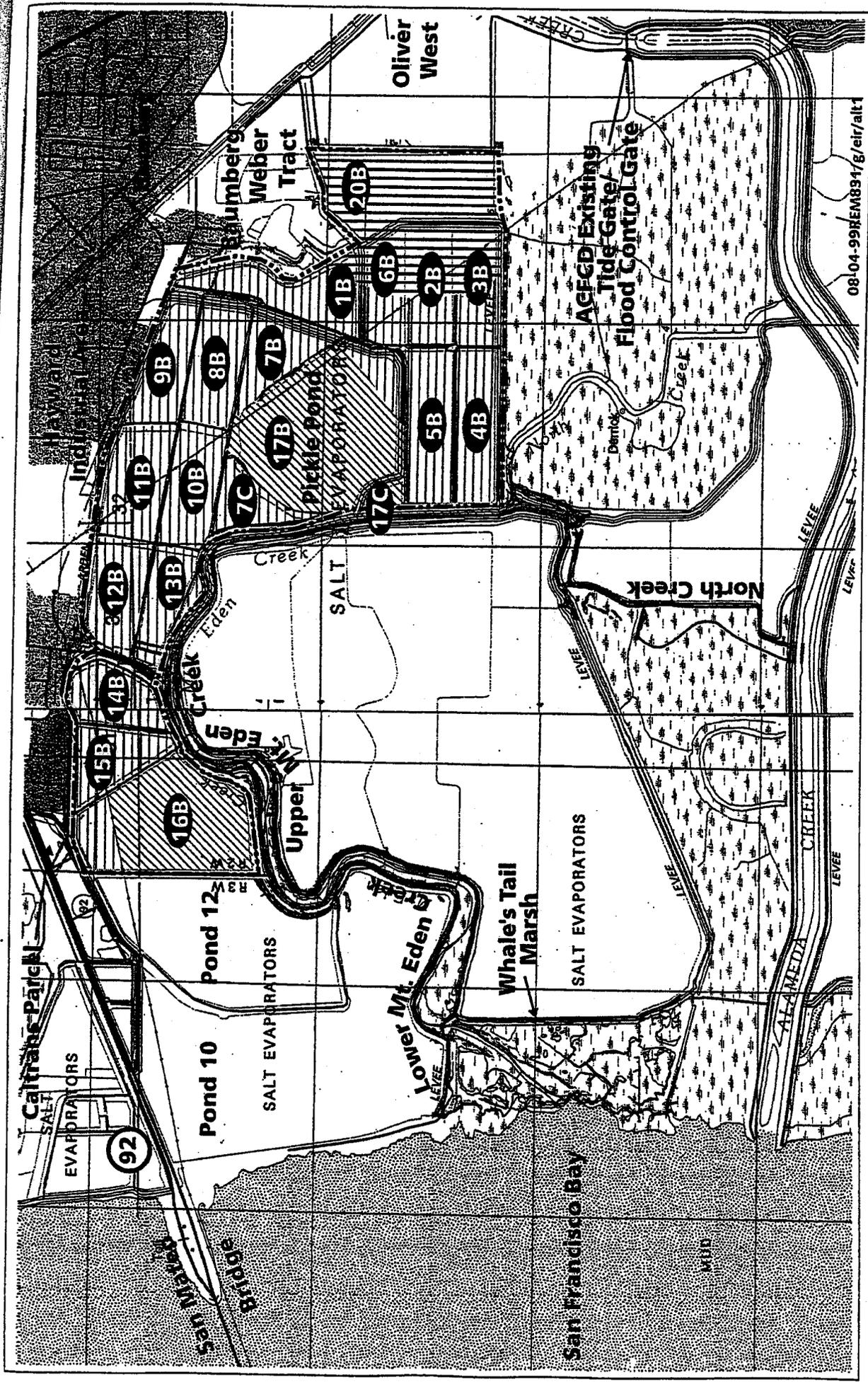
EDEN LANDING ECOLOGICAL RESERVE
RESTORATION AND
MANAGEMENT PLAN

Figure 15

Typical Trail Cross-section

Purpose: Wetland Restoration
and Management
Datum: NGVD

Near: San Francisco Bay, Old Alameda
Creek and Mt. Eden Creek
County: Alameda
State: California
Application by: California Department of
Fish and Game P.O. Box 47
Yountville, CA 94599



08-04-99REM837/geir/alt1

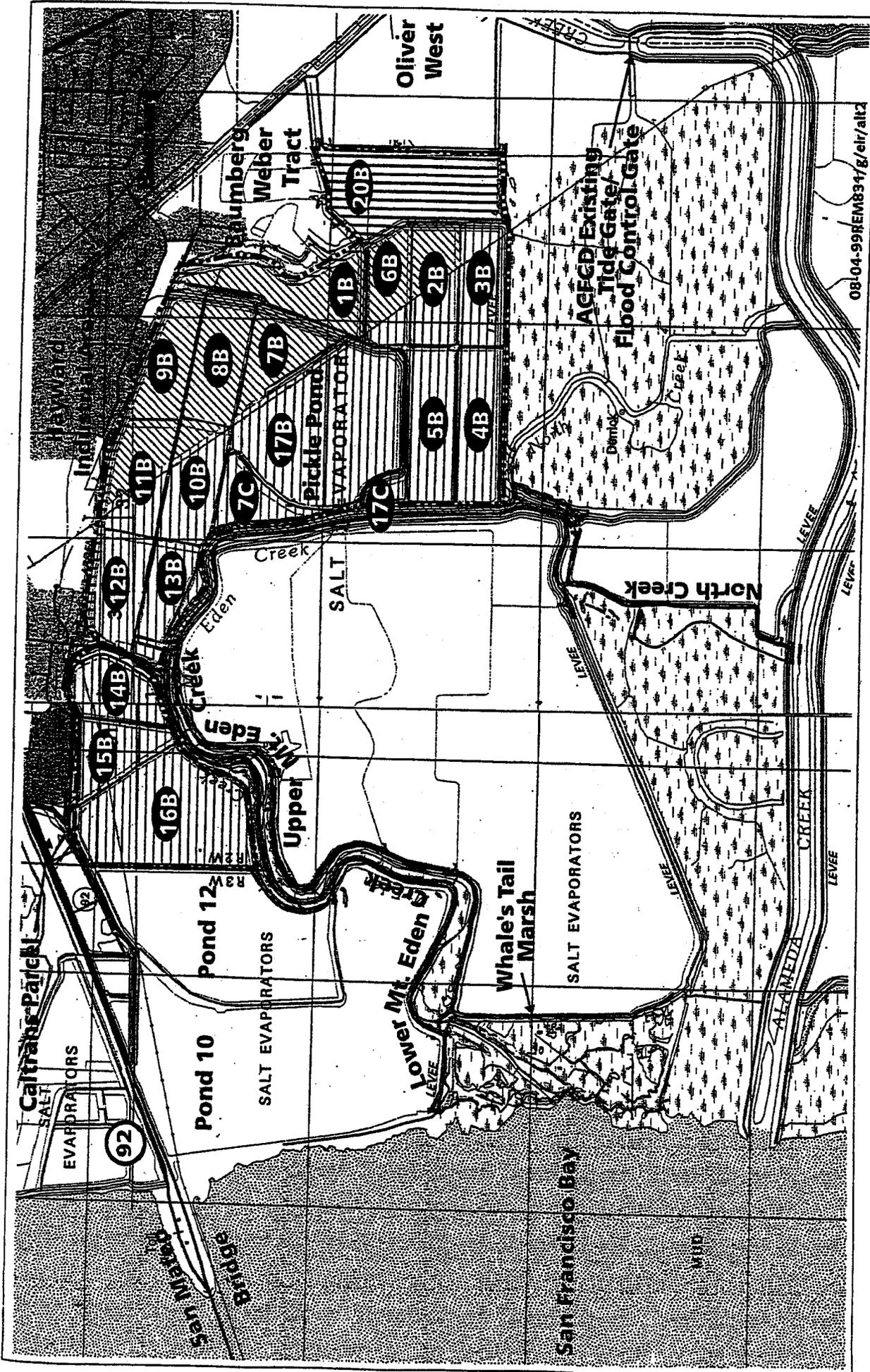
Alternative #1

Figure 16

-  Snowy Plover
-  Salt Marsh Restoration
-  Seasonal Wetland

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 Scale in feet
 0 2000

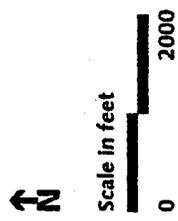




Alternative #2

Figure 17

-  Snowy Plover
-  Salt Marsh Restoration
-  Seasonal Wetland



08104-99/EM834/g/elr/alt2

