

Taken from "Final Roberts Landing
Mitigation and Monitoring Plan"
prepared by Resource Management International, Inc.
and dated May 1995

SECTION 1

SUMMARY

Roberts Landing is an area of approximately 478 acres bordering San Francisco Bay in the City of San Leandro. The State Lands Commission and the City of San Leandro own 272 acres of the property and the remaining 206 acres are owned by Citation Homes. In 1992, the City of San Leandro approved a plan submitted by Citation Homes for a residential development of 79 acres and 127 acres of restored wetland habitat and open space dedicated permanently to the City. The plan is the culmination of 15 years of planning and evaluation at the site and is designed to resolve conflicts over property rights, public access to San Francisco Bay and open space lands, and long-term protection and enhancement of critically important biological resources.

The residential development consists of 79 acres in the southeast corner of the site. Approximately 460 single family detached homes would be developed in the area south of the Lewelling Boulevard extension and approximately 220 townhomes would be developed in the area north of the Lewelling Boulevard extension.

This report describes the proposed mitigation activities associated primarily with the 127 acres of open space, the 9-acre buffer zone and public access area around the residential development, and the 5 acres of adjacent state lands required for the mitigation activities described below. To prepare the 79-acre development site for the 680 homes to be built, approximately 13.2 acres of generally low quality and degraded wetlands will be filled. Compensation for the fill as described in this mitigation plan involves restoring 16 acres of filled, historic baylands to wetland habitat and re-establishing tidal flows to approximately 113 acres of Citation's property and 5 acres of State Lands.

Restoration of the site is designed to be compatible with the City of San Leandro's adjacent Shoreline Marshlands Enhancement Project, which restored a muted tidal regime to approximately ~~272~~ acres of wetlands owned by the City and the State Lands Commission. All of the mitigation lands will be dedicated permanently to open space.

The mitigation plan includes procedures and requirements for implementation of the following components:

- ▶ Restoration of muted tidal action to approximately 118 acres of preserved and restored wetland habitat. Combined with the City's adjacent Shoreline Marshlands Enhancement project, these activities represent the largest restoration of tidal waters to historic marshlands in the central portion of San Francisco Bay.
- ▶ Restoration of 16 acres of new wetland habitat from existing upland areas. These uplands lie within historic bay marshlands that were filled prior to and during the 1960s.
- ▶ Excavation of fill material on 25 acres of the Bluebird area in order to recreate conditions suitable for restoration of viable salt marsh habitat. This area includes 17 acres of low value wetland which has developed on the imported fill material.
- ▶ Establishment and enhancement of approximately 18 acres of upland habitat as refugial habitat for the endangered salt marsh harvest mouse (*Reithrodontomys raviventris raviventris*) and buffer zones between the residential development and adjacent wetlands. This is in addition to 4 acres of old levees which were retained as part of the City's dredged material management site establishment.
- ▶ Creation of a Landscape, Lighting, and Habitat Restoration District to provide a permanent source of funding for on-going maintenance and management including exotic plant and feral animal species control and control/elimination of unauthorized, informal trails, roads, and general inappropriate public access and uses. Management costs are estimated at \$40,000 annually.
- ▶ Construction of the final segment of the San Francisco Bay shoreline trail. This trail segment will be in an area compatible with protection and management of adjacent wetland value, and will provide the final link to the terminus of the existing public trails along the immediate shoreline and at San Lorenzo Creek.
- ▶ Clean-up of localized sites of chemical contamination and restoration of these sites to valuable wetland habitat.
- ▶ Funding mechanisms and procedures to assure implementation of the required mitigation. Funding assurances are also provided for necessary monitoring and implementation of contingency measures should these be necessary to correct any problems which may compromise the success of the mitigation.

These proposed restoration activities are summarized in Table 1.

**Table 1.
Summary of Site Acreages Under
Existing and Future Conditions.**

79 Acres Development Site - Existing	79 Acres Development Site - Future
66 acres upland 13 acres wetland <i>filled</i>	70 acres residential development 9 acre buffer zone (8 acres habitat, 1 acre public access)
127 Acres - Open Space Existing Conditions	127 Acres - Open Space Future Conditions
74 acres of diked salt marsh 17 acres of seasonal wetland (Bluebird) 10 acres of upland habitat 12 acres of upland fill and levees on historic bayland 4 acres of old dredged material disposal site levees* 10 acres of old dredged material disposal site excavated to pre-disposal site elevations*	<div style="border: 1px solid black; border-radius: 15px; padding: 10px;"> 74 acres tidal action restored 17 acres excavated and restored to tidal action 10 acres upland, fill material disposal/recontour 12 acres excavated for wetland compensation; restored to tidal salt marsh 4 acres upland retained in current condition* 10 acres tidal action restored* </div>
5 Acres State Lands - Existing	5 Acres State Lands - Future
4 acres central levee and associated access roads/levees 1 acre historic Roberts Landing Slough	<div style="border: 1px solid black; border-radius: 15px; padding: 10px;"> 4 acres excavated for wetland compensation; restored to tidal marsh condition 1 acre excavated/restored channel with installed tidegate control structure </div>

* Components of City of San Leandro Shoreline Marshland Enhancement Project and Dredged Material Management Site Project.

The principal changes from the January 1992 mitigation and monitoring plan are described below. These changes and modifications are the result of agency and citizen input and do not constitute a change in the permit application:

- ▶ The tidal restoration program has been redesigned from a one-way flow-through system to more natural ebb and flood flows through Roberts Landing Slough, with an additional outflow at the Estudillo Canal.
- ▶ The buffer zone has been expanded from 50 feet to 100 feet for Phases II and III of the project/open space perimeter.
- ▶ The project storm water system has been redesigned to discharge directly into San Lorenzo Creek rather than through the enhanced marshes.
- ▶ The project has been designed to provide Federal Emergency Management Agency (FEMA) approved flood protection to the development area so that future potential restoration of full tidal action to any of the adjacent marshlands will not be inhibited.
- ▶ Contaminant studies have been completed and remediation measures have been incorporated for clean-up and restoration of localized sites of hazardous materials.
- ▶ Additional detail has been provided with respect to construction and clean-up activities and measures to be implemented for protection of existing biological resources during construction activities, as required by the US Fish and Wildlife Service (USFWS) Biological Opinion (July 6, 1992).
- ▶ Additional detail is provided for final excavation and grading including channel design and layout. Also, a slight shift in the Bluebird excavation is proposed in order to provide better access for long term monitoring, maintenance, and management, to shift more of the retained upland areas father away from human use areas, and to allow more efficient use of upland areas for the disposal of excess fill material.
- ▶ The monitoring plan has been modified to better assess mitigation goals for wetland productivity and other vital ecosystem attributes. This revised monitoring plan will place greater emphasis on the potential long-term stability of the mitigation area's ecosystem.
- ▶ Specifics for long-term ownership, management, and funding are provided.

For consistency, this report utilizes the following terms in reference to specific areas and/or ownership. The proposed residential development site will be referred to as the

"project site" or "development site." The remaining undeveloped lands will be referred to as the "open space reserve" or simply "open space." Collectively, the Citation Homes Central property will be referred to as "Citation's property." The terms "Roberts Landing" or "study area" will refer to the entire 478-acre area which includes the State Lands Commission and City properties (including the dredge spoil disposal area). In addition, certain locations or areas are referred to by their commonly accepted names. These include the Bluebird area and Trojan Powder Works site. The Bluebird area encompasses about 30 acres of imported fill material deposited on the site during the 1960s. The Trojan Powder Works site of mixed wetland and upland lies between the Bluebird area, the Lewelling Boulevard extension, and the remnants of the historic Roberts Landing Slough. These areas are indicated on report figures of the study area.

II. PLAN OBJECTIVES

A. ENHANCEMENT OBJECTIVES

The primary objective of the project is to improve water circulation and drainage in the study area consistent with protection of the resident salt marsh harvest mouse population and its required habitat. In the long term, a central objective is to stabilize and increase salt marsh harvest mouse populations in the area. Other objectives include improving nutrient cycling, decreasing sediment salinities, and improving habitat values for shorebirds and waterfowl.

The restored habitat will supplement adjacent existing and planned habitat restorations associated with the San Leandro Shoreline Restoration project and Dredge Disposal Site. The enhanced wetlands will also improve wildlife habitat locally and contribute to the regional resource.

The biological objectives, together with the constraints presented by the site, translate into somewhat different hydrologic objectives for different units as follows:

NORTH MARSH

This area will have a muted tidal regime, with substantial circulation and tidal exchange. In order to minimize loss of existing pickleweed vegetation, 50-70% of the area should be inundated no more than 12% of the time during a mean tidal month. This frequency of inundation corresponds to the mean high water (MHW) level during a mean tidal month. In addition, any short term losses of existing pickleweed vegetation should be offset by long term gains in both habitat acreage and quality.

BUNKER MARSH

The Bunker Marsh will be made fully tidal by dredging a new channel within and from Roberts Landing Slough to San Lorenzo Creek. Short term losses of existing pickleweed habitat should be offset by long term gains in tidal marsh habitat acreage and quality.

how evaluated

how evaluated

EAST MARSH

The East Marsh will have muted tidal action from Roberts Landing Slough. The upper elevation areas will be inundated only during high tide or major flood events. While the area will continue to have some standing water at all times, it will have an increased frequency of tidal exchange.

B. OTHER OBJECTIVES

Other enhancement objectives include maximizing future salt marsh harvest mouse habitat and long-term population viability while minimizing any short-term loss of animals, maintaining pickleweed viability, protecting the unique sand dune community, making use of some dredge spoils on site, maintaining service and emergency vehicle access to the EBDA manhole facilities and to the PG&E towers, and enhancement of natural amenities for the users of an extended Shoreline Trail through the study area.