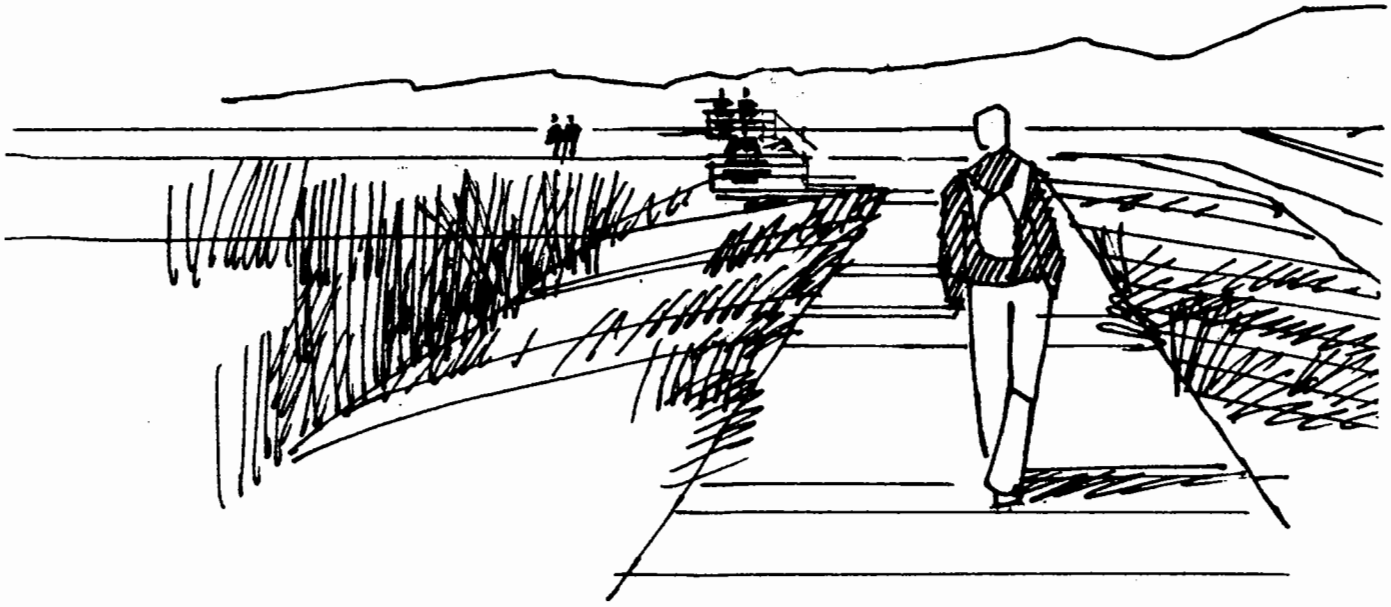

ALVISO MARINA COUNTY PARK
MASTER PLAN

October, 1997

Prepared for
Santa Clara County
Environmental Resources Agency
Department of Parks & Recreation

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Prepared by

Dillingham Associates
Landscape Architects & Planners

TABLE OF CONTENTS

Executive Summary

1. Introduction . . . . . Page 1

Organization of the Report
Purpose and Scope of the Master Plan
Project Background
The Planning Process

2. Project Analysis

A. Site Description . . . . . Page 7

B. Goals & Objectives . . . . . Page 8

C. Opportunities and Constraints . . . . . Page 10
Purpose
Opportunities
Constraints
Summary

D. Recreation Activities . . . . . Page 18

3. Master Plan . . . . . Page 27

Introduction
Description of Plan Elements
Permitting
Ownership and Leases

4. Park Management . . . . . Page 39

Operations

5. Master Plan Implementation . . . . . Page 41

Ownership
Funding
Permitting
Construction
Cost Estimate
Interim Plan

Participants

References

Appendices

Appendix A: Survey of Public Opinion, March 21, 1995
Appendix B: Project Inventory and Analysis
Appendix C: Recreation Activities Inventory
Appendix D: Alternatives and Preferred Plan
Appendix E: Interim Plan

LIST OF FIGURES

Figure 1 - Location Map . . . . . After Page 8

Figure 2 - Existing Conditions and Ownership . . . . . After Page 8

Figure 3 - Opportunities and Constraints . . . . . After Page 10

Figure 4 - Summary of Selected Regional Recreation in the South Bay . . . . . Page 19

Figure 5 - Regional Recreation . . . . . After Page 18

Figure 6 - Master Plan . . . . . After Page 28

Figure 7 - Sketch of Proposed Launch Ramp . . . . . Page 29

Figure 8 - Sections At Launch Ramp . . . . . Page 30

Figure 9 - Sketch of Proposed Picnic Facilities . . . . . Page 32

Figure 10 - Sketch of Proposed Boardwalk . . . . . Page 33

Figure 11 - Sketch of Proposed Levee-top Trail . . . . . Page 34

Figure 12 - Summary of Permitting Requirements . . . . . Page 43

Figure 13 - Sequential Implementation Steps . . . . . Page 44

EXECUTIVE SUMMARY

This Master Plan is the culmination of a comprehensive planning effort for the Alviso Marina County Park. The Master Plan provides a foundation for long term improvements at the park. The report has established: a) the current and future recreational activities most appropriate to the park site; b) the general location, extent and cost of park improvements; and c) specific solutions to achieve the best use of the park's recreational, environmental, and visual potential. The Master Plan is based on previous program and environmental assessment studies as well as alternative plans, a Preferred Plan and an Environmental Impact Report.

The basic direction of the master plan is to accept the recreation patterns that currently exist at the site and, at the same time, to improve physical facilities in order to accommodate them better. The Master Plan proposes improvements that are discussed in depth and illustrated in Section 3 - Master Plan. These include: launch ramp relocation to Alviso Slough; launch ramp access through the existing park and flood control levees; removal of marina floats gates and pilings; expanded and improved picnic facilities; boardwalk to cross former marina basin; parking improvements; trail and site amenities; interpretive decks and signs; planting and irrigation; and park entrance improvements.

The plan is contingent upon various land use, permitting and funding efforts being achieved (described in Chapter 5 - Project Implementation) prior to preparation of contract documents. When implemented, the Master Plan will require additional operations funding of about $30,000 per year, including increased operations costs and maintenance dredging at the launch ramp. The salaries for additional staffing are currently proposed to total approximately $70,000 per year. (See Chapter 4 - Park Management.)

Phase I development costs, including construction and administrative expenses, are projected to be about $1,970,000. Phase II development costs, including construction and administrative expenses, are estimated at about $871,500. Total projected implementation costs are about $2,841,500.

The Introductory Chapter that follows discusses the organization, purpose and scope of this report, the planning process, project background, site description and general goals.

This *Master Plan* proposes various improvements to Alviso Marina County Park. It is based on previous program and environmental studies as well as consideration of alternative plans and a preliminary or *Preferred Plan*.

The following Introduction includes information about the purpose and scope of the report, project background, a summary of the planning process, and a description of the general organization of this document.

Purpose and Scope

This *Master Plan Report*, represents the completion of a Master Plan that will ultimately lead to improvement of Alviso Marina County Park. Specifically, the *Master Plan* establishes: a) the range of current and future recreational activities that are most appropriate to the park site; b) the general location, extent and potential cost of park improvements; c) specific solutions to achieve the best use of the park's recreational, environmental, and visual potential.

The *Master Plan* is designed to consider park improvements over a period of about 20 years, a sufficient time frame to allow careful and incremental change at the park. A longer period could produce so many unanticipated changes that the plan's underlying assumptions would no longer be valid. The *Master Plan* process provided the kind of extensive public exposure required for all Master Plans.

Review and comments by various groups on four alternatives, a *Preferred Plan* and the Environmental Impact Report led to this *Master Plan*. These groups included the general public, and a task force consisting of Alviso residents, representatives of local groups and businesses, staff of regulatory agencies, neighboring land owners, as well as County staff. Some members of the Task Force were also involved in the concurrent efforts by the City of San Jose to prepare a community master plan for Alviso. Members of a Technical Advisory Committee comprising staff of regulatory agencies were also invited to comment.

Project Background

Alviso Marina County Park is located at the southern edge of San Francisco Bay and at the north edge of the community of Alviso, a district of the City of San Jose. The 29-acre park site consists of two parcels: one of 15-acres including a former marina and a parking lot; and a second parcel of 14-acres, to the north of the first, consisting entirely of salt evaporation ponds and related levees. Site facilities consist of a former marina (currently full of sediment), a boat launch ramp, a parking lot, a restroom building and trails. The former marina consisted of a 9-acre basin with 76 boat slips, not including possible tie-ups along non-designated portions of the floats. An additional dock was available with sewage pump-out facilities connected to the city sanitary sewer system.

Originally covered by tidal salt marshes, the site is part of an area that was diked between 1940 and 1970 to create salt evaporation ponds. In 1964, Santa Clara County purchased a 15-acre parcel from Leslie Salt (predecessor to Cargill Salt) for the purpose of building a marina. Two years later the County purchased a second 14-acre parcel to the north of the first site to accommodate eventual marina expansion. Based on the 1966 *Alviso Marina Feasibility Study* (no stated author), the marina was constructed in 1968. The first parcel was dredged for the marina basin and levees were built around it. It became immediately apparent that marina maintenance was very costly due to the expenses of dredging and removing high levels of accumulating sediment. The first maintenance dredging in 1974 was prefaced by the *Environmental Impact Report: Alviso Marina Expansion and Maintenance Dredging* (Diablo Engineers, 1974). Around 1980, with sediment continuing to be a problem, the County commissioned a study of the Marina - *Final Report for A Comprehensive Study of Alviso Marina* (Ruth and Going, 1980) - which suggested a series of solutions that were infeasible within the constraints of County funding. Following the completion of the study, the marina was abandoned and allowed to fill with sediment and bulrush vegetation. The original boat launch ramp, parking area and restroom continue to operate.

In 1992, representatives of the community of Alviso requested that the County Parks & Recreation Commission improve the park site. The Commission responded by approving funds for master planning and interim park improvements. While park planning efforts have been underway, a concurrent planning process for the Community of Alviso has been carried out by the Planning Department of the City of San Jose in order to make long-term and wide ranging improvements to the larger community.

The Planning Process

The planning process leading to the *Master Plan* for Alviso Marina County Park has been carried out by the Santa Clara County Department of Parks & Recreation, a part of the Environmental Resources Agency. A consultant team consisting of professionals in the fields of landscape architecture, environmental planning, coastal engineering and hydrology has produced the materials and provided the research represented in this document. A representative task force consisting of Alviso residents, neighboring landowners, recreational users, environmental groups and representatives of relevant public agencies was formed to guide the planning process. The Task Force acted as an advisory group, reviewing materials and providing information throughout the entire process. A technical advisory group, comprised of members of important regulatory agencies has commented on draft documents. Members of the general public have also reviewed submittals provided during this project. A County Project Team, including County Parks Staff in planning, operations and administration has participated throughout. A County Project Manager has reviewed materials and coordinated the efforts of the various participants.

The program document phase, initial stage of this master plan process, involved preparation of three documents: first, a report on relevant regulatory agencies, *Alviso Marina Master Plan - Agencies, Responsibilities and Permits* (March 1, 1995); second, a *Preliminary Program Document* (February 1, 1995) which contained an inventory of site conditions as well as an inventory of existing recreation needs and facilities. The last report prepared during the program document phase was an *Environmental Baseline Study* (February 1, 1995) which summarized environmental conditions on and around the park site. The Environmental Baseline Study was supported by several detailed environmental investigations: *Chemical Analyses of Sediment from*

Alviso County Park (Kinetic Laboratories, 1994); *Environmental Testing and Slough Sounding Results* (Terratech, Inc., 1995); and *Environmental Site Assessment Report Alviso Marina, 1195 Hope Street, Alviso, California* (County of Santa Clara Environmental Resources Agency, 1995).

The program document phase began in the Summer of 1994 and was completed with Task Force and public meetings by March 1, 1995. Project goals were discussed and approved at the end of this phase.

The preliminary master plan phase, second of the three master plan stages, included studies of alternative plans in an *Alternatives Phase Report* (May 5, 1995) as well as the *Preferred Plan* (October 30, 1995). A *Compilation of Planning Studies for Alviso Marina County Park - Program and Preliminary Master Plan* was issued on November 15, 1995. It consisted of various reports that had previously been issued separately, including: Goal and Objectives, Preliminary Program Document (Inventory and Analysis, Opportunities & Constraints, Park Program / Activities), Master Plan Alternatives, Preferred Plan and Interim Plan. Following the final version of the *Preferred Plan*, an *Initial Study of Environmental Impacts* was drafted. Simultaneous with the preparation of the *Preferred Plan*, an *Interim Plan* was also completed. This plan outlined short-term improvements which were not contingent upon Master Plan completion, and which could be completed within the limits of available funding. The preliminary master plan phase began in March 1995 and was concluded in December 1995. During late 1996 and 1997, construction documents were prepared for improvements shown in the *Interim Plan*. Actual construction of these improvements is expected to be completed by the end of 1997.

The final master plan phase, the last stage of the master plan process, consists of preparation of a *Master Plan* as well as the associated Environmental Impact Report. Following Task Force and public review, the County Parks and Recreation Commission will review and endorse the *Master Plan* and environmental documentation. If acceptable, they will be adopted by the Board. The final master plan phase of work began in the Fall of 1996 and will be concluded in late 1997.

Following adoption of the *Master Plan,* the County will carry out measures which begin the development proposed in the adopted Master Plan. This step will be contingent upon available funding. These measures are discussed under *Implementation* at the end of this report.

The master plan process has placed particular emphasis on understanding and complementing the environmental characteristics of the site. Several studies, as noted above, have inventoried and analyzed the environmental conditions at the site. These have formed the basis of plan proposals. The advantage of this environmental emphasis is to minimize the master plan's environmental impacts and, at the same time, to make the plan responsive to the park site's unique character and qualities.

Organization of the Report

This report consists of:

Chapter 1 - Introduction:

Chapter 2 - Project Analysis

Site Description: A brief summary of site location and features provides background for following sections.

Goals: General and project-specific goals are discussed that focus the ideas in this report.

Opportunities and Constraints: In the Opportunities and Constraints section, information from the Inventory and Analysis section is evaluated to determine which site characteristics may support or discourage recreational use of the park.

Recreation Activities: Inventory and analysis of other, nearby recreation facilities and site conditions are used to determine appropriate recreation activities for the site.

Chapter 3 - Master Plan

Based on information from the previous sections of the report and from evaluation of those proposals in the environmental impact report, a final master plan details specific proposals.

Chapter 4 - Park Management

Park management issues related to the master plan are discussed.

Chapter 5 - Master Plan Implementation

Cost estimates and proposed development phasing are discussed.
Interim Plan discusses recent development completed prior to adoption of the Master Plan.

Appendices:

Additional studies produced during the planning process are included here for reference.

Appendix A: Survey of Public Opinion, March 21, 1995
A survey of public opinion regarding the existing park and potential recreational facilities.

Appendix B: Project Inventory and Analysis

This section summarizes the existing conditions at the project site and surrounding area including the site's natural resources and hydrology, existing recreational use, government agencies and park offices.

Appendix C: Recreation Activities Inventory

Existing use of the site and recreation facilities in the surrounding area are evaluated in order to suggest potential recreation activities that should be included in park plans.

Appendix D: Alternatives and Preferred Plan

A series of four alternative development concepts were formed, discussed and evaluated with the Task Force and general public. Evaluation of the alternatives led to selection and development of a Preferred Plan.

Appendix E: Interim Plan

The Interim Plan for Alviso Marina County Park proposes a plan for park improvements which could be immediately implemented while the park Master Plan is being completed. The improvements proposed in the Interim Plan would make the park more attractive as well as resolving some current problems.

The improvements proposed here are feasible for immediate implementation; they do not require permits from regulatory agencies and do not have significant environmental impacts.

A. SITE DESCRIPTION

Alviso Marina County Park is a 29-acre county park operated by Santa Clara County Parks & Recreation Department and located on the northern edge of the community of Alviso, at a bend in the Alviso Slough. The site is bordered to the north by salt evaporation ponds and tidal flats that ring the southern edge of San Francisco Bay. The other side of the site abuts the built-up center of Alviso, a formerly independent city now part of the city of San Jose. Immediately adjacent to the southern edge of the site are two 1/2 acre ponds, remnants of the former Steamboat Slough. The eastern edge of the site is bordered by Southern Pacific Railroad tracks, with the wetland areas of the New Chicago Marsh lying beyond.

The park site consists of two parcels: one of 15-acres including the former marina and a three acre parking lot; and a second of 13.9-acres, to the north of the first, consisting entirely of salt evaporation ponds and related levees. The second parcel was purchased in 1966, two years after the purchase of the first parcel, with the intent of expanding the marina. The second phase of development never occurred.

State Highway 237, a recently improved four-lane freeway, passes within a mile of the southern edge of the site. Off-ramps provide convenient access to Alviso and the site via both the First Street exit and Gold Street at the Great America Parkway exit. The site is located at the north end of Hope Street near its intersection with Mill Street, an unimproved one block street along the south side of the former Steamboat Slough.

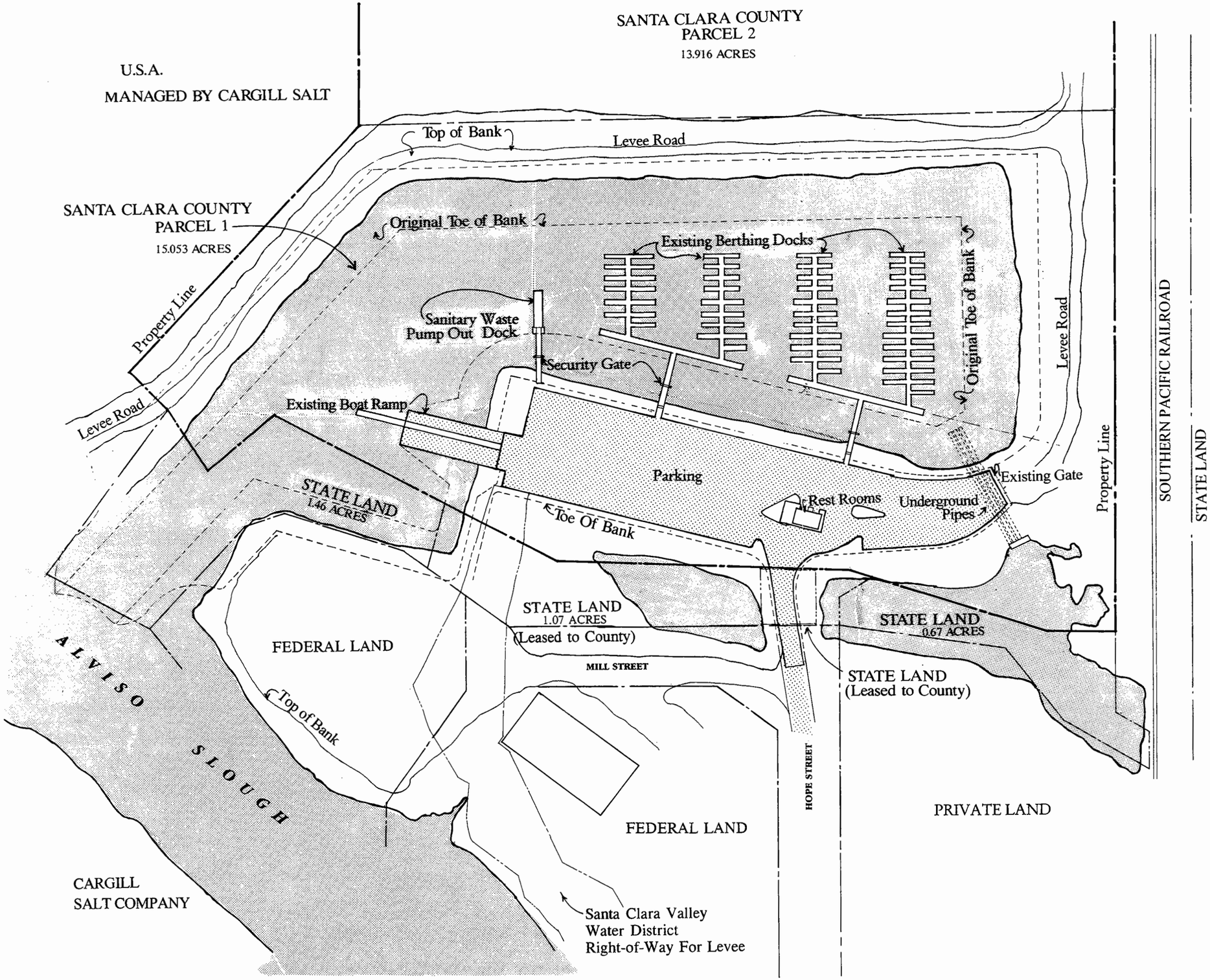
Facilities

Site facilities consist of an abandoned marina, a boat launch ramp, a parking lot, a restroom building and trails. The marina was constructed between 1964 and 1968 and consists of a 9-acre basin with 76 boat slips, not including possible tie-ups along non-designated portions of the floats. Due to the location of Alviso Marina on the southern end of the Bay, the Marina has been subjected to heavy siltation, resulting in the need for frequent and costly dredging. Due to the expense of dredging, the County ceased to dredge the marina around 1980. Renters of marina berths removed their craft in the following years and the basin gradually filled with sediment. As of 1997, the basin is almost entirely full of sediment or mud and supports a thick stand of bulrush vegetation. Berthing floats and finger docks with entry gates remain, although the depth of water at many slips is zero.

A concrete boat launch ramp, consisting of two lanes divided by a wood float, was built at the same time that the marina was constructed. Presently, one of the lanes is unusable because it is completely full sediment and bulrushes. The second lane is marginally usable for small boats at high tide. Local boat owners report that 10 to 12-foot boats can use the second lane at high tide if they are manually pushed through the mud to the nearby Alviso Slough.

The marina parking lot, located along the southern edge of the site, was constructed at the same time as the marina. It runs the entire length of the marina and more or less covers almost all of

Figure 2



LEGEND

WATER
(AT HIGH TIDE)

PAVED

EXISTING CONDITIONS AND OWNERSHIP

ALVISO MARINA COUNTY PARK

COUNTY OF SANTA CLARA
ENVIRONMENTAL RESOURCES AGENCY
DEPARTMENT OF PARKS AND RECREATION

DILLINGHAM ASSOCIATES
LANDSCAPE ARCHITECTS AND PLANNERS

NORTH

SCALE IN FEET
0 30 60 120 180

Master Plan Goals and Objectives

Specific goals for Alviso Marina County Park Master Plan were discussed with the project Task Force at a meeting on March 1, 1995. Further ideas were developed with the general public at a meeting on March 7, 1995. The list of goals agreed-upon at those meetings consists of:

1. Provide Facilities For Regional Recreation That Take Advantage of Site Characteristics and Resources

Alviso Marina County Park is a site with significant natural resources, proximity to Alviso Slough and San Francisco Bay, sweeping views, and wildlife habitat, define the character of the site. They are a prime reason for its appeal. The park site is located adjacent to the Don Edwards San Francisco Bay National Wildlife Refuge (NWR), and is presently used as a pedestrian access point for the Refuge. In addition, the San Francisco Bay Trail is proposed to pass through the Marina site. These resources should be acknowledged through recreational facilities that accentuate the natural characteristics, and provide for both passive and active enjoyment of the site.

2. Enhance Park Identity

The unique character of Alviso Marina County Park site lies in its strong natural character and its nineteenth-century history as an important port in the area. To retain its character, these aspects should be emphasized. Planting of park areas and restoration of existing facilities, such as the picnic areas and the restrooms, could enhance the character of the site and improve it's image within the community. A sign-board or kiosk could provide public information, giving it more importance in the Alviso community. A defined entry or gateway, whether planting or structure, would also improve the appearance of the site.

3. Protect and Enhance the Park's Natural Character and Scenic Quality

The natural elements of the site, such as wildlife habitat and shoreline, are an important resource and should be protected. Sensitive wildlife habitat should be carefully preserved through appropriate site design and development. Facilities should be sited where they do not affect wildlife habitat and do not obstruct views. Facilities should be developed in a manner that is compatible with the park's natural character. Screening of inappropriate areas, such as landfill or industrial areas, may enhance park vistas. Interpretive material explaining the natural resources and history of the site, could be provided.

4. Improve Recreational Facilities in Order to Improve the Quality of Visitors Recreational Experiences

Demand for recreational use is expected to increase over the next decade. This is a result of increased population in Santa Clara County and the increasing popularity of outdoor recreation. Many recreation activities currently take place on the site. Hiking, bird watching, and picnicking are popular, as is boating. However, the rate of siltation in the marina area is high. If the existing boat ramp is retained or a new boat ramp were developed, it would need to be maintained and/or sited in a way to guarantee access to the Bay for boaters. Expanded and improved picnic

areas, parking, and restroom facilities, as well as handicap access would meet the goal of improving the quality of the visitors' recreation experience at the site. Trailhead improvement, directional signs, interpretive information and a pedestrian boardwalk into the marsh would also improve the quality of recreational experience by increasing awareness of the park and its resources.

5. Provide Safe Recreational Experiences

Vandalism is currently a problem in the park at night, although increased police patrol has decreased this problem substantially. Continued patrol and improved lighting of the park could further reduce incidents of vandalism. The safety of the entry road and parking area within the park for hikers, bicyclists, and other park users, is also an area of concern due to possible conflicts between pedestrian and vehicular traffic. Facilities and trails should be sited in a way so as to minimize interaction between the two. If possible, emergency access to the Bay should be provided. Due to the proximity of two major airports and a number of smaller airports, emergency water access to San Francisco Bay in the event of a plane accident would be an important service to the community. This could be accomplished through a ramp or area where a hovercraft or other emergency vessel could be launched.

6. Provide Recreation Facilities That Are Easily Maintained and Cost Effective

Improvements to the Alviso Marina County Park should be done as cost efficiently as possible. This can be achieved in a number of ways. Where possible, existing amenities should be upgraded and used, such as the restroom and parking area. Facilities that are easy to maintain and operate, as well as those that generate revenue to offset park expenses, should be given consideration. Any additional facilities should be accompanied by additional maintenance staffing.

7. Support Efforts to Reduce Flooding Within the community of Alviso

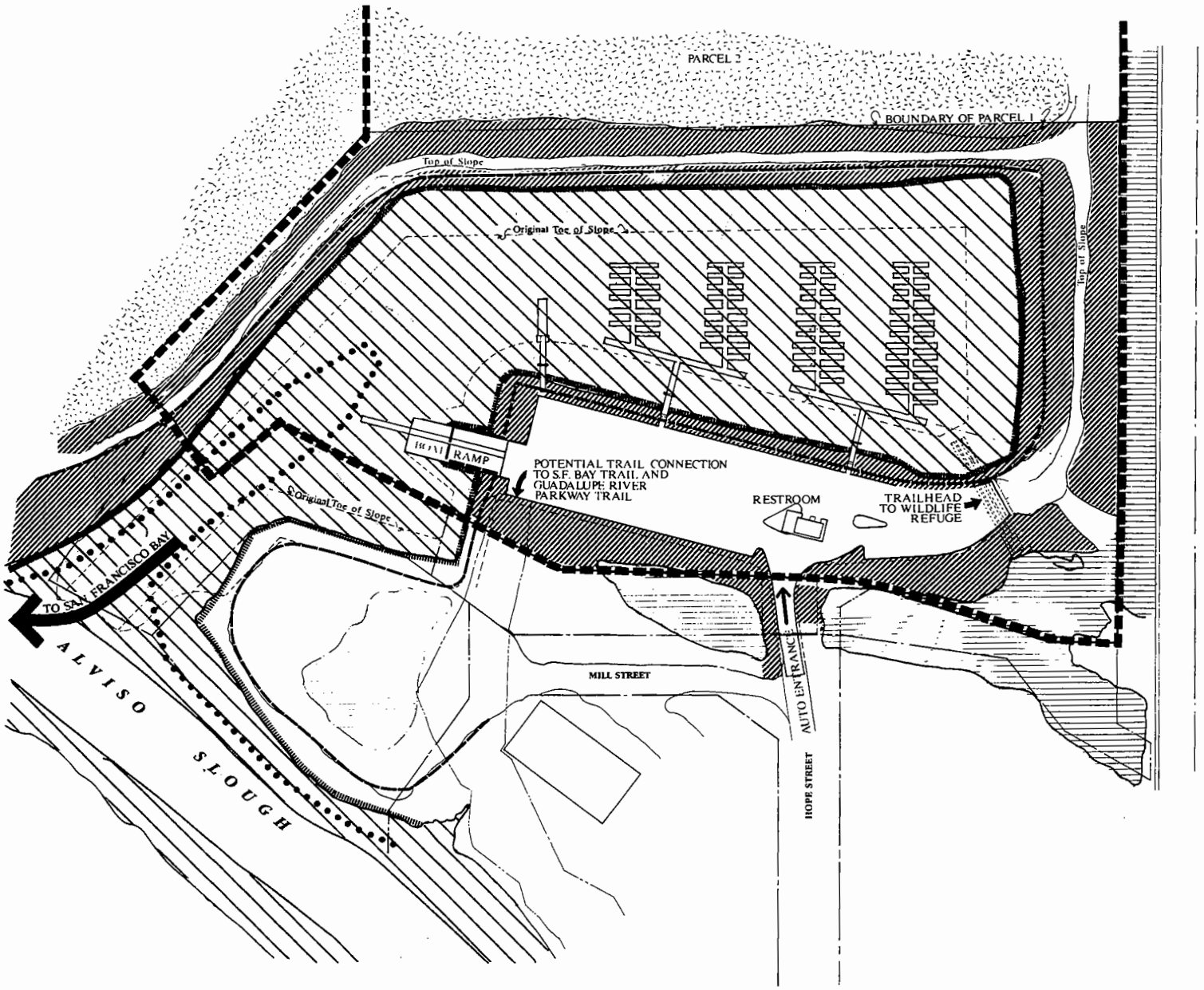
In the past, Alviso has been subject to severe flooding from the Alviso Slough. The potential for flooding is of great concern to many residents of the community. Recent efforts, such as Guadalupe River levee construction, storm water management, and Coyote Creek flood control improvements have prevented flooding in Alviso. The location of Alviso Marina County Park along Alviso Slough gives the park importance in flood control. Any plans for the site should take this into account by not diminishing the levee's ability to control flooding or affecting the removal of storm water.

C. OPPORTUNITIES AND CONSTRAINTS

PURPOSE

The purpose of comprehensive assessment of the "opportunities and constraints" for Alviso Marina County Park is to give a clear picture of how the site encourages or limits recreation development. The term "opportunities and constraints" refers to the qualities of the site that will affect its ability to accommodate different recreational needs. "Opportunities" are those site

Figure 3



LEGEND

- OPEN WATER AT LOW TIDE
- SALT POND
- AREAS SUBJECT TO SILTATION
- AVERAGE DAILY HIGHEST TIDE
- SEASONAL PONDS / PICKLEWEED MARSH
- AVERAGE DAILY LOWEST TIDE
- STEEP SLOPES
- SITE BOUNDARY
- LIMITS OF 100 YEAR FLOOD

OPPORTUNITIES AND CONSTRAINTS

ALVISO MARINA COUNTY PARK

COUNTY OF SANTA CLARA
ENVIRONMENTAL RESOURCES AGENCY
DEPARTMENT OF PARKS AND RECREATION

DILLINGHAM ASSOCIATES
LANDSCAPE ARCHITECTS AND PLANNERS

0 20 60 120
SCALE IN FEET

NORTH

characteristics which may encourage certain types of use or development. For example, a site that provides scenic vistas of the bay would be a desirable destination for both picnickers and hikers. "Constraints" are those characteristics which might limit or restrict use. Examples of these could include steep slopes or sensitive wildlife habitat. The following listing of opportunities and constraints consider both natural character and cultural resources. More detailed information about site conditions is contained in Appendix B - Project Inventory and Analysis.

The opportunities and constraints listed here are an important basis for the park master plan. It is the general intent of the plan, as reflected in the master plan goals, above, to respond as closely as possible to the opportunities and constraints while avoiding all significant environmental impacts.

In order to make an assessment of opportunities and constraints, some general assumptions about what forms of recreation or other activities are appropriate for the site had to be made. In the case of the Alviso Marina County Park, the analysis of opportunities and constraints was based on the possibilities of an upgraded marina and/or boat ramp, passive recreation, and a staging area.

The adjacent 1.8-acre property owned by the US Fish & Wildlife Service (USFWS) is not currently part of the park, however, it appears likely that it may be added to the site. For this reason, its constraints and opportunities for recreation use are discussed in this report section.

CONSTRAINTS

Site Boundaries and Topography

The small size of the site is a major constraint to development. Although the entire site covers 29 acres, only the parking area, consisting of three acres, is above flood levels and would be usable for most recreation. The northerly half of the site (parcel two, consisting of 14 acres) is almost entirely within a salt evaporation pond. The marina basin occupies 9 acres but is below flood level and filled with mud. The ponds at the southern edge of the site are designated wetlands. As a result, they could not be developed. Most of the remaining site consists of levees and are too steep to develop. In its present form, the parking area is approximately 650 feet long and 120 feet wide, or 73,000 square feet. This area has the capacity for up to 130 cars, or, as it was originally designed, for 28 cars and 33 cars with boat trailers. Due to the limited size of the site, steep slopes, and the proximity of wetlands, the level area of the parking lot could not be expanded within park property. If new structures or recreation facilities were built, they would need to be carefully located to retain parking and accommodate pedestrian and vehicular use, while avoiding flood waters.

The acquisition parcel consists of a generally level area of about 1.1-acres at elevation +4 to +5, surrounded by low levees at approximately elevation +9 which separate the central portion of the site from the Slough. In order to use this acquisition site, some fill would have to be placed in the central portion of the property in order to bring it to the level of the surrounding levees. Even though the central portion of the site may be raised to the level of the lower levees (+9), the entire site is at or below the level of the 100-year flood.

Flooding

There is a recognized flood risk for areas along the lower Guadalupe River and Alviso Slough. The Santa Clara Valley Water District (SCVWD) is conducting a flood control study of this area which includes the park site. No specific solutions have been identified as yet, however, a range of possible solutions may involve constructing or raising levees in areas within and adjacent to the park site. Park planning efforts are being coordinated with those of the SCVWD flood control study. As information becomes available, modifications to the plan may be necessary.

Potential Management Costs

The siltation rates at the marina site, some of the highest in the San Francisco Bay, create a major constraint to boat use of the site and adjacent areas. If the marina were reopened, dredging the marina and boat ramp would be required as frequently as every other year, or large areas adjacent to the slough would need to be dramatically opened up to greater tidal action. The levees around the site, which are being eroded by wind and tides, also need to be maintained. In addition, Alviso Slough is subject to the same high siltation rate as the marina site, and could possibly require occasional dredging and widening in the future to maintain its navigability. Any dredging of tidal areas related to the launch ramp or other facilities should be coordinated with the Santa Clara Valley Water District.

The tides at the site vary by as much as nine feet. Consequently, even if adequate dredging of the marina area and slough were to occur, much of the access to the water would only be available at high tide in order to avoid dragging the boats through the mud.

Permitting Agencies

Dredging the facility would require an extensive permit process and there is no guarantee the permit applications would lead to the right to dredge. Modifications or improvements to Alviso Marina County Park will require that other government agencies issue permits to the county for the work. The requirements of the different permitting agencies form a varied set of constraints. While requirements are not usually absolute, they will probably limit development and use of the site. The exact list of relevant agencies and the permits required will depend on the nature of the work to be undertaken. There are four agencies whose permitting processes may constrain park development.

<u>The Santa Clara Valley Water District (SCVWD)</u>

The SCVWD has jurisdiction over those portions of natural watercourses in Santa Clara County for which the tributary watershed is more than 320-acres and those portions of artificial channels which have been constructed by the District or accepted by the District Board of Directors. Other water facilities that the District has constructed, and over which it has jurisdiction , are ten reservoirs and 19 groundwater recharge facilities. SCVWD may limit modifications to its own levees in the project area but cannot restrict modifications to the facilities of others. The SCVWD requests that modifications to facilities non-SCVWD facilities be coordinated with them.

The Regional Water Quality Control Board (RWQCB)

The RWQCB reviews activities that affect water quality and has jurisdiction over the disposal of dredged material. Due to the levels of heavy metals and PCB's found in the sediment of the marina, the number of possible disposal sites is severely limited. This will result in higher dredge spoils disposal costs. Such a cost increase will tend to discourage extensive dredging.

The San Francisco Bay Conservation and Development Commission (BCDC)

BCDC regulates filling or changes in the use of all of San Francisco tidelands, including submerged areas, marshlands, salt ponds, and managed wetlands. In addition, development within a shoreline band 100 feet wide, measured from the high tide line, is under their design or planning review. This agency requires a Development Permit for any projects within the 100-foot band or involving fill. BCDC requirements will make additional fill or covering of wetland areas difficult, that is, they are unlikely to grant a permit for this work without an over-riding need. The park master plan is not likely to present an over-riding need for fill or covering of wetland areas.

The U.S. Army Corps of Engineers (COE)

The COE is the regulatory authority for discharge of dredged or fill material into U.S. waters, the construction of any structure in or over navigable waters, the excavation from, or deposition of, materials in such waters, and any obstruction or alteration in such waters. Permitting constraints from the COE are similar to those from the BCDC.

State of California, Department of Fish and Game (DFG)

DFG regulates any potential negative impact on wildlife species including impacts on wildlife habitats. Destruction of endangered species or their habitat would require a permit and may be denied.

The following agencies provide consultation for the permitting agencies listed above.

- The State Boating and Waterways
- The State Lands Commission (SLC)
- State Health Services
- State Water Resources Control Board
- State Historic Preservation Office (SHPO)
- Department of Water Resources
- Environmental Protection Agency (EPA)
- National Marine Fisheries Service (NMFS)
- U.S. Fish and Wildlife Service (USFWS)

Several of these agencies such as the DFG and the USFWS will restrict loss of wildlife habitat that might come from dredging or filling.

Wetlands

There are several wetlands in and around the park site. The largest of these is the marina basin which is wholly within the park. A seasonal wetland of 0.58-acres lies within the acquisition parcel. On State lands adjacent to the southern boundary of the park, are two ponds, remnants from the former Steamboat Slough. The eastern and larger of the two ponds is influenced by tidal changes. The western pond was originally connected to the eastern and was also influenced by tidal shifts. However, the culvert connecting the two ponds has becomes filled with sediment and the western pond is no longer tidal. Changes to any of these areas would require permits from the Corps of Engineers (COE), as well as mitigation or replacement of a similar wetland type at an on-site or off-site location. Loss of any of these wetlands would also represent a loss of sensitive wildlife habitat.

Sensitive Wildlife Habitat

Due to the siltation within the project site, vegetation has reclaimed much of the marina basin. As a result, the site's value as wildlife habitat has increased. Wetland and water dependent species are very abundant. Some of the plant and animal species that have been observed on the site, such as the Saltmarsh common yellowthroat, are either federally protected or are candidates for protected status. Passive use of the park, such as hiking, would have little impact on the rare or endangered species, given appropriate mitigation. However, active recreational use of the site such as for boating and related dredging could have a significant impact. Removal of marsh vegetation, or dredging of the marina site, could cause loss of marsh habitat and could have a negative impact on wildlife species. In addition, dredging of the marina would stir up contaminants present in the sediments, including trace metals and PCB's. These contaminants could potentially have a significant and adverse effect on aquatic organisms and the species that prey on them.

Water and Sediment Quality

The water quality at Alviso Marina County Park is influenced by San Francisco Bay and the flows of the Guadalupe River, whose mouth is the Alviso Slough. The South Bay in general has higher concentrations of mercury than other parts of the bay due largely to naturally occurring mercury deposits. The main water quality issue for the Alviso Marina are the non-point sources of pollution from local runoff, municipal dischargers, unauthorized 'live-aboards' moored in Alviso Slough, and the potential release of metals that are bound up in the bottom sediments. Sediment quality in the slough and the marina is characterized by levels of heavy metals, most notably mercury, that are marginally above 1992 standards set by the Regional Water Quality Control Board for wetland creation cover, levee restoration, and landfill daily cover. These standards limit the possible sites for disposal of dredged material from the Alviso Marina and Slough. In addition, heavy metal concentrations found in the marina could possibly present a health hazard to people eating fish caught in the marina area. Therefore, aquatic species should be tested for heavy metals and PCB's to determine if they are safe to consume.

Safety and Security

In addition to regular park use, the parking lot is presently being used for transient parking and occasional boat repair. The restroom facilities at Alviso Marina have been vandalized on occasion. In addition, the parking lot has been used at night for various illegal activities. Some reasons for the park's misuse could be attributed to the fact that the parking lot had previously been required to be open 24-hours, a requirement of the grant used to build the facility. This requirement has expired and the County is planning to close the park at night with a gate. Park security should improve as a result of these changes.

County Parks and Recreation has primary responsibility for park security, however, the park is more frequently patrolled by police officers from the City of San Jose. They have been patrolling Alviso and surrounding levees on mountain bicycles and have intensified patrolling of the marina area. Development of the park will need to consider security issues by preserving visibility and positioning park features in a way that facilitates patrolling the area.

OPPORTUNITIES:

Views

The views across the bay to the north, east and west are the most dramatic aspect of Alviso Marina County Park. The site is approached from below the level of the parking area, where the surrounding levee blocks any views of the distant landscape. As the road rises to the site, the expansive views of wetlands and water appear as a striking contrast to the contained views of the community of Alviso. To the north, views extend across the Bay. Mission Peak is visible to the northeast and Mount Hamilton to the east, while the Santa Cruz Mountains are visible behind the cities to the west and south. These views are vital to the identity of the site and need to be carefully preserved. They could potentially be an important attraction to the park. The views to the immediate southeast, however, are of the dump, the sewage treatment plant, and industry. These views detract from the natural setting and could be screened.

Open Space Links

The San Francisco Bay Trail Project has proposed that a trail section pass through Alviso. This trail, which will eventually circle the entire Bay, will provide a pedestrian and bicycle link north to the Sunnyvale Baylands, Shoreline Park in Mountain View, and the Palo Alto Baylands, as well as a connection to other parks and natural areas around the southern end of the Bay. In addition, a loop trail into areas owned by the NWR begins at the eastern end of the park site. The demand for trail-related recreation such as hiking and bicycle riding may increase in demand for open space recreation. The park site is now used as a staging area for walks into the refuge along the levees. The combination of views and proximity to hiking and bicycle trails will continue to make the Alviso Marina County Park a useful staging area for excursions along these trails as well as a picnic and rest area.

Water Access

Convenient access to Alviso Slough and its direct connection to San Francisco Bay make the Alviso Marina a convenient place for putting boats into the water. Alviso Slough provides one of the few clear routes in the San Jose area through the saltmarshes out to the open waters of the Bay. A boat ramp or marina at the site could provide a significant service in the South Bay by creating convenient access to the water for boaters, kayakers, canoers, wind surfers, scullers, anglers and hunters.

The acquisition parcel can provide direct access to Alviso Slough without a long channel and without extensive maintenance dredging requirements. This potential park addition offers a great opportunity for direct water access (launch ramp) from the park.

Wildlife and Vegetation

Alviso Marina County Park is adjacent to a number of important wildlife habitat areas, such as the New Chicago Marsh and the 23,000 acre Don Edwards San Francisco Bay National Wildlife Refuge (NWR). These areas are very popular destinations for bird and wildlife observers. Boating, hunting, and fishing are permitted with an appropriate state license, and within limited areas and seasons. Attendance at the refuge has tripled over the last ten years to 303,000 in 1994. The Environmental Education Center for the refuge is located in Alviso, one mile from the project site. This center provides information about the refuge and its resources to school groups by reservation.

Access

Compared to other regional or county park facilities, Alviso Marina is very accessible to the central populated areas of Santa Clara County. Access to the site itself is easily gained by car from Route 237, a six lane highway, via either Gold Street, North First Street, or Zanker Road, all two-lane roads. A bus stop is located two blocks to the southwest of the park in the center of town. Bike routes are planned to the marina site along the Bay Trail. The accessible location of the Alviso Marina gives it the opportunity to be a very popular facility.

Existing Facilities and Services

Many services are already in place on the site. Existing restrooms preclude the need for construction of new facilities, although they should be upgraded. Existing electrical service exists on-site. A public telephone has been recently removed from the site due to vandalism.

Climate

The Alviso Marina County Park has relatively mild weather conditions. The site receives sun throughout the entire daylight period, and summer fog is less prevalent than the northern end of the Bay. Winds are primarily from the northwest and can be forceful at times. Passive use of the site may require wind protection. Otherwise, climate factors do not represent opportunities or constraints for recreational use or development.

SUMMARY

There are may opportunities at Alviso Marina County Park to improve and/or supplement current recreational activities. The site is unique due to its sweeping views of the Bay and mountains and its prominent location on San Francisco Bay. Its location can provide access by boat to the Bay and Alviso Slough. The marina site could be used as a staging area for many water activities.

The abundance of birds and wildlife make it a desirable destination for many people. The accessibility to the Don Edwards San Francisco Bay National Wildlife Refuge, in addition to the planned San Francisco Bay and Guadalupe River Park Trails, make Alviso Marina County Park an important link in a bay network of recreational pathways.

Existing facilities on the site, such as restrooms, electric, water and sewage disposal services, will potentially save much of the cost of construction and installation of these services for any new facilities or development. However, the existing facilities may need to be upgraded.

Alviso Marina County Park is very accessible by many forms of transportation. Due to its proximity to Highway 237, the site could be easily reached by car. A bus stop is located two blocks from the entrance to the marina. In the future, the site could also be reached by foot and bicycle along specific trails in addition to the existing street network.

The high cost of frequent dredging could limit boating recreation on the marina site. In addition, the levels of toxins in the marina sediment would require special permitting and more expensive methods of disposal of the dredge spoils.

Due to the construction of the surrounding levees and the siltation of the marina basin over the last thirty years, the project site has changed from an open water habitat to a tidal marsh. At the same time, much of the historical tidal marshlands in the Bay have been lost through development and conversion to salt ponds. As a result, the habitat within the project site is a biological resource and provides habitat for certain wildlife species. This wildlife habitat would limit the types of activities that could occur on the site. Any threat to that habitat would require permitting, and there is no guarantee those permits would be issued.

The tendency for flooding, and the limited size of the site are constraints to development. Much of the site is located within potential flood zones. In addition, the steep slopes and wetlands surrounding the site would severely hamper expansion of the park or its existing facilities. Development would need to take place within the three acre area, or additional lands would be required.

The visually isolated location of the marina site makes vandalism and other such activities relatively unscrutinized by Alviso residents. These problems need to be taken into account in any design for the marina site. Visibility within and into the site would need to be improved.

The opportunities and constraints outlined above form an important basis for the park master plan. Two of the goals propose a direct connection between the site's resources and the proposed plan: *1. Provide Facilities For Regional Recreation That Take Advantage of Site Characteristics and Resources; 3. Protect and Enhance the Park's Natural Character and Scenic*

Quality. Based on these goals, the master plan will be developed to respond closely to the park site's opportunities and constraints and, at the same time, to avoid as many environmental impacts as possible.

D. RECREATION ACTIVITIES

The Recreation Activities section of this study presents information used to prepare a preliminary range of possible recreation uses for Alviso Marina County Park. The preliminary range of activities presented in this section were established by reviewing existing recreational uses and needs from surrounding areas of the South Bay region. In addition, the recreation needs of the community of Alviso were investigated through a community survey. Possible recreation activities were reviewed for their recreation value as well as construction and operations compatibility at the marina. In addition, potential revenue generation through commercial or concession activities at the marina was also reviewed. This section concludes with a *Summary of Potential Recreation Activities* which forms the basis for selecting recreation activities to be included in the master plan. Additional information about the recreation activities discussed here can be found in Appendix C - Recreation Activities Inventory.

Regional Recreation in the South Bay

In addition to the boat berthing facility for Santa Clara County established in 1966, the master plan process reviewed a wide range of alternative site uses, including renovation of the marina and/or boat launch ramp. Through understanding the range of nearby existing or proposed recreation facilities, new facilities at the Alviso Marina can be selected to complement rather than duplicate those already available. Figures 4 and 5 list existing regional recreation in the South Bay and activities that are included in those recreational areas. Following is a brief summary of existing and proposed facilities in the South Bay.

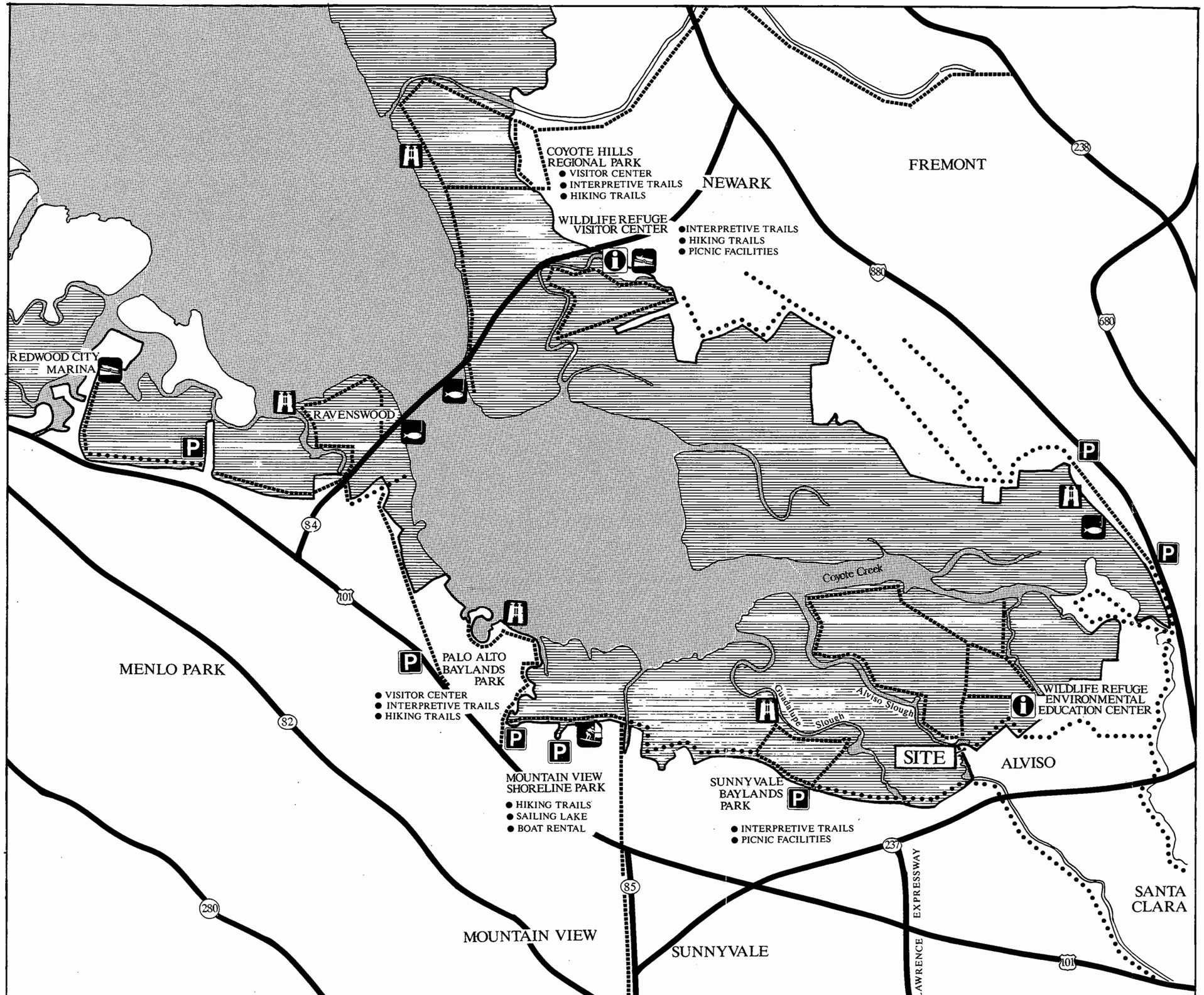
Boat Launch Ramps

The nearest boat ramps to Alviso are located on the east side of the Bay, eight miles north of Alviso at Thornton Avenue in Fremont. On the west side of the Bay, a second launch ramp is located fourteen miles to the northwest at the Docktown Marina in Redwood City. There are also marinas located at Blair Island and Uccelli Boulevard in Redwood City. Until recently, another boat launch ramp was located eight miles to the northwest at Palo Alto Baylands. It has been closed due to sedimentation.

The Don Edwards San Francisco Bay National Wildlife Refuge

The 23,000-acre Don Edwards San Francisco Bay National Wildlife Refuge is located in and among the mudflats, wetlands, salt evaporation ponds and Bay waters to the north and west of Alviso. It provides valuable open space recreation opportunities for hiking and boating. Trails are located along the levees that ring the salt ponds. Boating, hunting and fishing are permitted with an appropriate state license and within limited areas and seasons. The Visitor Center and the

Figure 5



LEGEND

- EXISTING TRAILS
- PROPOSED TRAILS
- MAIN ROADS
- STAGING AREA
- BOAT RAMPS
- FISHING AREA
- SCENIC VIEW
- WIND SURFING
- WILDLIFE REFUGE INFORMATION
- SALT PONDS
- WATER

REGIONAL RECREATION

ALVISO MARINA COUNTY PARK

COUNTY OF SANTA CLARA
ENVIRONMENTAL RESOURCES AGENCY
DEPARTMENT OF PARKS AND RECREATION

DILLINGHAM ASSOCIATES
LANDSCAPE ARCHITECTS AND PLANNERS

NORTH

0 1 2 3

SCALE IN MILES

SUMMARY OF SELECTED EXISTING REGIONAL RECREATION IN THE SOUTH BAY

	Visitor Center	Boat Ramp	Fishing	Bird Watching	Picnic Facilities	Swimming	Hiking Trail	Camping	Bicycles	Horse Trail	Nature Trail	Wind Surfing	Hunting	Dogs	Power Boat	Non-power Boat
Redwood City Marina		X	X	X	X				X					L	X	X
Ravenswood Preserve				X			X		X							
Coyote Hills Regional Park	X			X	X		X	L	X	X	X			L		
Menlo Park Bayfront				X			X		X					L		
Palo Alto Baylands	X		X	X	X		X		X		X	L		L		L
Coyote Lake Park	X	X	X	X	X		X	X	X	X		X		X	X	X
Mountain View Shoreline	L			X			X		X		X	X				X
Sunnyvale Baylands				X	X		X				X					
S.F. Bay Wildlife Refuge	X	X	X	X	X		X		X		X		X	L	L	L
Almaden-Quicksilver Park			L	X	X		X		P	X	X			L		
Calero Reservoir Park	X	X	L	X	X	P	X			X					X	X
Anderson Lake Park		X	X		X	P	X							L	X	X
Vasona Lake		X	X	X	X		X		X		X			L		X
Lexington Reservoir		X	X	X	X		X		X			X		L		X
Joseph D. Grant Park	X		X	X	X		X	X	X	X	P					
Alviso Marina County Park		X	X	X	X		X		X		X			L	X	X

P - Proposed
L - Limited
X - Included

Environmental Education Center provide information to the public about the refuge and its resources.

The San Francisco Bay Trail

When complete, the Bay trail will be a 400 mile long network of trails that will circle San Francisco Bay. Forty-percent complete in 1994, it will run through all nine Bay Area counties and 42 shoreline cities. It will be multi-use in nature, accommodating walkers, runners and bicyclists. It is anticipated that Alviso Marina County Park will be a staging area for the Bay Trail.

Sunnyvale Baylands Park

Sunnyvale Baylands Park, located about one mile west of Alviso is a 217 acre park owned by Santa Clara County and operated by the City of Sunnyvale. It includes 72 developed acres for active recreation and 105 acres dedicated to wetlands, walking trails and wildlife observation.

Twin Creeks Softball Complex

The Twin Creeks Softball Complex, adjacent to Sunnyvale Baylands Park is located on land leased from Santa Clara County. It offers softball fields and batting practice facilities.

Palo Alto Baylands

The City of Palo Alto operates a park and recreation facility adjacent to San Francisco Bay about eight miles west of Alviso. It includes a visitor center, walking trails and wildlife observation. Guided educational walking tours are also available.

Shoreline Park, Mountain View

The city of Mountain View operates a 700 acre park at the edge of the Bay, about six miles west of Alviso. This facility, built over an old landfill, includes a golf course, an outdoor amphitheater, a historic house, a boating and wind-surfing lake, and walking and bicycling trails, and nature study. The boating lake rents paddle-boats, kayaks, canoes, and sailboats.

Coyote Hills Regional Park, Newark

This 1,000 acre regional park, operated by the East Bay Regional Park District, is located ten miles northwest of Alviso at Coyote Hills adjacent to salt evaporation ponds and the east end of the Dumbarton Bridge. In addition to hiking, bicycling and nature study, this park features a nature interpretive center with displays related to the park's habitation by Native Americans.

Parks in Alviso

Alviso currently has a 7.5 acre park, located on North First Street, operated by the city of San Jose. It includes a swimming pool, a playground and a baseball field.

Recreation Needs

The recreation needs of large and heterogeneous population groups are very difficult to assess with any degree of precision. Although there are many standards, there are few statistics that can be directly used to show how and why people recreate or use park facilities. However, the following information can give a general sense of recently increasing recreation demand that will affect use of Alviso Marina County Park.

Growing Population and Park Attendance

Santa Clara County population in 1990 was 1,464,000. The population estimate for the year 2000, according to the Santa Clara County Planning Department, is 1,615,000. This change represents a growth of about 10 percent, or slightly more than one percent per year, the equivalent of 14,000 new residents each year. In addition to growing population, per capita park attendance has been increasing over the last several decades. In 1960, attendance at state parks was about 1.5 visits per resident. In 1990, that had increased to 2.6 visits per resident. Similar rates of increase are likely at regional and local parks. (*San Jose Mercury News, September 1, 1991*).

Boating

Boat ownership, and presumably use, in Santa Clara County has remained relatively constant over the last ten years. Statistics from the State of California Department of Boating & Waterways show that the numbers of boats registered in Santa Clara County and Alameda County have remained fairly level over the last ten years. The lowest number of registered boats in Santa Clara County was 31,274 in 1984 while the highest number was 33,538 in 1988. Alameda County totals varied from 28,267 in 1988 to 32,462 in 1991 (*California Department of Boating & Waterways, 1994*). In addition, the lack of heavy demand for boating and boating facilities is reflected in occupancy rates for marinas of only around 70%.

Baylands

For many years, the edges of the San Francisco Bay were largely unknown to Bay Area residents. Except for bridge crossings, most Bay margins were privately held and more or less invisible to the public. In the last 20 to 30 years, publicly held land around the Bay has increased dramatically. Holdings near Alviso include the National Wildlife refuge (1972), Sunnyvale Baylands, Shoreline Park in Mountain View, Coyote Hills near Newark, and others. As a result, awareness and interest in the Bay and its wetland margins has increased, as well as visits to related recreation facilities. For example, attendance at the national Wildlife Refuge has tripled over the last ten years from about 100,000 persons in 1984 to 303,000 in 1994.

Community Survey

In February 1995, questionnaires were distributed to residents of Alviso to assess recreational use of Alviso Marina County Park. Questions included frequency of use of the park, types of activities enjoyed, activities preferred for the marina, and other parks frequented.

Hiking was the most popular existing activity on the site, followed by wildlife observation, eating lunch, boating, and enjoying the view. Other activities mentioned were jogging, bicycling, fishing, walking dogs, and watching the trains. There was no discernable trend in the types of activities favored by a particular age group or family size. Large and small families, single people, and all age groups used the park equally for hiking, fishing, and boating. In addition, no group used the park more often than another. Boaters, fishers, and hikers all frequented the park on average between 2 times per week and 2 times per month. Additional information about the community survey can be found in Appendix A.

Potential for Commercial Activities

Where appropriate, Santa Clara County Parks and Recreation may permit operation of commercial activities within parks in order to provide valuable recreation facilities or activities that might not otherwise be available to the public. These concessions could be facilities such as horse stables, boat rentals or food sales. Concessions are operated under a lease from the county which covers such items as services to be provided, rent payments, insurance, etc. In considering the possibility for a commercial activity at the Alviso Marina County Park, there are three basic guidelines. First, the commercial activity must produce income for the operator. No concessionaire can afford to operate for very long unless they can produce some profit from their operations. Second, the upland (non-wetland) areas of the park site that could be used for concession are severely limited. Most upland areas are currently devoted to parking; wetland area activities are limited by regulatory agencies. And third, commercial use of parks in Santa Clara County are subject to the *Policy on Commercial Development on Parklands* which sets forth what types of commercial developments are allowed in county parks. Following are several possible commercial activities which could operate at Alviso Marina County Park. Many of these commercial activities were explored further in the Alternatives phase on the master planning process. Please refer to Appendices C and D for more information.

Marina Concession

The existing condition of the marina and previous estimates of the cost for dredging have shown that any marina operation at the park site will have substantial maintenance costs beyond everyday operating costs. While it is beyond the scope of this master plan study to perform a detailed economic feasibility assessment, some basic dredging costs can be considered. If an economical dredge spoils disposal site suitable for marina sediments could be located, dredging costs might be around $10 to $15 per cubic yard. Based on an accumulation of 2.0 feet of sediment per year (Ruth & Going, 1980), the marina would need to be dredged every two years to remove an estimated quantity of 100,000 cubic yards, for a yearly cost of $500,000 to $750,000. Theses costs are substantially above a level that could be supported by berthing fees.

Dry Stack Boat Storage Concession

The 1980 Ruth and Going study discussed various alternatives for marina arrangements. That study suggested that a dry stack storage system was one of the economically feasible alternatives for the site. This dry storage type of facility would store boats out of the water, eliminating the need for dredging much of the marina area.

Lock System Marina

A lock system marina would retain a water berthed marina, as originally developed, but shelter it from sediment by a system of locks which would separate the marina from Alviso Slough. A lock system combined with dry stack storage would offer a second economically feasible plan for retaining boat berthing at the Alviso Marina site.

Bait & Marine Supplies/Food Concession

Existing businesses in Alviso currently provide bait and marine supplies. In a limited market, it is possible that a concession operating in a county park site could put a competing operation out of business. In addition, without the redevelopment of the marina, it is fair to assume that a marine supply business in the marina would not be viable or appropriate at the park site. Bait and marine supply concessions should be considered secondary concessions to strengthen a principal one such as a marina.

Wind Surf/Boat & Kayak/Jet Ski Rentals

Although they do not require dredging, wind surfing and jet skis require large areas of open water. These conditions are not generally available in the slough and salt pond environment around the Alviso Marina.

Summary of Potential Recreational Activities

Based on information discussed above and data in Appendix C - Recreation Activities Inventory, the following summary indicates which recreation activities are most appropriate to be included in the Alviso Marina County Park Master Plan. The recreation activities and facilities selected here are further developed and refined in the master plan section of this report.

The site has potential for many uses. The Alviso Slough is one of the few clear waterways through the salt ponds in the area. This creates the potential for an important access point for activities such as boating, kayaking, and wind surfing. With sweeping views and a prominent site, the Alviso Marina site is presently used as a spot to sit in the car and have lunch. With the proper location of tables, it has the potential to be a picnic and lunch stop along the Bay Trail. Because of its close proximity to important wildlife areas, the site is ideally located as a starting point for hikes into the NWR and to Sunnyvale Baylands Park. In addition, with the planned walking and biking paths along the Guadalupe River, the Alviso site could be linked by trails to downtown San Jose along this corridor.

A summary follows of various possible recreation activities that could be accommodated at the Alviso Marina. Some of these, like the marina, were part of the original development program from 1966. Others have been suggested by various members of the public and by various reports. Lastly, some recreation activities, like boat berthing, are listed because they represent water related recreation that is inadequately available in Santa Clara County. Each activity is evaluated for inclusion in the master plan.

Boat Launch Ramp

Although a launch ramp exists at the site, its use has been limited by heavy sedimentation, vandalism, and regulatory limitations on maintenance. A renovated or relocated ramp could provide boating access to the southern San Francisco Bay. There has been strong support for a boat launch ramp from the community and public at large.

Boat Marina

The advantages and limitations of this kind of facility are discussed in Appendix C - Recreation Activity Inventory. The problems of sedimentation and cost make this facility impossible to develop and maintain at the Alviso Marina site within current budget and funding constraints.

Dry Stack Boat Storage

Dry storage for boats at the Alviso Marina was proposed in the 1980 Ruth and Going study. That report concluded that this solution offered the best single possibility in terms of cost and general feasibility for keeping boats at the park site. However, the lack of demonstrated economic demand, and conflicts with other proposed activities, have eliminated this from master plan proposals.

Marina with Locks

This solution to the sedimentation conditions was also considered in the 1980 Ruth and Going study and was particularly recommended in concert with a boat dry storage system. Like the dry-stack storage proposal, above, the lack of demonstrated economic demand and conflicts with other activities have eliminated this from master plan proposals. The requirements of regulatory agencies also prevent this proposal from further consideration.

Kayaks

Although the use of sea kayaks has been growing in popularity in recent years, the immediate area of the Alviso Marina may not prove interesting enough to attract many kayak users because kayaks do not have a great travel radius from the point of entry into the water. Kayaks do not require elaborate facilities and could use easily a launch ramp, but actual use of the site by kayaks is anticipated to be very low.

Wind Surfers

Public comment suggested the possibility of using salt ponds for wind surfing or other small sail boats. Wind surfing requires flat water and reasonably steady winds which are available near the park site. However, wind surfing will likely require greater water depths than are usually available in the salt ponds.

Jet Skis

While the recent popularity of jet skis suggests that they might be popular at Alviso Marina County Park it is not clear that the sloughs would be very appropriate for their fast, flexible movement. Wakes may damage adjacent levees and be disruptive to bird and other wildlife.

Picnicking

With very little encouragement, picnicking is currently happening at the site during the lunch hour. If more elaborate facilities with wind protection were available, this could be a popular use of the site.

Trail Staging and Trail Walking

Hiking or walking presently occurs on the site. It is also implicit in the proposals associated with the Bay Trail development. The facilities to support these activities are already on the site, including, parking, restrooms, trails and an interesting natural environment.

Nature Study and Interpretive Trails

These related activities occur on the site in a limited way. They, of course, do not require elaborate facilities and would be easy to retain and encourage at very little cost. With the nearby Environmental Education Center, operated by the NWR, there is probably not a strong need to duplicate facilities that may be better served at that location. If nature study and interpretation remain an important component of the park's program, it may be worth discussing how resources at the Alviso Marina County Park might complement those at the Environmental Education Center.

Fishing

Although there are adequate fish populations in the South Bay to support recreational fishing, it is not clear that suitable water areas are accessible from the shore at the park site. The use of floating docks such as those used for the launch ramp could give marginally better access to the water, however, fishing should be located away from boating activities like the launch ramp. In addition, heavy metal concentrations in the surrounding sediment could possibly present a health hazard to people eating fish caught in the area. Therefore, aquatic species would need to be tested for heavy metals and PCB's to determine if they are safe to consume.

MASTER PLAN

Introduction

The Master Plan is the final proposal for the site of the Alviso Marina County Park. It is based on previous program and environmental assessment studies as well as consideration of alternative plans, the Preferred Plan and the Environmental Impact Report. Review and comments by various groups on the alternatives, the Preferred Plan, and the Environmental Impact Report led to this plan.

General Direction of Plan

Due to the site's history as an abandoned marina, the park has developed its own unique characteristics and use patterns: parking and vista point for the south bay, boat launching, community open space, trailhead, and access point to the salt pond levees. All of these existing activities occur within the relatively small area of the existing parking lot, the setting for almost all park activities.

The basic direction of the master plan is to accept the recreation patterns that currently exist at the site and, at the same time, to improve the physical facilities in order to accommodate them better. A new, more easily maintained launch ramp is proposed at the Alviso Slough. The existing parking lot has been redesigned to be more efficient and provide extra space for picnic. Planting, signing, and trails enhance the existing recreation activities and make a more inviting park. The basic elements of the master plan include:

New launch ramp at the edge of the Alviso Slough

Removal of the existing marina floats

Improvement and addition of picnic sites

Interpretive boardwalk across the marsh in the marina basin

Reconfiguration of existing parking to provide equivalent numbers of stalls in a more efficient manner

Walking trails and various amenities such as benches, signs and gates

Development of interpretive trails and decks

Directional and identification signs

Park entry improvements

Retention of flood control levees.

Mitigation of environmental impacts

During the planning process for the master plan, improvements which could be completed prior to completion of the master plan were identified and referred to as the "Interim Plan." When funding approved by the Board of Supervisors became available for these improvements, construction documents were prepared. Actual construction will be completed before the end of the 1997. Improvements include: park entry improvements, planting and Irrigation, float repair at the existing launch ramp, an emergency telephone, improvements to the existing restroom, lighting repair, and resurfacing of the existing parking area.

Description of Proposed Facilities

Launch Ramp

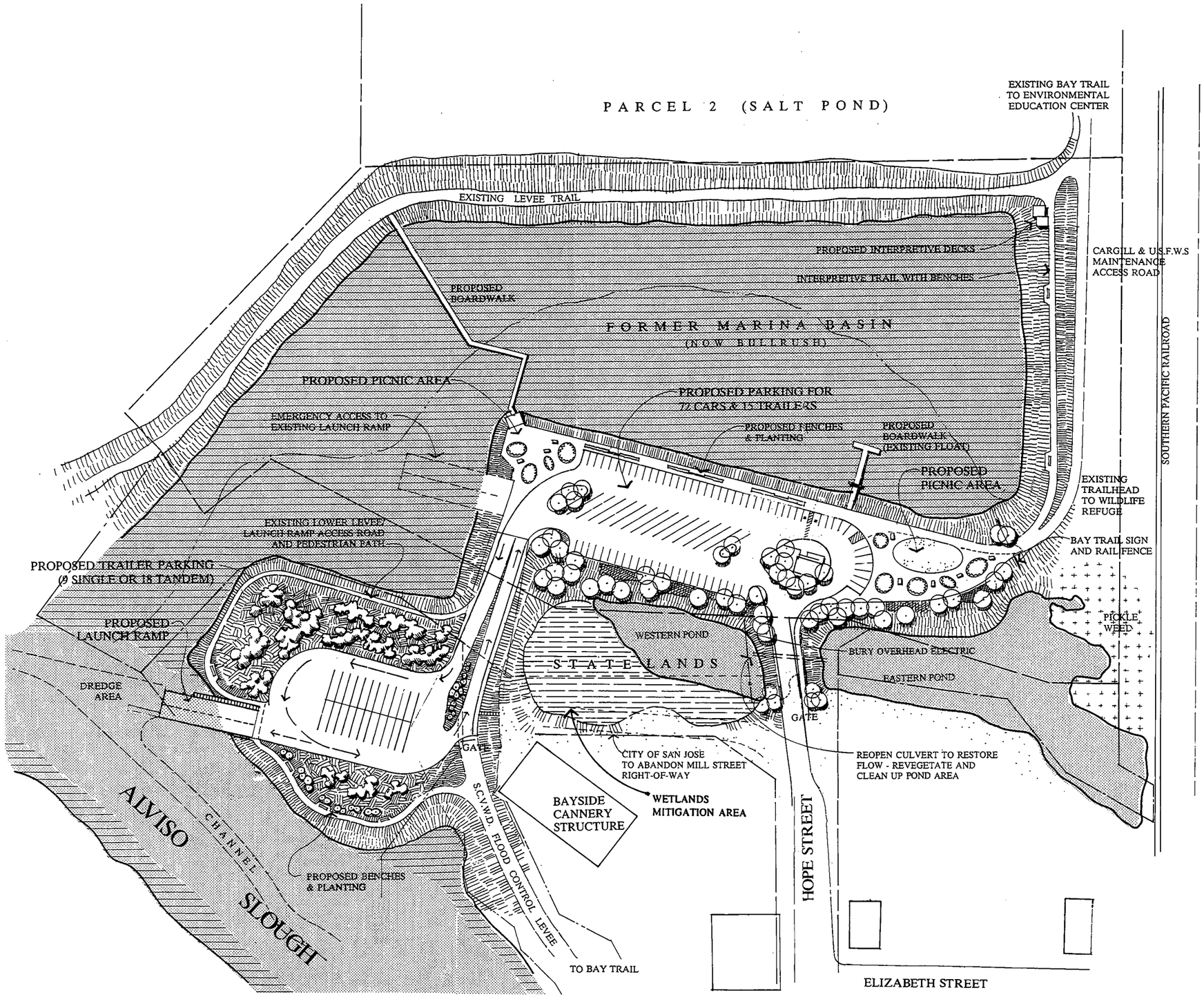
One of the major considerations throughout the master plan process has been the need to improve small boat access to Alviso Slough. Boaters and others have noted the difficulty of using the present ramp due to the existing mud caused by high rates of sedimentation. Early in the process, the US Army Corps of Engineers (COE) directed the County to consider an alternative location for the launch ramp to avoid potential environmental impacts related to dredging a channel for the existing launch ramp. The COE indicated it would not give consideration to a launch ramp dredging permit application at the existing site until an alternate location has been pursued and found to be infeasible. Accordingly, the Master Plan proposes relocating the launch ramp to Alviso Slough on property that is presently owned by the US Fish and Wildlife Service (USFWS). Acquisition of this property is discussed below under "Ownership and Leases."

Soil and vegetation surveys of the property owned by USFWS (the acquisition parcel) have indicated that the central portion of the site contains a seasonal wetland as defined by the COE. Despite this resource, staff members from the COE and other regulatory agencies indicated at an informal meeting (February 8, 1995), that launch ramp development of this parcel is preferable to dredging the existing launch ramp and consequent damage of bulrush vegetation and wildlife habitat. With the proposed location at the Slough, the new launch ramp will be exposed to greater tidal flow and more scour than the present ramp and, as a result, less sedimentation will occur. Because of the slower buildup of sediment, the proposed ramp will need to be dredged less frequently and there will be less impact on wildlife and surrounding habitat. The launch ramp at the slough was preliminarily viewed by the staff of regulatory agencies as "*the least environmentally damaging, practicable alternative.*"

The proposed launch ramp at the Slough will be usable a much greater percentage of the time than the current ramp. Although launch ramp usability is affected by a complex series of conditions, such as tidal range, bottom configuration, boat size or draft, the following table of Float Time gives a general indication of the percentage of time that boats with the drafts listed would be able to use the Alviso Slough at the midpoint of the channel. The numbers project a slightly more optimistic picture than is likely to occur because boaters do not stay exactly in the center of the channel. In addition, channel depths vary over time as tides go in and out; and launching at a high tide may mean returning at a low one when the water levels would be less. However, if dredging can make the base of the launch ramp as deep as the midpoint of the channel, about -6.0 ft. NGVD (-2 ft MLLW)[1], then the launch ramp would be very usable a high percentage of the time for small boats.

The proposed launch ramp at the Slough will consist of two fifteen-foot lanes and a single six-foot float along one side. In order to maintain the lower levees along the edge of the Slough and around the acquisition parcel, two concrete walls will flank the ramp as it projects through the levees. These walls will be designed to be attractive and to discourage graffiti. With one-foot wide retaining walls at either side, the total width of the ramp will be 38-feet. The approximate length

[1] Based on historical records of high tides in the Bay, the estimated 100-year high tide elevation at Alviso is 8.0 ft. National geodetic Vertical Datum (NGVD), 3.4 feet above the average high tide. Two survey datums are commonly used as a reference for elevations: On land, the standard USGS datum of NGVD, which corresponds approximately with Mean Sea Level (MSL) is the standard for Santa Clara County. In tidal areas, Mean Lower Low Water (MLLW) is commonly used, which is a relative datum based on local tide conditions. For Alviso, MLLW is 4.4 feet below NGVD.



MASTER PLAN IMPROVEMENTS

LAUNCH RAMP

RELOCATE TO ALVISO SLOUGH
ACCESS RAMP VIA EXISTING PARK
PARKING FOR 9 TRAILERS (18 TANDEM)
EMERGENCY ACCESS TO EXISTING LAUNCH RAMP

REMOVE MARINA

REMOVE FLOATS AND PILES

PICNIC FACILITIES

PICNIC AT EAST END OF SITE
PICNIC AT WEST END OF SITE

BOARDWALK

BOARDWALK ACROSS MARINA BASIN
BOARDWALK USING FORMER MARINA FLOATS

PARKING IMPROVEMENTS

IMPROVE PARKING FOR 72 CARS (LOSE 33 CARS)
IMPROVE PARKING FOR 14 TRAILERS

TRAILS AND SITE AMENITIES

SIGNS, FENCES, GATES, BENCHES

INTERPRETIVE TRAIL AND DECKS

INTERPRETATION OF ECOLOGY
INTERPRETATION OF LOCAL HISTORY

PLANTING & IRRIGATION

NATIVE AND DROUGHT TOLERANT PLANTINGS

SIGN PROGRAM

INTERPRETIVE SIGNS
DIRECTIONAL SIGNS

PARK ENTRANCE IMPROVEMENTS

ENTRY WALK
CLEAN-UP AND REVEGETATE POND AREA ON STATE LANDS
GATE, SIGNS, PLANTING

UTILITIES

BURY OVERHEAD ELECTRIC

RETAIN EXISTING FLOOD CONTROL LEVEES

NOTE: INTERIM PLAN IMPROVEMENTS INCLUDE: RESURFACE PARKING LOT, RESTROOM IMPROVEMENTS, PLANTING AND IRRIGATION, FLOAT REPAIR, LIGHT REPAIR, ENTRANCE IMPROVEMENTS

MASTER PLAN

ALVISO MARINA COUNTY PARK

COUNTY OF SANTA CLARA
ENVIRONMENTAL RESOURCES AGENCY
DEPARTMENT OF PARKS AND RECREATION

DILLINGHAM ASSOCIATES
LANDSCAPE ARCHITECTS AND PLANNERS

0 20 60 120
SCALE IN FEET

NORTH

Table of Float Time

Percentage of time proposed launch ramp available to boats of given drafts

Boat Draft	Percentage Time Available	Boat Draft	Percentage Time Available
1.0 ft.	96%	5.0 ft.	70%
2.0 ft.	94%	7.0 ft	44%
3.0 ft.	86%	8.5 ft.	20%

of the ramp, above and below water, will be 150-feet (20 feet of vertical rise at 13-percent slope). The base of the ramp will be protected by rock rip-rap (concrete rip-rap is not acceptabole because it can provide habitat for red foxes which prey on bird life). Ramp construction will require about 250 cubic yards of excavation from the existing low levee. The top of the ramp will begin at an elevation equal to the height of the low levee in order to maintain the flood control capacity of the levee.

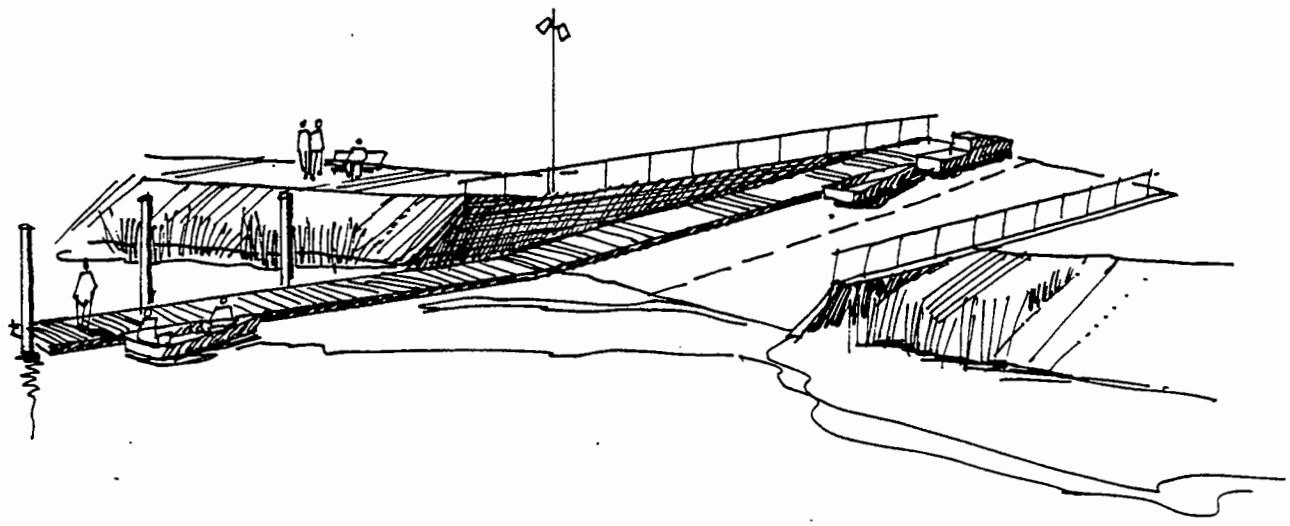


Figure 7 - Sketch of Proposed Launch Ramp

The launch ramp shown on the Master Plan is set at an angle to the centerline of the Slough. This position is preferable to one which is perpendicular to the centerline of the slough because the required ramp slope has a better fit with the slough configuration and it will be easier to launch boats at low tide. In addition, the angle will allow Slough current to provide greater cross-flows and cleansing of the ramp surface. The final location and alignment of the launch ramp will be based on detailed soundings of the slough and a topographic survey of the site. Construction of the launch ramp will require dredging about 1275 cubic yards of sediment within the slough as well as destruction of minor areas of bulrush vegetation at the edge of the Slough. The environmental impacts associated with the construction of the launch ramp will require the use of a coffer dam, suction dredge and desilting ponds during dredging activities. It appears that the constraints of the project site and water quality concerns will require that the coffer dam be constructed of interlocking sheet metal pilings or equivalent.

It may be possible to use dredge spoils from the initial dredging for the launch ramp as fill for the trailer parking area. After dredging, the semi-liquid spoil could be placed in the low area on the acquisition parcel and allowed to dry. The dried dredge spoils would be prepared for use as fill under the parking area.

The center of the acquisition parcel is lower than the surrounding levees which separate it from the slough. As noted above, portions of this area are considered to be a seasonal wetland. In order to bring the low area of the 1.8-acre parcel up to a grade that would be even with the levees, about 3,000 cubic yards of earth would be brought to the site. As noted above, some of this quantity could come from dredge spoils. Due to the presence of the seasonal wetland, development in this area will require a permit from the Corps of Engineers. See the Implementation section of this report. Mitigation for fill of the seasonal wetland is discussed below.

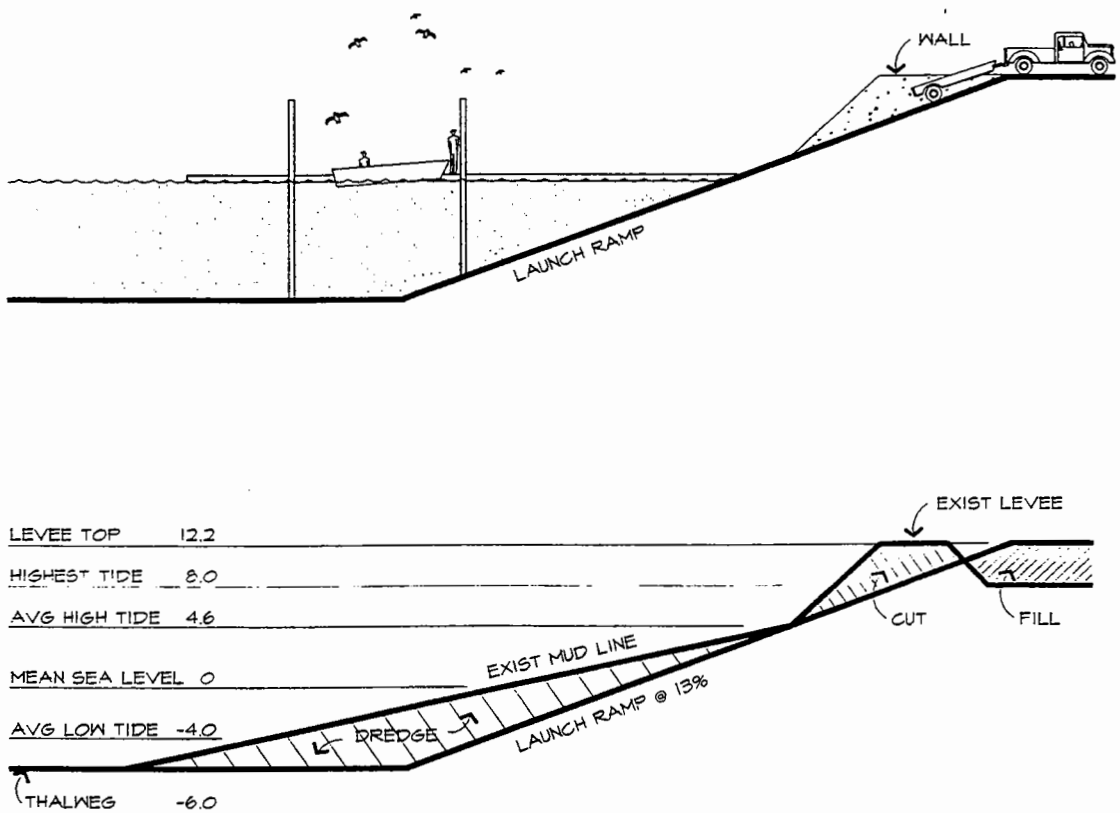


Figure 8 - Diagrammatic Sections at Proposed Launch Ramp

Access to the launch ramp will come via roads from the existing park to the launch ramp following the course of the existing levees. Leading from the existing park and parking lot, the access road will first follow the top of the lower, flood-control levee. The existing access roadway here is about ten-feet wide and must be widened about ten-feet to accommodate a fifteen-foot travel lane and five-foot walkway. The access road returning to the existing park area will follow the higher, 20-foot wide flood-control levee constructed by the Santa Clara Valley Water District (SCVWD). Minor additional fill will be required to use these levees.

The access road from the existing park to the launch ramp parking area will traverse it for about 260 feet. Modifications to the area will not impact the ability of the SCVWD to access the levee south of the trailer parking lot. A system of bollards and service gates will be used to restrict vehicular access to the levee-top service/maintenance road. SCVWD must grant permission to use the levees and their staff have indicated informally that permission is likely. However, it should noted that SCVWD retains the right to make any modifications to their levees. In the event that the SCVWD wished to make changes to the levees, the cost replacing any County facilities connected with the levees, such as access roads, must paid entirely by the County. Prior to development of detailed plans, proposals will be coordinated with the SCVWD, and plans will be submitted to them for approval per SCVWD ordinance 83-2.

After completion of the launch ramp, parking, and access roads, about half of the 1.8-acre parcel will remain vegetated and undeveloped. Existing levees around the parcel will be retained so their flood control capability will not be compromised. Walkways on the levees around the 1.8-acre acquisition parcel will be retained for recreation use. Other portions of the launch ramp area will be revegetated with species native to the site.

The existing concrete launch ramp will remain for emergency use. The existing floats will be removed, however, and the piles will be cut-off at the mud (high water) line.

Environmental Mitigation at the Western Pond For Launch Ramp Development

In order to provide access roads and trailer parking areas on the 1.8-acre acquisition parcel, the existing 0.58-acre seasonal wetland must be filled. The US Army Corps of Engineers (COE) will require that this loss be mitigated through replacement of similar wetland. This will be accomplished at an on-site location at a ratio to be determined by the COE. The proposed site for this mitigation is the adjacent western remnant pond of the former Steamboat Slough. A modification of the existing County lease on this parcel from the State Lands Commission, owner of the parcel would be required to carry out the mitigation. Land area within the State parcel is not adequate to completely accomplish the entire required mitigation. As a result, the County will also have to secure the land in the adjacent Mill Street right-of-way, a 0.70-acre area. The City of San Jose has indicated that this acquisition seems very feasible. See the Implementation section of this report.

Alternative Launch Ramp Plan

If it is not possible to secure permits, property ownership or leases for the launch ramp development at the Slough, the County may consider applying to the COE for permits to dredge the existing launch ramp and its access channel to the Alviso Slough. There is no guarantee that permits or funding will be available for dredging a channel to serve the existing launch ramp. If permits for construction of the access route from the existing park to the launch ramp area (acquisition parcel), are not obtainable, an alternative access route would be required via Mill Street. In this case, mitigation for loss of the 0.58-acre seasonal wetland on the acquisition parcel would be achieved on-site through reconfiguration of the access roads and parking, or at an off-site location.

Removal of the Marina

Most of the existing marina facilities will be removed as part of the Master Plan implementation. The appeal of a walk among the bulrushes has made the deteriorating marina facilities an attractive nuisance. Issues of public liability, negative visual impact and potential environmental degradation all indicate that marina facilities should be removed. Although wood floats will be easy to remove, pilings will be difficult and will be cut off at the mud line. One portion of the eastern-most float and access gateway will be retained and improved as an interpretive walkway into the marsh vegetation.

Picnic Facilities

The Master Plan proposes an upgrade and expansion of picnic facilities. The parking lot east of the restroom will be removed and replaced with a picnic area consisting of six to eight picnic tables. A small open meadow, seeded, non-irrigated and mowed once in Spring, will be provided along the waterfront and could be used for informal activities or games such as "frisbee" or catch. An additional picnic area with three or four tables will be constructed along the western edge of the site. The west picnic area will be more open to allow views across the wetlands. Native and/or drought tolerant shrubs and grasses will be planted on low mounds in both picnic areas to provide some buffering from prevailing winds and to separate the picnic areas from one another and from the parking lot. The ground surface will be consist of a crushed rock paving. In order to avoid increases in predators of endangered and other animal species, adequate trash receptacles will be provided which do not allow access by animals. Signs will be posted to discourage feeding of animals.

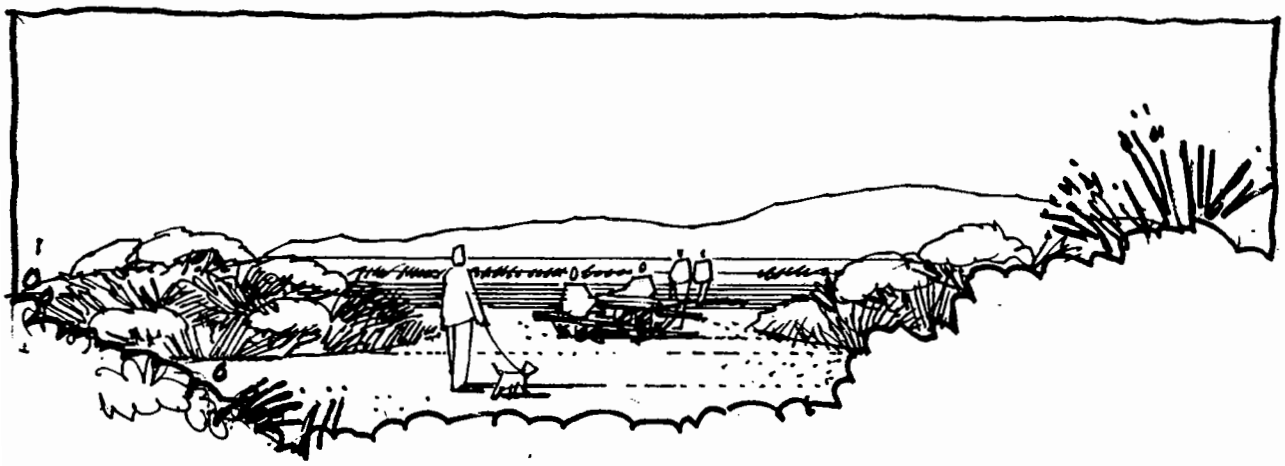


Figure 9 - Sketch of Picnic Facilities

Boardwalk

A wooden boardwalk is proposed to cross the bulrush habitat of the former marina basin. Built on concrete or wooden pilings set into sediment, the boardwalk will give visitors access to the wildlife and vegetation of the bulrush habitat. The boardwalk will require a permit from the Corps of Engineers and BCDC. See *Permitting*, below. In addition, the boardwalk will provide

a short loop trail around the former marina basin and, at the same time, a short-cut to the trail that parallels the east side of the Alviso Slough. The boardwalk and the loop trail will create a series of good locations for interpretive signs with great potential for environmental education. See *Sign Program*, below.

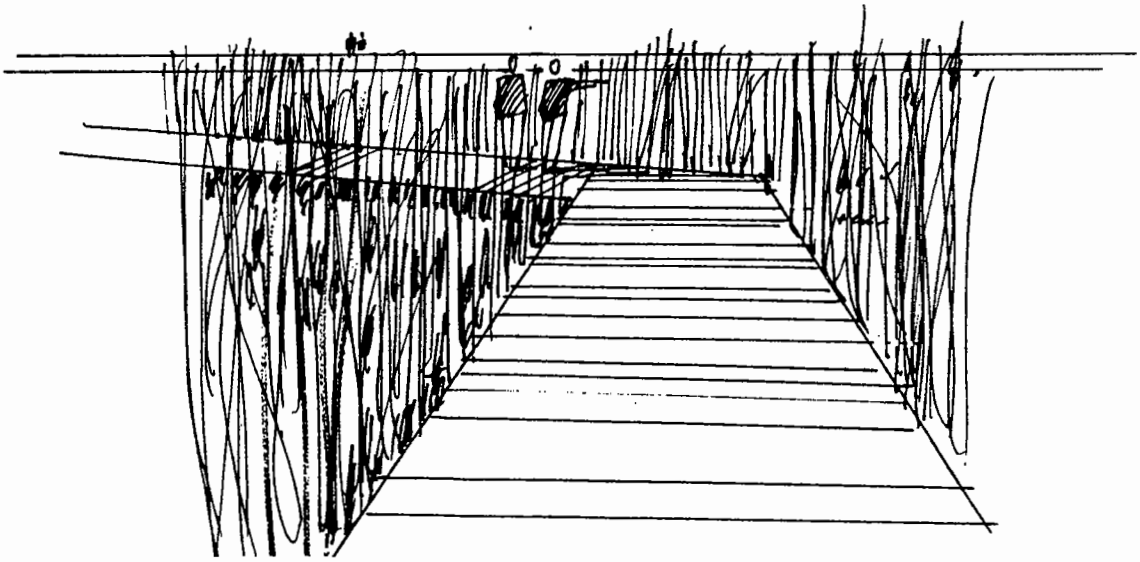


Figure 10 - Sketch of Proposed Boardwalk

Restroom Improvements

The existing restroom is scheduled for renovation as part of the Interim Plan development. The new ramped entry will meet the accessibility standards required by State Title 24 and the Federal Americans with Disabilities Act. The restroom structure will be reinforced and the interior floor and wall surfaces replaced. New partitions and some new fixtures will be added as well as new skylights and a new roof. Electrical outlets in the restrooms will be removed so that they are not a convenience and attraction for anyone using a vehicle in the parking lot as a semi-permanent living unit. An emergency telephone (911 calls only) and a new drinking fountain will be installed on the exterior.

Parking Improvements

Although originally designed for 28 cars and 33 trailers, the present capacity of the parking area, as developed in the Interim Plan, is about 105 cars and 14 trailers. The Master Plan proposes that car and trailer parking remain in the existing park and that additional boat trailer parking be developed at the launch ramp area. The parking area within the existing park will have a capacity of 72 cars and 14 trailers, a decrease of 33 car stalls. Parking for nine additional (18 if parked tandem) trailers will be located adjacent to the proposed ramp, increasing total trailer parking to 23 stalls. As noted under the discussion of picnic facilities, parking on the eastern and western ends of the park will be removed and replaced with picnic areas, allowing a more diverse use of the site.

Trails and Site Amenities

Site pedestrian circulation will occur on pathways separated from vehicular areas. A widened pathway will pass along the marsh edge, separated from the parking area by low buffer planting in such a way that views from adjacent cars will not be blocked. Benches will be set along the path and oriented to the views. A trail with interpretive information and benches will be located along the pedestrian path on top of the levee at the east end of the marina.

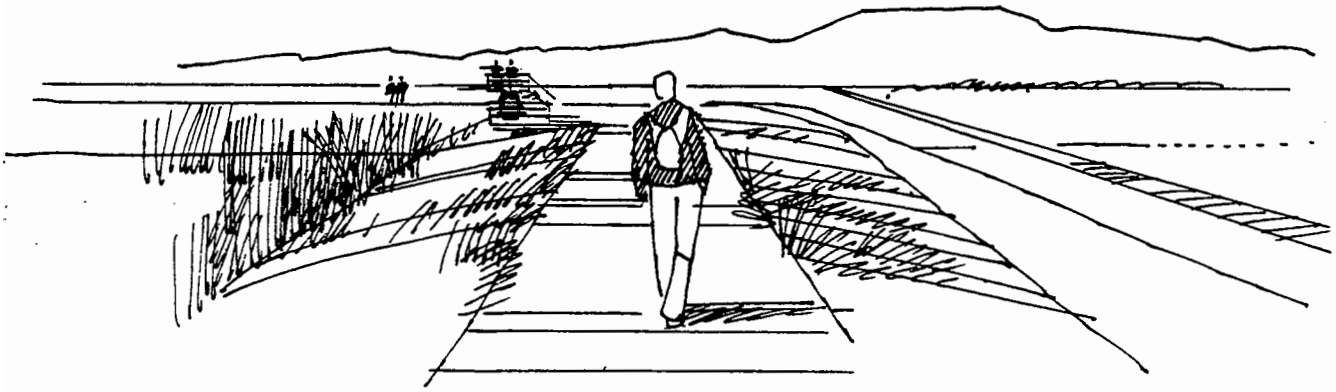


Figure 11 - Sketch of Levee-top Trail

The Alviso Marina County Park is a proposed staging area for the San Francisco Bay Trail as it crosses the southern end of the bay shore. The main trail will be extended from Sunnyvale Baylands Park (west of the site) to Gold Street in Alviso, then continue along City streets or along the Santa Clara Valley Water District flood control levee (following the Slough) to the park. The main trail will continue to the east following city streets (State Street to Los Esteros to Zanker). A secondary loop trail already extends from the park into the National Wildlife Refuge to the Environmental Education Center before reconnecting to the main Bay Trail.

Signs will be used to make the trailheads to the San Francisco National Wildlife Refuge and the San Francisco Bay Trail easier to find. Maps posted at the trailhead will provide route information for trail users. The existing sign board or kiosk sign will be relocated to a site along the path at the edge of the marsh to provide more information about the park for the general public. In addition, community notices and other information could be posted. The sign board will be improved through painting and plexiglass display covers.

Interpretive Decks

Interpretive decks are proposed at the north-east corner of the existing levees surrounding the marina area. The wooden deck structures will consist of two ten-foot square platforms with rails, one of which will rise about 4.5-feet above the level of the existing parking area. The second deck will be close to ground level and will be accessible in accordance with State Title 24 and Federal ADA standards. The intent of the structures is to provide a platform to observe the surrounding landscape as well as plant and animal life. The decks will be combined with interpretive signs,

as discussed in more depth below. While the height of the platform will make it a prominent feature on the landscape, its design could recall some of the historic structures that existed in the area.

Sign Program

The existing sign kiosk has been relocated to a site near the restroom and will be improved. This structure provides a place to post information about the park for the community. Interpretive signs will be installed at areas such as the observation deck and the boardwalk. These signs will describe various aspects of the park, such as the vegetation, wildlife, views, history and natural processes. They will help educate the visitor about the park's rich natural and cultural heritage. Directional and other signs will indicate the location of various facilities within the park as well as facilities that are connected to the park by trails or pathways. A park identification sign, as discussed in more detail below, will be installed at the park entry. Whenever possible, sign structures will be designed so that they do not serve as perches for raptors to prey on marsh species.

Planting and Irrigation

Additional planting and irrigation throughout the park site will serve to further beautify and enhance the site in several ways. Native and/or drought-tolerant shrubs will be planted around the picnic areas to provide windbreaks. Areas around the proposed trailer parking on the acquisition property will be revegetated. Plants will be selected for use on the basis of their ability to withstand wind, salt-air, soil, and drought conditions. Wherever consistent with horticultural and maintenance conditions, appropriate native species will be used. An irrigation system for new woody plants will be installed to reduce demands on limited park maintenance staff and to ensure the establishment of new plantings. In order to reinforce the open and natural quality of the park site, new plantings will not include trees. No existing trees will be removed.

Park Entrance Improvements

Public comments have requested that the western remnant pond from the former Steamboat Slough be cleaned-up and replanted with appropriate vegetation. With the approval of the State Lands Commission, owner of the site, this area was partially cleaned-up with volunteer effort in 1996. Additional clean-up of concrete and wood debris is still necessary, however, this work must be coordinated to minimize disruption of burrowing owl nests. County staff will explore the possibility restoring tidal circulation to the western pond by re-opening the existing 24-inch culvert which passes under the entry road. Park staff will need to continue cleasring and maintaining the culvert in order to prevent re-sedimentation. With the construction of the launch ramp, this area will be used as mitigation for the loss of the 0.58-acre seasonal wetland on the acquisition parcel. Mitigation will involve expansion of the pond and associated wetland by 0.58-acres and will involve areas now part of the Mill Street right-of-way. See page 28.

A wood sign at the park entry is scheduled to be installed as part of the Interim Plan development in order to identify the park for visitors. Directional signs will be required to direct boat trailers to the new launch ramp site via the existing park and parking area. A wood-rail fence has also been scheduled for installation as part of the Interim development in order to denote the park's boundary. Design of the fence will be appropriate to the park site.

The existing entry road does not include a sidewalk or path. A pedestrian walkway will be added along the east side of the entry road to connect the park with the community. Because the road is narrow with steep side embankments, the new pedestrian walkway will be constructed as a raised, wooden boardwalk. The City has designated Hope Street and the park entry drive as a bicycle route. The existing overhead electric and telephone connection into the park will be relocated underground. Entry improvements located south of the County's lease-hold on State lands require an encroachment permit from the City of San Jose because they are proposed in the public right-of-way for Hope Street. The County Task Force and/or community should approach the City of San Jose to request improvements such as curbs, gutters and sidewalks along Hope Street as it enters the park site.

As part of the Interim development an automatic vehicular gate will be installed to restrict use of the park to daylight hours only. For many years the park was required to be open 24-hours per day in order to accommodate the needs of boaters for 24-hour access to the launch ramp. The shallow water in the Slough and at the existing launch ramp require that boaters sometimes launch their craft during times when the park will normally be closed. This requirement, which was part of the conditions of the original grant has expired. In order to control night-time access to the park yet still permit access to the launch ramp, a system of night launch permits and card access will be instituted. Boaters can apply for and receive permits through the County Parks and Recreation Department. A card will be used for after-hours entry. Exit gate operation after-hours will be automatically triggered by an electro-magnetic loop detector in the exit road. A sign at the gate will be used to inform the public of the program and how it operates.

Utilities

The Master Plan will not make significant changes in the utilities at the park site. Most of the necessary facilities such as electric power, water, and sanitary sewer are already available. The existing sanitary sewer line from the former sanitary pump-out station on the marina floats will be terminated at an existing manhole near the west end of the existing parking area. A water line for boat wash down will be extended from the existing park area to a site at one side of the new trailer parking area near the proposed launch ramp. Overhead electric lines along the park entry road as well as those along Mill Street will be replaced with underground connections to avoid the negative visual impact of overhead lines. As required by the Municipal Storm Water National Pollutant Discharge Elimination System Permit administered by the San Francisco Bay Regional Water Quality Control Board, best management practices for controlling pollutants in runoff from parking lots and other sources will be included in park design and management.

Ownership & Leases

The Master Plan proposes several improvements on land adjacent to the park site but not currently owned by the Santa Clara County Parks Department.

Construction of a launch ramp at the edge of the Alviso Slough will require acquisition of a 1.8-acre parcel of land, owned by the Federal Government and managed by the United States Fish & Wildlife Service (USFWS). It is located between the existing park and the slough. Preliminary discussions with the USFWS have indicated that such an option is feasible. Due to a rule prohibiting USFWS from selling surplus property, the County will be required to exchange property to acquire this parcel. The park's northerly parcel of 14-acres, currently used as salt

pond, could be used for all or part of the exchange, although continuing discussions will indicate to what extent. This 14-acre parcel is one of the few areas east of the Slough and north of Alviso that is not presently included in the National Wildlife Refuge. If acquisition of the 1.8-acre parcel owned by USFWS is not possible, or permits for development are not available, the existing launch ramp and access-channel will then be proposed for dredging and renovation, assuming that permits for this work will be granted.

In order to have adequate area to accommodate environmental mitigation at the western remnant pond of the former Steamboat Slough, the County would have to acquire the right-of-way to Mill Street from the City of San Jose. This dedicated street is unpaved and without curbs, sidewalks, drainage or utilities other than an overhead electric line serving the 1.8-acre acquisition parcel. If the city owns the ROW in fee-title, then the ROW would be sold at either a "nominal" cost for good reason, or at market value after an appraisal. City of San Jose staff have indicated that it would be feasible for the City to abandon, the Mill Street right-of-way and allow the County to acquire it.

New leases or modifications to existing ones will be required for improvements planned on parcels owned by the State Lands Commission. These parcels include areas of Alviso Slough and the former Steamboat Slough. The State Lands Commission has indicated that the leases required by the Master Plan, to cross and revegetate these parcels, could be obtained without difficulty because the plan supports water-related uses.

Permitting

Several aspects of the Master Plan will require permits from regulatory agencies in addition to the requirements of the California Environmental Quality Act as administered by Santa Clara County. More information on this topic can be found in Appendix B, however, the most detailed information on permitting requirements is given in the report *Alviso Marina Master Plan - Agencies, Responsibilities and Permits* (dated March 1, 1995). In brief, the following agencies will be likely to require permits:

United States Army Corps of Engineers (COE):
Section 10 and Section 404 Permits for: a.) construction of launch ramp and any related dredging; b.) destruction of a "seasonal wetland" on the 1.8-acre acquisition parcel as required for construction of launch ramp parking. The boardwalk will also require a COE permit. The COE will consult about potential environmental impacts with other State and Federal agencies such as State Historic Preservation Office, National Marine Fisheries, Environmental Protection Agency, the US Fish & Wildlife Service, and the State Department of Fish & Game.

State Department of Fish and Game:
Streambed alteration agreement per Section 1601 of the State Fish & Game Code for construction of the launch ramp at the Alviso Sough

Santa Clara Valley Water District:
Encroachment permit and permit to modify the existing flood-control levees along the edge of the Alviso Slough. Encroachment upon the levee for access to the boat ramp parking area is also subject to permit.

Regional Water Quality Control Board:
National Pollutant Discharge Elimination System and Waste Discharge Permits for disposal of any dredge spoils. Best management practices for controlling pollutants will be included in park design. See page 33.

The San Francisco Bay Conservation and Development Commission (BCDC):
Permit to construct the boardwalk, launch ramp and related dredging, removal of existing marina structures such as floats and piles, development or improvement of any facilities within 100 feet of the high tide line.

State Lands Commission:
Application for lease and use of State Lands will be required in order to construct the launch ramp and access road on State lands, and to modify the pond area.

City of San Jose:
Construction of entry improvements within the public right-of-way of Hope Street will require an encroachment permit from the City of San Jose.

PARK MANAGEMENT

Operations

The term "operations" refers to County policies and staff activities which are necessary to manage and maintain the park. General management and maintenance practices at the park will be continued and expanded under the Master Plan.

Alviso Marina County Park is one of the smaller parks in the County's Park system. It is part of the Ed Levin Unit, which includes 1000-acre Ed Levin County Park near Milpitas and the linear, 6-mile Penitencia Creek Park chain in east San Jose. Alviso Marina County Park is considered to be remote from the others with a 30 to 45-minute drive separating them.

Staffing

The following positions have responsibility for park operations and maintenance:

Regional Manager

To date, the Regional Manager has overseen parks in the northern half of the County. Because the Regional Manager provides liaison between field staff and administrative staff, the position's time is charged to administrative functions and does not come out of the Park's staffing budget.

Park Ranger

A Park Ranger, based at Ed Levin County Park, performs patrol and minor maintenance duties. They are not allocated specific hours but spend about 10-percent of their time for the Marina.

Maintenance Staff

Alviso Marina is staffed by a permanent maintenance worker who spends about one-third of their time, or about 550 hours annually, at the Marina. This worker is based at Ed Levin County Park and also has duties at Penitencia Creek County Park. A seasonal park worker, with 430 hours per year, assists the maintenance staff worker. County Parks hires seasonal part-time help to augment maintenance staff. Maintenance duties include general clean-up, daily restroom cleaning, garbage removal, building repairs, weeding, and implementation of various staff projects such as picnic improvements.

Supplementary Services

Police Services

Because Alviso and the County Marina are located within the City of San Jose, law enforcement is provided by the San Jose Police Department, Beat R-1 (Roberts District) which includes areas within the San Jose City limits north of Highway 237 generally between Coyote Creek and the Guadalupe River. Officers work from the main police Station at 201 West Mission Street at the corner of Guadalupe Parkway. Secondary law enforcement comes from County Parks Rangers.

Primary enforcement responsibility for aquatic areas belongs to Park Rangers. In addition to patrol of the parking area, their duties also include such items as citing boats in the water for obstruction of the launch ramp.

Fire Control

Like police services, fire control services are provided by the City of San Jose Fire Station No. 25, located at 1590 Gold Street in Alviso. This station has four fire-fighters on 24-hour duty. Equipment is limited to a fire engine tank truck that can pump 500-gallons per minute. Back-up fire control comes from Station No. 29, located at Zanker Road and Caviglia Drive, about a mile and a half south of Highway 237.

Garbage and Refuse Service

Refuse is collected weekly from dumpsters located within the parking area at the Marina by a private garbage collection service based in San Jose. . County Parks, through its operations staff, contracts for this service.

Impact of the Master Plan on Operations

The Master Plan represents additional park management and maintenance duties for the County Parks' staff. These further duties will require additional staff to patrol and maintain the expanded facility. It is currently proposed that the following additional staff will be needed after Master Plan implementation. However, these staffing levels will be reviewed during the review period for the Draft Master Plan and may be revised. Proposed staffing includes: a) a half-time ranger patrol (1040 hours per year) at a cost of $17,500; b) a permanent full-time maintenance worker (2080 hours per year) at an approximate cost of $38,500 per year; and c) a seasonal half-time maintenance position (1040 hours per year) to maintain new facilities during the busy summer months, at an approximate cost of $14,500 per year. Maintenance tasks will include trash removal, clean-up and weeding proposed picnic areas; general maintenance of new planting and irrigation; repair of fencing, picnic tables, signs, etc; maintenance and repair of the proposed boardwalk and interpretive platforms; clean-up and repair of the proposed launch ramp area.

Operations Budget

The operations budget for the Alviso Marina for Fiscal Year 1997 (July 1997 to June 1998) is $8,360 (not including salaries). Of this amount about $2,500 is used for garbage, electric and water costs. About $1,800 is used for phone, maintenance equipment and supplies, interpretation and restroom supplies. $4,000 is used for operations, including building maintenance, weeds, signs, paint, irrigation and dock maintenance. When completed, the Master Plan will require an approximate increase of $6,000 in the Operations Budget, to make the new operations budget around $15,000. The increased operations costs will generally cover such items as periodic resurfacing of the parking areas, renovation of walkways, planting and irrigation maintenance, yearly maintenance of the emergency call box, as well as maintenance of lighting and launch ramp floats. In addition to general operational costs, dredging an average of 750 cubic yards per year for maintenance of the new launch ramp will be in the range of $15,000 to $20,000 per year depending on disposal location and trucking costs.

MASTER PLAN IMPLEMENTATION

After the Master Plan is adopted, the County will need to begin various steps to implement the plan. It is important to note that various components of the plan are dependent on meeting several different conditions which will affect the timing of the plan implementation. These conditions include land ownership, obtaining funding and permitting. Each is discussed below. Because various tasks associated with these requirements must occur prior to implementation, specific start dates for plan implementation are not provided at this time. Instead, an estimated time-range associated with the various tasks is indicated.

Land Ownership

In order to complete the development outlined in the master plan, the County will have to acquire or lease several pieces of adjacent property before it can apply for some permits or for certain grant funds. These can occur simultaneously.

Acquisition Parcel (USFWS)
Construction of a launch ramp at the edge of the Alviso Slough will require acquisition of a 1.8-acre parcel of land, owned by the Federal Government and managed by the United States Fish & Wildlife Service (USFWS). While initial discussions have occurred during the planning process, the actual exchange cannot occur until the Board of Supervisors approves this master plan. It is estimated that negotiations to complete the acquisition will take six to eighteen months.

Alviso Slough and Remnant Pond at Steamboat Slough (State Lands Commission)
Roll-over and expansion of existing leases will be required for improvements planned on parcels owned by the State Lands Commission. These parcels include areas of Alviso Slough and the former Steamboat Slough. Completion of new leases will require six to 12 months.

Mill Street Right-of-Way (City of San Jose)
In order to have adequate area to accommodate environmental mitigation at the western remnant pond of the former Steamboat Slough, the County will have to acquire the right-of-way to Mill Street from the City of San Jose. City planning staff has indicated a willingness to proceed with the abandonment of Mill Street during the initial planning stages Abandonment of the Mill Street right-of-way will require an estimated eight to eighteen months.

Flood Control Levees (Santa Clara Valley Water District)
Santa Clara Valley Water District will require permission to construct and operate the launch ramp access road on their levees. They have indicated informally that this is not likely to be a problem. Approval of proposed plans can be completed at a staff level and will require two to three months.

Funding

Currently there are no funds appropriated for Master Plan implementation in the Parks Capital Improvement Programs. There are a number of possible sources of funding for development of the Alviso Marina County Park Master Plan which the County will pursue upon approval of the plan. Both the State Department of Boating and Waterways and the California Coastal Conservancy have indicated a willingness to assist in funding this project.

State of California Department of Boating and Waterways (B&W):
B&W administers a grant program to assist local jurisdictions with development of launch ramp facilities. These grants can be used not only for actual launch ramp development but also construction of related facilities such as parking, lighting, pedestrian access, planting and irrigation. The County has made initial contact with B&W during the planning phase of the project. Once the Master Plan is approved and the USFWS parcel acquired by the County, the County will submit an application for funding.

State of California Coastal Conservancy:
The Coastal Conservancy funds development proposals of local jurisdictions which enhance shore habitats and/or improve access to shore areas. The County has made initial contact with the State Coastal Conservancy regarding this project. Once the Master Plan is approved the County will submit a formal application for funding.

State Proposition 204 - The San Joaquin / Sacramento Delta Bond Act:
This bond act will fund riparian mitigation and habitat improvement. Although not currently available, it will be administered through the State Department of Water Resources.

State Department of Transportation Environmental Enhancement and Mitigation Program:
This currently-available grant program provides $10 million per year for mitigation of non-specific environmental impacts associated with highways. In the case of the Alviso Marina, the expansion of highways 880 and/or 237 could be considered to have impacts in the Alviso area. The Marina could be a suitable receiver site for mitigation of impacts connected with these highways.

State Senate Bill 2: Although not yet in place, this probable future state bond act would replace the expired funding from previous state park bonds. The act has three parts: a) a per capita distribution of funds to various jurisdictions; b) the Roberti-Z'berg-Harris Open Space Fund which has both competitive and per capita aspects; c) Trail development which is distributed on a competitive basis.

City of San Jose:
Because the Alviso Marina County Park provides recreation facilities to the citizens of San Jose and is within the City limits, the City may be willing to provide some support for park development. Improvements related to Hope Street may also be supported by the City with Community Development Block Grants.

County Capital Improvement Program
The County Parks Department provides annual funding for various capital projects. The Alviso Marina Master Plan, EIR, and Interim Improvements were funded through Parks Capital Funds. Upon completion of the Master Plan, the County may consider these Master Plan improvements for future funding.

Permitting

As ownership issues are being resolved, the County will apply to agencies for permits to carry out launch ramp and other construction. Initial discussions with some of these permit agencies indicate it would be desirable for the land use agreements discussed on page 37 to be secured at the time the permit application is filed.

Figure 12

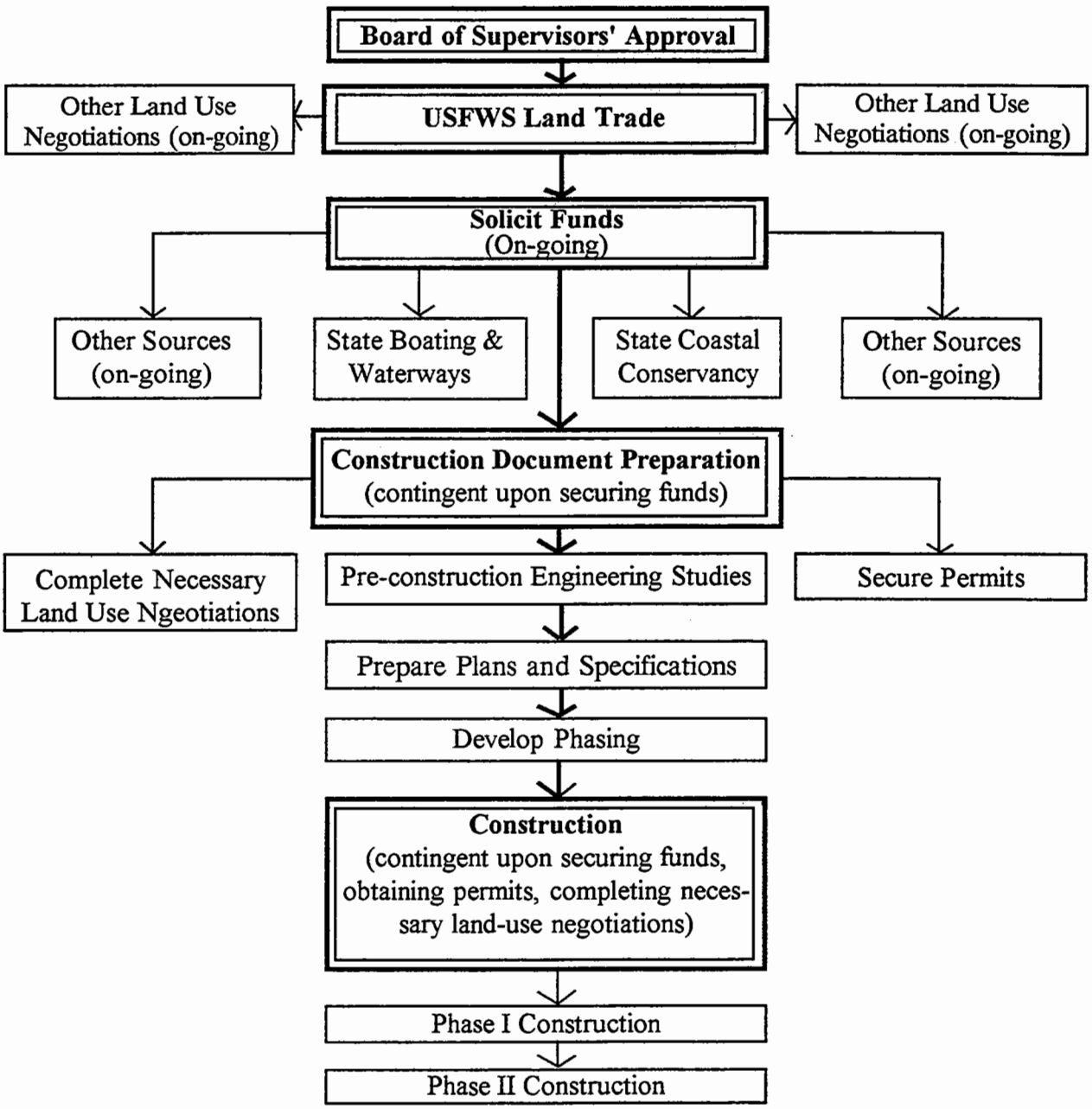
Summary of Permitting Requirements

Agency	*Permit Type*	*Estimated Time Required*
United States Army Corps of Engineers (COE):	Section 10 and Section 404 Permits for: construction of launch ramp and any related dredging; destruction of a seasonal wetland on the 1.8-acre acquisition parcel; construction of the boardwalk.	8 to 18 months or more
State Department of Fish & Game	Streambed Alteration Agreement (per Section 1601 of the State Fish & Game Code) for construction of the launch ramp on Alviso Slough	1 to 3 months
Santa Clara Valley Water District:	Per SCVWD Ordinance 83-2, permit to: modify the existing flood-control levees along the edge of the Slough; and an Encroachment Permit to construct and traverse levees with the launch ramp access road.	1 to 8 months minimum
Regional Water Quality Control Board:	National Pollutant Discharge Elimination System and Waste Discharge Permits for disposal of any dredge spoils.	6 to 8 months
The San Francisco Bay Conservation & Development Commission (BCDC):	Permit to construct the boardwalk, launch ramp and related dredging, removal of existing marina structures such as floats and piles, development or improvement of any facilities within 100 feet of the high tide line.	2 to 6 months or more
City of San Jose:	Encroachment Permit for construction of entry improvements within the public right-of-way of Hope Street.	4 to 12 months

Construction Document Preparation and Park Construction

Upon obtaining the lands previously mentioned, and when sufficient funding is available, the County will proceed with the preparation of coastal engineering studies to be used as the basis of construction documents for the proposed launch ramp. The engineering studies are estimated to take approximately four to eight months. Following their completion, a complete set of contract documents will be prepared. At that time, a detailed wetland mitigation plan will also be prepared. These could take between six to twelve months to complete. If funding for construction is available, a bid process of about three months would follow. Then a construction contract would be authorized by the Board of Supervisors. Actual construction, if completed in one project, is estimated to take between six to ten months. Depending upon available funding, these improvements could be phased.

SEQUENTIAL IMPLEMENTATION STEPS



Due to potential impacts on wildlife species such as the clapper rail and steelhead, construction periods may need to be restricted. If clapper rail are found to be present at the park site, construction of the boardwalk and removal of existing floats will need to avoid the clapper rail breeding season (February 1 to August 31). Construction of the launch ramp at Alviso Slough must avoid impacting steelhead migration and therefore be limited to the period between June 15 and October 15. See the EIR for further information.

Development Phasing

Construction of master plan elements can be completed in two or more phases depending upon available funds, obtaining permits and accomplishing land ownership transfers. It is anticipated that the launch ramp and related improvements would be constructed first. The Phase 1 development is proposed to include launch ramp development, related parking and access roads, related paths, related dredging, and removal of existing marina floats. The various specific items in the Phase 1 project are listed in the following construction cost estimate. A second development phase would include the remaining master plan elements including parking, picnic development, trail development and amenities, interpretive decks, interpretive sign program, and boardwalk construction. Depending upon funding and other conditions, Phase 2 development could broken into several smaller phases.

Interim Plan Development

During the master plan process a series of short term improvements to enhance the park were identified in "the Interim Plan." The Interim Plan improvements were feasible for immediate implementation; they did not require permits and did not have significant environmental impacts. Midway through the master planning process, the County Board of Supervisors approved Parks Capital Improvement Program funding to implement interim improvements, which are scheduled to be complete before 1998. See Appendix E - Interim Plan for a listing of these improvements.

Cost Estimate

A preliminary cost estimate for work proposed to complete the Master Plan is provided below. It lists the specific components that would be included in each phase and the associated cost of each. It should be emphasized that this estimate is preliminary, based on early planning concepts. Once the coastal engineering studies are completed and detailed plans and specifications are prepared, more detailed cost estimates can be provided.

Total Master Plan costs, exclusive of operations, design fees, administration, and permitting are approximately $2,478,000, based on 1997 estimates. The total cost for Phase I is $1,969,728 with construction costs totaling $1,639,728, and administrative costs, (permits, coastal engineering, 100% construction documents, and reimbursable costs) being $330,000. The total cost for Phase II is approximately $871,500, with construction costs totaling $838,500, and administrative costs (re-packaging of phase II construction drawings developed in phase I and reimbursable costs) being $33,000. Yearly operations costs are anticipated to <u>increase</u> by $92,600.

Item	Estimated Quantity	Unit	Estimated Unit Cost	Estimated Item Cost	Total
PHASE ONE DEVELOPMENT					
Launch Ramp & Related Facilities					
Site preparation & grading	50,000	sf	allow	$35,000	
Dredge / disposal at acquisition site	1,300	cy	allow	$40,000	
Mobilization for dredging			allow	$15,000	
Excavation of levees	250	cy	allow	$8,000	
Import fill for trailer parking area	3,000	cy	allow	$90,000	
Site drainage			allow	$15,000	
Extend water line to trailer parking	900	lf	allow	$6,000	
Extend electric line to trailer parking	600	lf	allow	$6,000	
Bury existing OH electric line	700	lf	allow	$45,000	
Launch ramp walls	20	cy	allow	$25,000	
Launch ramp surface - conc	4,300	sf	allow	$190,000	
Launch ramp piles & floats	400	sf	allow	$65,000	
Riprap			allow	$20,000	
Asphalt paving - parking area	36,000	sf	allow	$100,000	
Asphalt paving - access road	5,000	sf	allow	$30,000	
Gates at levee service road	1	ea	allow	$5,000	
Lighting at launch ramp			allow	$28,000	
Fencing & miscellaneous			allow	$20,000	
Planting	15,000	sf	allow	$45,000	
Irrigation			allow	$45,000	
Subtotal					$833,000
Habitat Restoration					
Removal of marina gates, floats, pilings			allow	$65,000	
Wetland mitigation			allow	$260,000	
Subtotal					$325,000
General Construction Overhead & Miscellaneous					
Subtotal of Items Above				$1,158,000	
Estimating Contingency @ 20%				$231,600	
Subtotal					**$1,389,600**
General Conditions @ 8%				$111,168	
Contrator's Overhead & Profit @ 10%				$138,960	
Total Phase One Construction Costs					**$1,639,728**
Phase One Administrative Costs					
Design and Engineering					
Coastal Engineering: $40,000 to $60,000				$60,000	
Wetland Mitigation Plans and Monitoring: $30,000 - $50,000				$50,000	
Construction Documents: $80,000 to $135,000				$135,000	
Permitting Fees (based on consultant processing)				$85,000	
Total Phase One Administrative Costs					**$330,000**
Total Phase One Costs: Construction & Administration					**$1,969,728**

Item	Quantity	Unit	Unit Cost	Item Cost	Total
PHASE TWO DEVELOPMENT					
Picnic Facilities and Landscaping					
Miscellaneous demolition			allow	$18,000	
Remove existing asphalt	22,520	sf	allow	$10,000	
Import soil for planting	1,200	cy	allow	$30,000	
Crushed rock paving	5,000	sf	allow	$10,000	
Planting			allow	$65,000	
Irrigation - drip			allow	$65,000	
Picnic facilities: tables, bbqs			allow	$15,000	
Fencing & miscellaneous			allow	$15,000	
Subtotal					$228,000
Interpretive Decks					
Support structure			allow	$60,000	
Platforms: 2 @ 10 x 10 ft.	200	sf	allow	$15,000	
Stairs & ramps	100	lf	allow	$10,000	
Rails	120	lf	allow	$12,000	
Subtotal					$97,000
Boardwalk					
Wood pilings	60		allow	$48,000	
Boardwalk surface	1,750	sf	allow	$61,250	
Subtotal					$109,250
Parking Improvements					
Resurface parking area	54,500	sf	allow	$54,500	
Restripe parking			allow	$3,000	
Subtotal					$57,500
Trails & Site Amenities					
Pedestrian walkway	2,500	sf	allow	$12,500	
Benches	12	ea	allow	$14,400	
Trailhead signs & maps	2	ea	allow	$5,000	
Subtotal					$31,900
Signage Program					
Interpretive signs	8	ea	allow	$48,000	
Directional signs	12	ea	allow	$12,000	
Subtotal					$60,000
Miscellaneous Improvements					
Bury existing OH electric line	170	lf	allow	$8,500	
Subtotal					$8,500

Item	Quantity	Unit	Unit Cost	Item Cost	Total
General Construction Overhead & Miscellaneous					
Subtotal of Items Above				$592,150	
Estimating Contingency @ 20%				$118,430	
Subtotal					**$710,580**
General Conditions @ 8%				$56,846	
Contrator's Overhead & Profit @ 10%				$71,058	
Phase Two Construction Costs					**$838,484**
Phase Two Administrative Costs					
Permitting Fees (re-package from Phase One)				$8,000	
Preparation of Construction Documents (re-package from Phase One)				$25,000	
Total Phase Two Adminsitrative Costs					**$33,000**
Total Phase Two Costs: Construction & Administration					**$871,484**
TOTAL PROJECT COSTS					**$2,841,212**
Total Construction Costs + Administrative Costs for Phase One and Phase Two					

* Costs and prices are indicated in current, that is 1997, costs. Future funding and construction costs must be adjusted for inflation that has occured since the 1997 base year. 9701\report\05mpce1.xls

OPERATIONS COSTS

These yearly costs will be required to maintain the project.

Increase in General Park Operations Budget					$7,000
Dredging at Launch Ramp:					
750 cy per year, dredged every three years.					
Mobilization			allow	$10,000	
Dredge - dry at site, truck to disposal site in Bay Area	2250	cy	$25.00	$56,250	
Subtotal				$66,250	
Cost per year (subtotal / 3)				$22,083	$22,083
Staffing Increases					
Ranger patrol: half time				$17,500	
Maint staff: permanent full time			allow	$38,500	
Maint staff: seasonal half time			allow	$14,500	
				$70,500	$70,500
Yearly Operations Cost for Park					$99,583
Yearly Additional Operations Cost for Park					**$92,583**

PARTICIPANTS

The Task Force members, staff and consultant team were the primary participants throughout the entire duration of the master plan process. The Technical Advisory Committee was formed to keep various individuals within State, Federal and local agencies informed on the project.

Task Force Members

Savas Alvarez	Alviso Resident
David Blair	Alviso Resident
Craig Breon	Audubon Society
Roger Dillender	Alviso Resident
Lonnie Gross	Alviso Business Owner
Bob Gross	Alternate
David Hoxie	Alviso Resident
Barton Laine	Alviso Resident
Valerie Layne	Biologist
Reuben Orozco	Alviso Resident
Russell Robinson	South Bay Yacht Club
Tony Santos	Alviso Resident
Vern Santos	Alviso Resident
Margaret Roper	State Fish & Game
Chuck Taylor	Cargill Salt Company
Sue Tippets	Santa Clara Valley
Bill Springer	Water District

Staff & Others

Ruth Shriber	County Project Manager
Lisa Killough	Regional Park Planner
Bill Ventura	Regional Park Manager
Reece Current	Senior Ranger
Jerry Anderson	Maintenance III
Carlos Garcia	Maintenance Staff
Jim Foran	Park & Recreation Commissioner
Fadi Saba	Aide to Supervisor Peter McHugh
Laurel Prevetti	City Planner, City of San Jose

Consultant Team

Reed Dillingham	Project Manager Dillingham Associates Landscape Architects
Jeffrey Haltiner	Hydrologist
Scott Noble	Waterfront Engineering
Jana Sokale	Environmental Planning
Lynne Trulio	

Technical Advisory Committee

The Technical Advisory Committee was formed to keep various individuals within State, Federal and Local agencies informed on the project. The following individuals were provided selected technical materials for review.

State

Mary Howe	State Lands Commission
Kay Vonne Mahbell	Regional Water
Tom Gandesbery	Quality Control Board
Dr. Martin Kharrisi	Dept. of Health Services
Carl Wilcox	State Fish & Game
Steve McAdden	Bay Conservation & Development Commission
	California Coastal Commission
	California Coastal Conservancy

Regional

Muriel Fulford	County Advance Planning Office

Federal

Margaret Kolar	US Fish & Wildlife Service
Eric Yonker	US Environ Protection Agency
Molly Martindale	US Army Corps of Engineers
Mark D'Avignon	US Army Corps of Engineers

References marked with * are members of the Task Force, Project Team or Technical Advisory Committee

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APPENDICES

Appendix A:
Survey of Public Opinion, March 21, 1995

Appendix B:
Project Inventory and Analysis

Appendix C:
Recreation Activities Inventory

Appendix D:
Alternatives and Preferred Plan

Appendix E:
Interim Plan

APPENDIX A

SURVEY OF PUBLIC OPINION

March 21, 1995

In February 1995 questionnaires were handed out to residents of Alviso regarding recreational use of Alviso Marina County Park. Questions included were regarding frequency of use of the site, types of activities enjoyed, activities they would like to see at the Marina, and other parks frequented. (A copy of the questionnaire follows.)

35 questionnaires were returned. Of the respondents, the majority of them knew about and used Alviso Marina County Park and the nearby parks of Sunnyvale Baylands and the S.F. Bay National Wildlife Refuge Interpretive Center. The respondents were from a variety of backgrounds and age groups, and from households of sizes from 1 to 12. A small majority of respondents were from a smaller family with the parents in their late twenties to mid- thirties. The average number of people per household was 4.

Most of the respondents had cars. When asked to name other parks visited, 21 other parks were named, yet most parks were named only once, except for Ed Levin County Park and Lake Elizabeth, and no park was frequented more than another. Although the majority of the parks were located in Santa Clara County, they were dispersed throughout the County.

Hiking was the most popular activity on the site, followed by wildlife observation, eating lunch, boating, and enjoying the view. Other activities mentioned were jogging, bicycling, fishing, walking dogs, and watching the trains. There was no discernible trend in the types of activities favored by certain age groups or family size. Large and small families, single people, and all ages groups used the park equally for hiking, fishing, and boating. In addition, no group used the park more often. Boaters, fishers, and hikers all frequented the parks on the average between 2 times per week and 2 times per month. Nine surveys were answered in Spanish. The Spanish questionnaires displayed a preference for developing the Marina. Nearly 90% of the Spanish surveys wanted either a boat ramp or Marina at the park, while only 33% of the English questionnaires favored either alternative. In addition, a majority of the Spanish survey respondents wanted hunting and jet-skiing at the park, as opposed to less than one-quarter of the English speaking respondents. This may or may not show a preference among the Hispanic community as many of the English surveys could also have been completed by the Hispanic community.

Of the activities that the respondents would like to see at the park, the overwhelming majority (34 of 35 questionnaires) wanted access to the salt ponds and wildlife observation. Slightly less desirable were picnic and fishing facilities, and nature interpretation. Approximately half of the respondents requested either restoration of the Marina or a boat launch ramp, although the ramp was slightly favored. Other activities, such as wind surfing, jet skiing, or duck hunting, were cited by only 30% to 40% of the respondents.

The biggest complaint among the respondents was the poor condition of the park. They mentioned either the messiness of the site or its state of disrepair. Some respondents stated that they did not use the park in the past because it was in such poor condition. The most adamant were those who were against any development of the park at all. Written comments are included.

Written Comments:

The Marina should be cleaned up and restored to tidal salt-marsh. All abandoned boats and berths should be removed. It would be nice to have wildlife interpretive signs. The floating dock gives people the feeling of being in the marsh with the birds, etc. and is a unique feature that should remain. The area is too far from the bay- no boat launching facilities should be developed in the vicinity.

Maintain access way for a variety of uses- educational classes, sports.

Need small boat access.

Leave it alone! Wildlife is increasing-loves to come in early a.m. to watch birds. Garbage is now under control-don't over-develop so it gets uncontrollable.

Better restaurants.

They love it!

Clean up-bring boats back.

Better hiking trail

Clean up boat berth / they look bad.

Make the place pretty.

Needs a lot of work.

Please keep the place clean and we'll see each other more often.

It would be very nice to have all the recreation at this place. Its time these things were provided (and be sure it's kept clean!)

Would like to know of restaurants in the marina area that are nice quality and that are on the water or have a view of the water.

Wildlife habitat; science and research; possibly commercial uses that would be compatible with the site and aid the community.

More funding for parks.

SURVEY OF COMMUNITY PREFERENCES FOR ALVISO

This is a survey about the Alviso Marina County Park. We would like to know if you use the Marina site. If so, how often, when, and in what ways. Your answers will help the County determine what to do with this County Park site. If you have any questions or comments about this survey, or would like to get on the mailing list, please call Santa Clara County Parks at 358-3741. Your help is greatly appreciated.

Background data:

Number of persons in household?_____
Ages and genders of persons in household?
Do you own a car?_____
Do you, or others in your household, go to other parks?_____

Please mark the time and day of filling-out this survey:
M T W TH F S S

Time_____

Which other nearby parks do you use frequently and what do you do there?

Circle the following nearby recreation facilities that you are familiar with:
Wildlife Refuge Interpretive Center_____ Alviso Park (City of San Jose)_____
Sunnyvale Baylands Park_____ Other_____

How often do you go to other parks? _____per week. _____per month. _____per year

Alviso Marina

Do you know where the Alviso Marina site is? _____ Do you use the Alviso Marina site? _____
What do you like to do there now?

If you do not go to the Alviso Marina site, why not?

Did you use the Alviso Marina site more in the Past. _____ Why?

Check the kinds of activities or facilities that you would like to se at the Marina:

Boat Berthing _____ Boat Launch Ramp _____ Nature Interpretation _____ Fishing _____ Kayaking ___

Car Washing _____ Bait/ Snack Shop _____ Picnic Facilities _____ Wind-surfing _____

Jet-ski _____ Duck Hunting Access _____ Jet-ski _____ Wildlife Observation _____

Walking Trails Out to the Sloughs and Salt Evaporation Ponds _____

Bicycling Trails Out to the Sloughs and Salt Evaporation Ponds _____

Lawn or Other Passive Activity Areas _____

Comments or suggestions for other uses of the Marina:

Please return this survey to: Ruth Shriber, Santa Clara County Parks, 298 Garden Hill Drive, Los Gatos, CA 95030

ENCUESTA DE PREFERENCIAS SOBRE EL PARQUE DEL EMBARCADERO DE ALVISO

Esta es una encuesta sobre El Parque del Embarcadero de Alviso. Queremos saber si ustéd visita al Embarcadero. ¿Con qué frequencia? ¿Mucha o poca? ¿Con qué propósito? Sus repuestas ayudarán al Condado a decidir el futuro de este parque. Si tiene algunas preguntas o comentarios, o si quiere más información sobre el parque, favor de llamar a la Agencia de Parques del Condado de Santa Clara al 358-3741. Muchas gracias por su ayudo.

Información de Fondo:

¿Cuántas personas hay en su familia?
¿Cuántos años tienen? ¿Hombres o mujeres?
¿Tiene coche?
¿Visita usted parques? ¿Otros en su familia visitan parques?

Por favor marque el día y tiempo de contestar esta encuesta
L M M J V S D

Tiempo_____

¿Cuáles parques cerca de Alviso visita? ¿Qué hace allí?

Marque las facilidades recreativas que conoce:
El centro interpretativo del Refugio de Fauna _____ Parque de Alviso _____
Parque de Sunnyvale Baylands _____ Otro_____

¿Cuántas veces va a otros parques?_____ cada semana? _____ cada mes?_____ cada año?

Información Sobre el Embarcadero de Alviso

¿Sabe donde está el parque "Embarcadero de Alviso"(Alviso Marina) _____ ¿Visita al Embarcadero?_____
¿Qué cosas perfiere hacer allí?

¿Si no visita al Embarcadero, porqué no?

¿Visitó el Embarcadero más hace tiempo? ¿Porqué?

Marque las actividades o facilidades que prefiere en el Embarcadero:

Mueles para lanchas_____ Rampa para lanzar barcas_____ Interpretación de cosas naturales_____ Pescar_____

Usar kayaks_____ Lavar coches_____ Tienda o puesto para comida o cebo_____ Facilidades para barbacoa_____

Deslizador de viento (Wind surf)_____ Moto de agua(Jet-ski)_____ Acceso para cazar patos_____

Observar fauna y pajaros_____ Senderos a la Bahía o entre los estanques_____

Senderos para andar en bicicleta a la Bahía o entre los estanques_____

Cesped o otros lugares para actividades tranquilas_____

Comentarios o sugerencias para otras facilidades o actividades para el Embarcadero

Favor de revolver esta encuesta a: Ruth Shriber, Santa Clara County Parks and Recreation
298 Garden Hill Drive, Los Gatos, CA 950302

APPENDIX B

PROJECT INVENTORY AND ANALYSIS

GENERAL SITE DESCRIPTION AND FACILITIES

Site

Alviso Marina County Park is a 29-acre county park operated by Santa Clara County Parks & Recreation Department and located on the northern edge of the community of Alviso, at a bend in the Alviso Slough. The site is bordered to the north by salt evaporation ponds and tidal flats that ring the southern edge of San Francisco Bay. The other side of the site abuts the built-up center of Alviso, a formerly independent city now part of the city of San Jose. Immediately adjacent to the southern edge of the site are two 1/2 acre ponds, remnants of the former Steamboat Slough. The eastern edge of the site is bordered by Southern Pacific Railroad tracks, with the wetland areas of the New Chicago Marsh lying beyond.

The park site consists of two parcels: one of 15-acres including a former marina and a three acre parking lot; and a second of 13.9-acres, to the north of the first, consisting entirely of salt evaporation ponds and related levees. The second parcel was purchased in 1966, two years after the purchase of the first parcel, with the intent of expanding the marina. The second phase of development never occurred.

Access

State Highway 237, a recently improved four-lane freeway, passes within a mile of the southern edge of the site, and off-ramps provide convenient access to Alviso and the site via First Street. The site is located at the north end of Hope Street near its intersection with Mill Street, an unimproved one block street along the south side of the former Steamboat Slough. Access to the site by private automobile is available via the short access road at the end of the city street. Bicycle, horse, and walking access are also available along the street, however, there are no developed sidewalks or paths linking the park with the surrounding community. There is a Santa Clara County Transportation Agency bus stop two blocks from the site in the center of Alviso. The majority of the park users, however, arrive at the site by car.

Facilities

Site facilities consist of an abandoned marina, a boat launch ramp, a parking lot, a restroom building and trails. The marina was constructed between 1964 and 1968 and consists of a 9-acre basin with 76 boat slips, not including possible tie-ups along non-designated portions of the floats. In addition, a dock for sewage pump-out that connects to the city sanitary sewer system is also available. Due to the location of the Alviso Marina on the southern end of the Bay, the Marina has been subjected to heavy siltation, resulting in the need for frequent and costly dredging. Due to the expense of dredging, the County ceased to dredge the marina around 1980. Renters of marina berths removed their craft in the following years and the basin gradually filled with sediment. As of 1994, the basin is almost entirely full of sediment or mud and supports a thick stand of bulrush vegetation. Berthing floats and finger docks with entry gates remain, although the depth of water at many slips is zero. One boat remains trapped in the mud of the marina. During the original marina construction, a series of three

60-inch diameter pipes with flood gates were constructed between the Marina basin and the eastern pond-remnant from Steamboat Slough. The intent of these pipes was to enhance flow through the marina basin and decrease sedimentation. Within a few months of construction, one or more pipes became full of silt and ceased functioning.

The concrete boat launch ramp, consisting of two lanes divided by a wood float, was built at the same time that the marina was constructed. Presently, one of the lanes is unusable because it is completely full sediment and bulrushes. The second lane is marginally usable for small boats at high tide. Local boat owners report that 10 to 12-foot boats can use the second lane at high tide if they are manually pushed through the mud to the nearby Alviso Slough.

The marina parking lot, located at the southern edge of the site, was constructed at the same time as the marina. It runs the entire length of the marina and more or less covers almost all of the non-tidal portion of the site. The parking lot was designed to accommodate 28 cars and 33 boat trailers with cars. The parking area was built between elevations +13.7 and +11.5 (U.S.G.S. 1960 Datum; M.S.L. = +1.58), similar to the elevation at the top of the surrounding levees. This elevation is above all anticipated high tides or storm-related flooding. Public restrooms occupy the center of the parking lot, and eight 30 foot light standards ring the perimeter.

Trails along the tops of existing levees extend from the east end of the parking area. Although levees and trails within the site are limited to 2,600 feet in length, these trails connect to a 10-mile network of trails owned and designated by the National Wildlife Refuge.

The site is served by the following utilities: Water - 12-inch asbestos concrete pipe in the public right-of-way, leading to an 8-inch asbestos concrete pipe on the site; Electric - overhead; Sanitary Sewage - 6-inch vitrified clay pipe; Storm Sewage - none; Telephone - overhead. Electric, telephone, water and sanitary sewer service is connected to the existing restroom building. There is presently no phone at the Marina. Water and electric service is available to the former boat-berth floats. Water and sanitary sewer service is available to the sanitary waste pump-out dock.

SURROUNDING CONTEXT

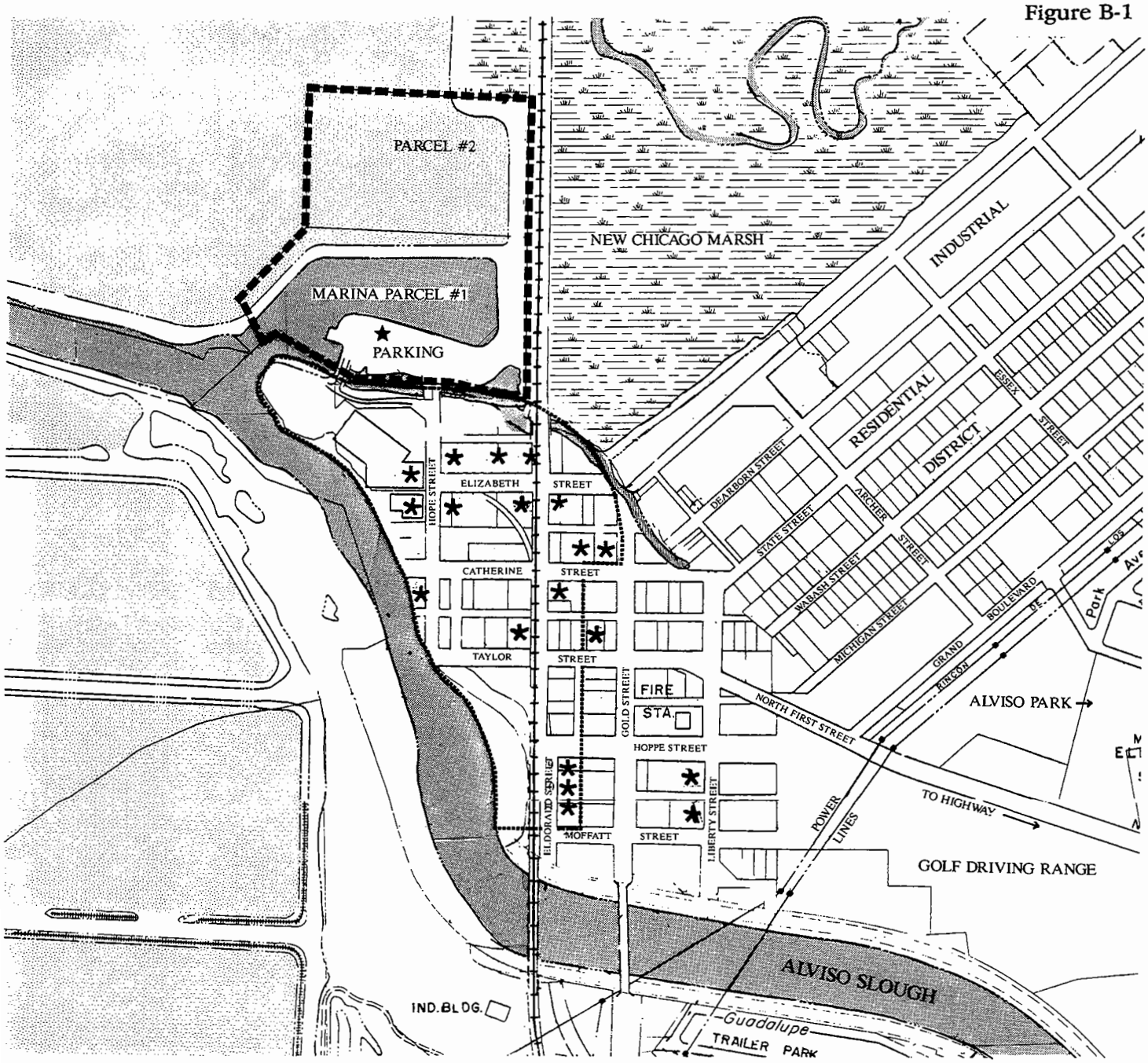
Local

Community of Alviso

Alviso is a community of 2,195 persons (1990 census) located north of State Highway 237 and along the extreme southern end of San Francisco Bay. It was a separate city until 1968, when it became a part of the City of San Jose. Alviso is one of the oldest communities in Santa Clara County and has had a long history as a port and access point to San Francisco Bay.

Alviso has approximately 550 dwellings and an average of 3.8 individuals per household. Alviso's per capita income is about half the city-wide average of San Jose. Alviso also has a higher proportion of the population under the age of 15. Spanish is the principal language spoken in 61% of the households.

Figure B-1



LEGEND

- ★ SITE
- WATER
- SALT POND
- MARSH
- URBAN
- RAILROAD
- HISTORIC DISTRICT
- SITE BOUNDARY

★ HISTORIC CITY LANDMARKS

Bayside Cannery
China Camp
Bayside Cannery Offices
Union Warehouse
Three Musketeers Hotel
Laine/Tilden Grocery Store
Tilden Residence
Southern Pacific Depot
La Montagne Residence
John O'Martin Residence
Robert Trevey Residence
South Bay Yacht Club
Chinese Casino
Alviso City Hall and Fire Station
Wade Residence
Wade Warehouse
Alviso Grammar School
W. Roubidous [Robidoux] - Blacksmith

SURROUNDING AREA

ALVISO MARINA COUNTY PARK

COUNTY OF SANTA CLARA
ENVIRONMENTAL RESOURCES AGENCY
DEPARTMENT OF PARKS AND RECREATION

DILLINGHAM ASSOCIATES
LANDSCAPE ARCHITECTS AND PLANNERS

NORTH

SCALE IN FEET
0 200 400 600

San Francisco Bay National Wildlife Refuge

Alviso is bordered on its northern edge by extensive salt evaporation ponds and wetlands that are part of the 23,000-acre San Francisco Bay National Wildlife Refuge, established in 1972 and operated by the United States Fish & Wildlife Service. Refuge areas provide valuable wildlife habitat for many native and migratory species of birds. The Refuge includes two visitor facilities: a visitor center for the general public located at the east end of the Dumbarton Bridge; and an environmental education center for school groups by reservation only, located in Alviso at the end of Grand Boulevard. The Refuge is primarily managed for wildlife habitat. However, beyond that general goal, recreation activities such as walking on levee tails , boating, fishing and hunting in designated areas are also permitted.

Cargill Salt Evaporation Ponds

Cargill Salt, a private company, uses the naturally occurring solar evaporation of salt water in shallow ponds to harvest salt for commercial purposes. This process requires the movement of salt water through a series of ponds of ever-increasing salinity prior to eventual complete evaporation of water and harvesting of salt. Cargill Salt operates a series of 145 salt ponds on the east an west sides of southern San Francisco Bay, covering 29,000 acres and enclosed by 200 miles of levees.

The Alviso Slough, a four-mile long tidal channel between the salt ponds, is a continuation of the Guadalupe River. In 1858, a channel was excavated at Alviso to connect the Guadalupe River to Alviso Slough and make the Guadalupe Slough independent. Alviso Slough is one of the only boat access routes to the Bay from Santa Clara County.

Ownership

Lands to the north of the site and east of Alviso Slough are generally owned by the United States Government through the U.S. Fish & Wildlife Service. However, these areas are leased and managed for salt production to Cargill Salt, their former owner. Salt evaporation ponds west of Alviso Slough are owned and managed by Cargill Salt for salt production. A parcel of 30-acres, east of the site and the Southern Pacific Railroad tracks, is owned by the State of California. Further east, wetland properties within the New Chicago Marsh were subdivided in the 1890's and are held by private property owners. The Peninsula Open Space Trust, a private non-profit land trust, has been acquiring many of these parcels with the intent of turning them over to the National Wildlife Refuge. Three properties immediately adjacent to the south edge of the site were part of the former Steamboat Slough, a branch of Alviso Slough, and are currently owned by the State and managed through the State Lands Commission. These parcels, from west to east, consist of 1.46-acres, 1.07-acres, and 0.67-acres. The middle parcel includes a lease of 0.1-acres (State lease No. 3607.9), expiring in the year 2015, to Santa Clara County for the park access road. A former lease to the County (State No. 3628.9), Covering 0.843-acres of the same parcel expired in 1981. Properties to the south-west of the site are within the community of Alviso and are generally held by private parties, although the City of San Jose, the Santa Clara valley Water District and the State of California hold minor parcels.

Land Use

As noted, land use in the most extensive areas near the site consists of salt evaporation ponds operated by Cargill Salt. Areas to the east of the site are undeveloped wetlands owned by the State and private parties. Near the southern edge of the site, the historic Bayside Cannery building is being operated by the San Francisco Bay Bird Observatory. Land use within the developed portion of Alviso is a mixture of single-family residences, parking, offices, restaurants, and vacant lots. Prominent businesses and other activities include the Alviso Library, the South Bay Yacht Club, the Post Office, bait and marine supply shops, as well as Mexican and seafood restaurants. The community of Alviso also includes a public elementary school, a city park, a golf driving range, light industry and construction yards and the City of San Jose Water Treatment Plant.

With the closing of the marina around 1980, boat berthing in Alviso has been very limited. The South Bay Yacht Club maintains a lease from the State Lands Commission that permits mooring of boats along the Alviso Slough near the yacht club building. In addition, a number of unregistered transient boats have also tied-up illegally along the slough edge. As well as constituting an illegal berthing and possible safety violations, these boasts have created unsanitary sewage disposal conditions along the slough. The parking lit at the marina is required to have an "always-open" policy to allow access to the boat ramp. This has contributed to boat owners living in their cars and using the parking area for boat repairs.

Zoning and Planning

In 1993 the city of San Jose began preparing a Master Plan or Specific Plan for the Community of Alviso. The Master Plan is intended to protect the "small town" character of the community while providing appropriate policy direction for future land use and development, housing, infrastructure and community service improvements, economic development, commercial revitalization, historic preservation, and other issues. This plan is expected to be completed in the winter of 1997. Current land use designations for Alviso are shown on the San Jose 2020 General Plan Land Use/Transportation Diagram which was adopted August 1994 and amended December 1996. As shown in that plan, areas closest to the Marina site (i.e., the historic district) are designated "Combined Industrial/Commercial" and "General Commerical." Areas with "Private Open Space' and "Public Park/Open Space" designations are located to the north and west of the park site. Current zoning for the park site and surroundings is M-1 Manufacturing.

History

As a community, Alviso has prospered and struggled based on its relationship to the waters of the Bay and the sloughs. The name of the town came from the owner of the original Mexican land grant, Ignacio Alviso. The town began as a port community for the surrounding Santa Clara Valley in the early years of the 19th century. The initial settlement was one-half mile upstream on the Guadalupe River and was known as the Embarcadero de Santa Clara. With the westward migration, Alviso became a busy port for shipping agricultural produce to the markets of San Francisco. In addition, Alviso was an important station on the connection between northern and southern California. In the 1870's, the railroad came to Alviso. While

this caused some immediate prosperity, the railroad eventually replaced the shipping industry that supported the port of Alviso. In addition to shifting transportation systems, Alviso was increasingly subject to tidal and storm flooding. The agricultural development of the Santa Clara Valley was partly supported by agricultural pumping of ground waters from the valley's aquifers. Over a period of 100 years, pumping has caused the ground level around Alviso to sink as much as 12 to 13 feet, thus making the area more vulnerable to flooding. In 1968, Alviso residents narrowly voted to consolidate with the City of San Jose.

In the one-hundred years between 1850 and 1950, a continuing process of flood control levee construction as well as the development of salt evaporation ponds transformed the vast salt marshes of southern San Francisco Bay. As early as 1858, a channel connecting the Guadalupe River to the Alviso Slough was built between the area of the South Bay Yacht Club to the mouth of the Alviso Marina. Over the following decades the ponds and facilities of many small independent salt-making companies were consolidated into the vast salt pond network of Cargill Salt. Subsiding ground—the result of prolonged ground water pumping—caused the construction of flood control levees along the major rivers and sloughs. The net result of the various flood control and levee efforts was to dramatically reduce the flow of tidal waters across large areas north of the site at the southern end of San Francisco Bay. The decrease in tidal flows passing through Alviso and other sloughs has consequently allowed increases in sedimentation of the slough and adjacent areas such as the marina.

The Alviso County Park site was originally part of the vast expanse of tidal salt marsh that ringed the southern edge of the bay. Tidal marshlands in the vicinity of the project site were diked between 1940 and 1970 to create salt evaporation ponds. The County purchased a 15-acre parcel for the marina from Leslie Salt (predecessor to Cargill Salt) in 1964 and two years later purchased a second 14-acre parcel to the north of the marina. In 1968, the marina was constructed by dredging the marina basin and constructing levees around it. Early plans included expanding the marina to the north with a second phase of construction on the more northerly parcel of property. In 1976, County Parks spent $400,000 to dredge the marina. After a two-year acrimonious delay, hydraulic dredging moved sludge to the Sunnyvale Baylands park site about one mile west (*San Jose Mercury News, Feb 10, 1975*). Due to heavy sedimentation and the continued high cost of dredging, the Marina was abandoned around 1980. The boat launch ramp continued to operate.

NATURAL ELEMENTS / NATURAL RESOURCES

Hydrology

The following material has been abstracted from sections of the environmental baseline study prepared for the Alviso Marina County Park by LSA Associates, Inc. For a fuller description of this data, please refer to that document.

The Marina

The Alviso Marina was constructed by diking an area of about 8 acres in the former salt evaporator, and dredging approximately 5 acres to a depth of 10 feet. Shortly after the initial Marina construction, the extremely high rates of siltation became evident. Shoaling rates were so rapid that the Marina required redredging in 1976, by which time nearly 11 feet of silt had

been deposited. In recognition of the rapid siltation rates and high cost of dredging, a detailed study of alternative methods for operating the Marina was conducted in 1980 (Ruth and Going, 1980). However, none of the alternatives discussed in the report were implemented, and ongoing siltation has resulted in the gradual abandonment of the harbor. Since the late 1980's, siltation has raised the Marina bathymetry to an elevation where wetland plants could become established, and much of the basin is currently vegetated.

Tidal Circulation and Hydrologic Processes

The Marina represents a diked arm off Alviso Slough (excavated out to the former junction of Steamboat Slough with Alviso Slough), and is subject to full tidal circulation from San Francisco Bay. Tidal waters are propagated from the south end of the Bay approximately 4 miles up Alviso Slough to the Marina. Alviso Slough continues farther south into town as the Guadalupe River with tidal influence extending southward to approximately the Montague Expressway.

As a result of the resonating effect of the Bay's shape (which amplifies the tides that enter the Bay at the Golden Gate), the South Bay is subject to the largest tidal range in the Bay, with an average daily tidal fluctuation of approximately 9 feet. Based on historical records of high tides in the Bay, the estimated 100-year high tide elevation at Alviso is 8.0 feet NGVD (National Geodetic Vertical Datum), 3.4 feet above the average high tide.

In addition to tidal circulation through the Marina entrance, there are two other hydraulic connections in the Marina (in the southeast corner):

- Three 5-foot diameter culverts were installed at the time of Marina excavation to provide gravity drainage of flood waters from the diked remnant of Steamboat Slough. Steamboat Slough collects storm drainage from various low points in Alviso. The ongoing situation in the Marina has completely buried the west end (Marina) of the culverts, and they are currently inoperable.

- A 24-inch force main from the Gold Street Pump Station also discharges into the Marina near the above culverts. This pump station is located in New Chicago Marsh, and provides drainage from the area during storm events. The station includes four submersible pumps with a capacity of 2500-3000 GPM (gallons per minute).

The Guadalupe River, and Coyote Creek to the east, have been sources of numerous flood occurrences in Alviso over the past century. All of the Marina area (and most of Alviso) is within the 100-year FEMA and County flood boundaries (SCVWD, 1993). The area is subject to flood hazards from both streams and tidal flooding from the Bay. At present, the SCVWD is involved in major flood control projects to reduce river flood hazards to the Alviso area.

The County park also includes an undiked area about 14 acres in the Salt Evaporator Pond north of the Marina. This larger salt pond is surrounded by dikes, and not subject to direct tidal action. The ponded water in the salt evaporator has a maximum open water "fetch" length of approximately one mile, and the small, wind-generated waves which develop on the pond are gradually eroding the levee which separates the north side of the Marina from the salt pond. Maintenance of this levee will eventually be required to insure that it is not breached.

Sedimentation Processes

A review of regional sedimentation processes affecting this area was provided in the 1980 Marina Study (Krone, 1980). Most of the sediment affecting the Marina comes from San Francisco Bay and is carried by tidal currents up Alviso Slough to the site. A second source of sediment to the Marina comes from the Guadalupe River, particularly during high flow events. This sediment is kept in suspension by the river current, until the flow velocity is reduced as the river enters the tidal waters.

The original channel of Alviso Slough was as much as 18 feet deep (-21 feet NGVD) in some locations, while the 1975 channel did not exceed 7 feet (-10 feet NGVD). More recent detailed surveys of the channel are not available, and the channel depths are not shown on more recent navigation charts. However, observations by local sailors and an ongoing sedimentation study by the SCVWD at the Gold Street Bridge indicate that sedimentation in Alviso Slough is continuing and the channel has not reached an equilibrium configuration. Based on annual surveys of the channel at Gold Street since 1987, it can be seen that sediment is primarily being deposited on the mudflats along the channel sides. As much as three to four feet of mud has been deposited in some locations during the past 6 years, narrowing the channel by about 30 feet on one bank and about 10 feet on the other.

The future long-term equilibrium configuration of sedimentation in Alviso Slough is unknown. In 1965, the SCVWD widened the channel from the SPRR tracks to Taylor Street and may have also dredged portions of it during the 1980's. However, there are no plans for the future dredging or maintenance work in this channel other than construction on the bank levees as part of the flood control project. The levee on the Alviso side of the river will be higher than the southwest bank levee, so that during major flood events, water will overtop the southwest levee and flow through the salt ponds to the Bay (SCVWD, Marc Klemencic, personal communication, 1994). As a result of the ongoing sedimentation processes, Alviso Slough continues to narrow. This has negative effects on the boat moorings at the Yacht Club and will continue to gradually reduce the navigability of Alviso Slough.

The construction of the Alviso Marina at this particular location subjects it to perhaps the highest sedimentation rates anywhere in San Francisco Bay. The site is subject to two sources of sediment (Bay and Guadalupe River), a mixing point between fresh and salt water, the quiescent water of a dead-end channel, and the excavated depth required of a marina. As a result, sediment rates of up to two feet per year can occur immediately following an ongoing event.

Vegetation

The following material has been abstracted from sections of the environmental baseline study prepared for the Alviso Marina County Park by LSA Associates, Inc. For a fuller description of this data, please refer to that document.

Four general vegetation types occur within the limits of the project site (Parcel 1): (1) tidal brackish marsh, within the marina basin; (2) ruderals, on the surrounding levee; (3) scrub, on the banks south of the parking lot; and (4) seasonal salt marsh, along the eastern border of the parcel and south of the parking lot.

Tidal Brackish Marsh

Tidal brackish marsh occurs throughout the marina basin, up to approximately mid-way up the slope of the surrounding levee. The dominant species are alkali bulrush (*Scirpus robustus*) and California tule (*Scirpus californicus*). Narrow-leafed cattail (*Typha angustifolia*) and fat hen (*Satriplex triangularsis*) are also common. Along the toe of the surrounding levee, which is at the upper limit of tidal action, the dominant species is perennial peppergrass (*Lepidium latifolium*), but pickleweed (*Salicirnia virginica*), fleshy jaumea (*Jaumea carnosa*), and fat hen are common. These species occur in a band about 6 feet wide. Vegetation cover is dense (*ca.* 100 percent) except in the tidal channels and mudflats that are adjacent to the central boat berths and occupy about 15 percent of the marina basin.

Ruderals

Vegetation on the levees enclosing the marina basin is composed primarily of ruderal species, those species that thrive in disturbed soil. The vegetation is a mosaic of non-native grasses, herbaceous non-native weeds, disturbance-tolerant native salt marsh species, and scattered quailbush (*Atriplex lentiformis*). The species are patchily distributed and no species are clearly dominant. The most common non-native grass is Mediterranean barley (*Hordeum marinum spp. gussoneanum*). Sweet fennel (*Foeniculum vulgare*) is common along the north edge of the parking lot, and a large stand of milk thistle (*Silybum marianum*) covers the levee along the east edge of the marina. Common species on the levee along the north and east edges of the marina include pickleweed, crystalline iceplant (*Mesembryanthemum crystallinum*), five-horn smotherweed (*Bassia hyssopifolia*), alkali heath (*Frankenia salina*), Indian sweetclover (*Melilotus sativus*). Vegetation cover varies from sparse to dense.

Scrub

Vegetation on the banks south of the parking lot is a scrub association composed of native and ornamental shrubs. The dominant shrub is quailbush, a native species. Ornamental shrubs are planted in a strip along the south edge of the parking lot, including myoporum (*Myoporum laetum*), bottlebrush (*Callistemon sp.*), oleander (*Nerium oleander*), and a prostrate form of coyote brush (*Baccharis pilularis*). Openings in the scrub are vegetated by ruderal species, including smilo grass (*Piptatherum miliaceum*) and wild radish.

Seasonal Salt Marsh

Seasonal ponding occurs in the remnants of Steamboat Slough along the southern edge of the project site and in the channel along the eastern edge of the project site. A fringe of salt marsh, dominated by pickleweed, occurs at the margins. The salt marsh fringe average 2-3 feet wide.

Wildlife

Wildlife inhabiting the project site consists primarily of birds, small mammals, and probably small carnivores. The project site also provides roosting and foraging habitat for migratory water birds and other bird species living in the vicinity of the project site. Raptors observed

foraging over the project site include red-tailed hawk (*Buteo jamaicensis*), white-tailed kite (*Elanus lecurus*), and northern harrier (*Circus cyaneus*). A number of species forage for food scraps left in the picnic area, including gulls and house sparrows (*Passer domesticus*).

Marsh

Coastal brackish marsh within the marina basin is habitat for a number of marsh birds as well as species occurring in a wide range of habitat types. Marsh species present on the site include virginia rail (*Rallus limicola*), sora (*porzana carolina*), marsh wren (*Cistothorus palustris*), common yellowthroat (*Geothlypis trichas*), and song sparrow (*Melospiza melodia*). At high tide, the tidal channels and clearings adjacent to the boat berths provide open water habitat for ducks, including mallards (*Anas platyrhynchos*), cinnamon teal (*Anas cyanoptera*), and shovelers (*Anas clypeata*). Species foraging on the mudflats during low tide include american coot (*Fulica americana*), common moorhen (*Gallinula chloropus*), great egret (*Casmerodius albus*), and various shorebirds.

Levees

The ruderal plant species on the project site levees provide foraging habitat for small songbirds, including house finch (*Carpodacus mexicanus*), American goldfinch (*Carduelis tristas*), Savannah sparrow (*Passerculus sandwitchensis*), and white crowned sparrow (*Zonotrichia leucophrys*). The levees are also habitat for California ground squirrels (*Spermophilus beecheyi*), which have excavated numerous burrows along the east and north levees.

Scrub

The scrub community south of the parking lot provides foraging and nesting habitat for a number of bird species. Bird species observed in the scrub habitat include mockingbird (*Mimus polyglottos*), loggerhead shrike (*Lanius ludovicianus*), and California towhee (*Pipilo fascus*). The scrub community is also habitat for brush rabbit (*Sylvilagus bachmani*).

Seasonal Marsh

Seasonal marsh on the project site is utilized by many of the same species that utilize the tidal brackish marsh. Because the vegetation is lower and less dense than in the tidal marsh, less cover is available, and the seasonal marsh is less suitable for the marsh bird species.

Wetlands

By federal definition, three characteristics must be present for an area to be considered a wetland: (1) hydrophytic vegetation, (2) hydric soils, and (3) wetland hydrology. These three characteristics are present in the coastal brackish marsh occurring in the marina basin and in the seasonal marsh along the eastern border of the parcel and south of the parking lot. The three wetland characteristics are not present in the ruderal vegetation occurring on the levees nor are they present in the scrub south of the parking lot.

Special Status Plants and Animals

The following section, abstracted from the Environmental Baseline Report, prepared by LSA Associates, Inc. identifies special status animals that may occur on the park site. A longer discussion of these and other plant and animal species may be found in that report as well as discussion about possible impacts on these species.

California Clapper Rail (Rallus longiristris obsoletus). California clapper rail is listed as endangered on both the state and federal levels. The species inhabits saltwater marshes traversed by tidal sloughs. California clapper rails typically occur in dense vegetation dominated by cordgrass or pickleweed and forage on mollusks obtained from mud-bottomed sloughs. The California clapper rail is potentially a regular resident of Alviso Marina and could breed there. Its presence as a breeding species could not be confirmed or ruled out without further surveys.

Western Burrowing Owl (Speotyto cunicularia hypugea). The western burrowing owl is a federal Category 2 candidate for listing and is a California species of special concern with respect to burrow sites. The western burrowing owl inhabits open, dry annual or perennial grasslands, deserts and scrublands characterized by low-growing vegetation. Western burrowing owls are subterranean nesters, utilizing abandoned mammal burrows, typically those of the California ground squirrel. Suitable habitat for western burrowing owls occurs on the project site levees. No western burrowing owls were observed during the November 1994 site visit. However, western burrowing owls are known to migrate following the nesting season, and their absence from the project site cannot be confirmed without additional surveys, including several during the breeding season. The project, therefore, may possibly have an affect on western burrowing owls.

Saltmarsh Common Yellowthroat (Geotrichas sinuosa). Saltmarsh common yellowthroat is a federal Category 2 candidate for listing and a California species of special concern. The subspecies inhabits freshwater and saltwater marshes, requiring thick, continuous cover down to the water surface for foraging and tall, dense cover such as grasses, tule patches, or willows for nesting. Common yellowthroats were observed in the marsh on the project site during the November 1994 site visit, and they are presumably the saltmarsh subspecies. Therefore, the proposed project may affect this species.

Alameda Song Sparrow (Melospiza melodia pusillula). The Alameda Song Sparrow is a federal Category 2 candidate for listing and is a California species of special concern. The subspecies occurs in salt marshes dominated by pickleweed in the South Bay and has been recorded from the vicinity of Alviso (Grinnell and Miller 1994). This subspecies cannot be distinguished in the field from other local subspecies of song sparrow. The song sparrows observed in the project site during the November 1994 site visit were in the costal brackish marsh and thus may not be the Alameda subspecies. Because of the uncertainty as to the subspecies identification, we were unable to determine whether the proposed project may affect this subspecies.

Saltmarsh Wandering Shrew (Sorex vagrans halicoetes). Saltmarsh wandering shrew is a federal Category 1 candidate for listing and a California species of special concern. The saltmarsh wandering shrew inhabits tidal saltmarsh, in the medium high marsh 6 to 8 feet above sea level where abundant driftwood is scattered among pickleweed. The narrow fringe

of vegetation at the toe of the levee, in which pickleweed is common, may be marginally suitable habitat for this species. This shrew may possibly utilize non-tidal pickleweed marsh, such as the small patches that occur on-site in the seasonal marsh. Although the saltmarsh wandering shrew is unlikely to be present on the project site, we cannot rule out the possibility that the species occurs on the site. Therefore, the proposed project may affect this species.

Saltmarsh Harvest Mouse (Reithrodontomys raviventris). The saltmarsh harvest mouse is state and federally listed as endangered. This species inhabits tidal and non-tidal saltmarsh with high cover of pickleweed. The species utilizes adjacent uplands as foraging and upland refuge habitat. The narrow fringe of vegetation at the toe of the levee may be marginally suitable habitat for this species, as may be the other small pickleweed patches in the seasonal marsh on-site. Although the saltmarsh harvest mouse is unlikely to be present on the project site, we cannot rule out the possibility that the species occurs on the site. There fore, the proposed project may affect this species.

EXISTING RECREATIONAL USES OF SITE

Although the site was planned and constructed as a marina and boat launch facility, heavy sedimentation and the prohibitive cost of dredging have caused most of the facilities to be abandoned. However, the boat launch ramp continues to be used by a limited number of small boats at high tides.

Other recreational use of the site includes parking or staging for hiking along the levee trails and passive activities such as sitting in cars, looking at the view, limited picnicking, and bird watching. Because the park site is required to remain open at all times, occasional vandalism occurs.

VISUAL RESOURCES

While the area of the Alviso Marina County Park site is small in comparison with other regional parks, the visual expanse of the surrounding landscape makes the site seem very large. The marina is a site with dramatic appeal and significant visual resources. These conditions come from the site's slightly elevated location in the midst of a generally flat landscape.

Views

To the southwest, much of the town of Alviso can be seen from the parking lot, including several historic buildings such as the Bayside Cannery and the South Bay Yacht Club. To the east, the steeply rising and grass covered ridges of hills around Mount Hamilton, Mission Peak and Walpert Ridge form a backdrop to the wetlands and salt ponds near the site. Views to the north tend to be open and dominated by sky because one is looking along the length of San Francisco Bay. The low but isolated ridge of Coyote Hills a the east end of the Dumbarton Bridge is a counterpoint to the foreground wetlands and salt ponds. To the west, the bulrushes along the slough and levees around the salt evaporation ponds block a view of the

nearby salt ponds. A thousand yards away, a row of tall steel towers aligned north-south supports overhead electric transmission lines. Beyond, distant settlements lie at the base of the wooded ridge of the Santa Cruz mountains. In addition to the specific geographic features, the flat landscape around the site is dominated by views of the sky, clouds and birds.

The site itself presents views of the former marina, full of sediment and bulrushes. The improbable juxtaposition of floating docks and old boats sitting in a basin of mud and bulrushes has a strange appeal for first-time visitors. The luxuriant bulrush vegetation is attractive and invites closer inspection, both for itself as well as any birds that may be hidden. The wide expanse of paved parking lot and the freestanding restroom building, softened a little by a few eucalyptus trees, are less attractive aspects of the site. The flat landscape and the general lack of trees make vertical elements like electric poles and wires unduly prominent.

The approach to the site is nondescript and appears to have been nothing more than the result of earthwork associated with the original construction of the marina. The approach rises up to the parking lot level while crossing between the two small ponds south of the site that remain from the former Steamboat Slough. The larger pond to the east is open to some tidal flow and supports healthy aquatic plant and animal life. However, the smaller western pond appears to be stagnant and cutoff from the tidal flushing. Large concrete blocks can be seen resting in a mustard colored liquid in the bottom of the pond.

GOVERNMENT AGENCIES AND OTHER JURISDICTIONS

Policies and Plans of Santa Clara County

County General Plan

This long range planning document is required by state law for all cities and counties. It delineates zones for different kinds of development and uses. All planning documents for the park must be consistent with the general plans of Santa Clara County and the city of San Jose. The respective planning departments are responsible for reviewing such documents for consistency. The general plan is currently in draft form and is under review by the planning commission. A goal of those working on the new plan is to incorporate the goals of the policies and reports that have been adopted by the county over the years. One particularly significant report is the Preservation 2020 Task Force entitled "Open Space Preservation: A Program for Santa Clara County."

Because Alviso Marina County Park is located within the city limits of San Jose, county plan designations do not include the park area. However, the County General Plan includes a number of policies that offer guidance for acquisition of open space and for general development of park lands.

An integral part of the Recreation and Culture Element of the County General Plan is a document and map entitled: "Regional Parks, Trails and Scenic Highways Plan." This plan categorizes Alviso Marina as a Bayland Park and Refuge. Proposed trail corridors connect downtown San Jose with one marina along the Guadalupe River. A second trail corridor connection from the marina follows Saratoga Creek to the south.

Open Space Preservation - 2020 Report

This report, completed in 1987, makes comprehensive recommendations for county-wide open space, formulated by a volunteer task force appointed by the Santa Clara County Board of Supervisors. The report has been adopted by the board of supervisors and is used by the county planning department to assess proposed developments' impacts on open space. When sites listed in the report as *high priority for open space or recreational acquisition* come before the planning department for review of proposed development, the parks and recreation department is brought into the process. The areas along the bayfront around the marina received the highest priority (No. 1 of 46 areas in the county) for acquisition.

Policies of Santa Clara County Parks & Recreation Department

Following are Santa Clara County Parks & Recreation Department general plans and policies that may affect master plan development at Alviso Marina County Park. Other department policies may also be important.

Five Year Capital Improvement Plan

Adopted in 1988, this document is the blueprint for regional park development and land acquisition. It is updated annually. The plan emphasizes acquiring small, strategically located parcels that will round out existing parks or provide links between existing parks and open space lands. The current capital improvement plan does not include any funding for capital improvement projects at the marina, pending completion of this master plan study.

Commercial Development Policy/Concession Agreements

This policy sets forth what types of commercial developments are allowed in county parks. Written by the Parks staff and approved by the Parks and Recreation Commission and adopted by the County Board of Supervisors in 1987, the policy is composed of 23 guidelines divided into sections. The document has the weight of policy, not law, and is written in language that is in many cases open to interpretation. See *Park Program/Activities - Potential for Commercial Activities* section for further discussion.

Dogs and Other Pets in County Parks Policy/Ordinance

Recently the Department has amended its Dogs and Pets in Parks Policy to allow owners to bring their pets into specifically designated areas within certain county parks, such as the Alviso Marina. Dogs are required to be leashed and must be licensed. Dogs are not permitted on levee trails leading from the marina into the San Francisco Bay Wildlife Refuge.

Santa Clara County Environmental Health

This county agency monitors and issues permits for a variety of facilities and conditions that may affect potential Master Plan proposals of Alviso Marina County Park. These include: a) review and approval of plans and specifications for food and eating facilities; b) issuance of permits to operate food and eating facilities; c) monitoring of conditions and clean-up of complaints and enforcing county ordinances regarding excess noise generation.

Permitting

Modifications or improvements to Alviso Marina County Park may require that other government agencies issue permits to the county for the work. The exact list of relevant agencies and the permits required would depend on the nature of the work to be undertaken. Dredging and reactivating the marina would require permits or consultation from as many as 16 federal, state, regional and local agencies.

Figure B-2 shows a list of agencies whose permits or advice may be required. Agencies are listed in two groups. The first group consists of those agencies that must receive applications and will issue permits. The second group consists of agencies that provide consultation to the first group. They will not issue permits but can influence the availability and conditions regarding permits from the first group. Arrows on the left side of the chart indicate the general flow of information and applications form one permitting agency to another. Arrows between the two columns indicate consultation and advice between consulting agencies and permitting agencies. Following is a brief summary of the specific agencies, their responsibilities and permits. Agencies are listed in the same order in which they are shown in Figure B-2.

Permitting Agencies

County of Santa Clara Environmental Resource Agency (Department of Parks and Recreation)

This agency handles Alviso County Park planning, including CEQA compliance. EIR certification is required for the County Park Master Plan and the processing time is 18 to 24 months.

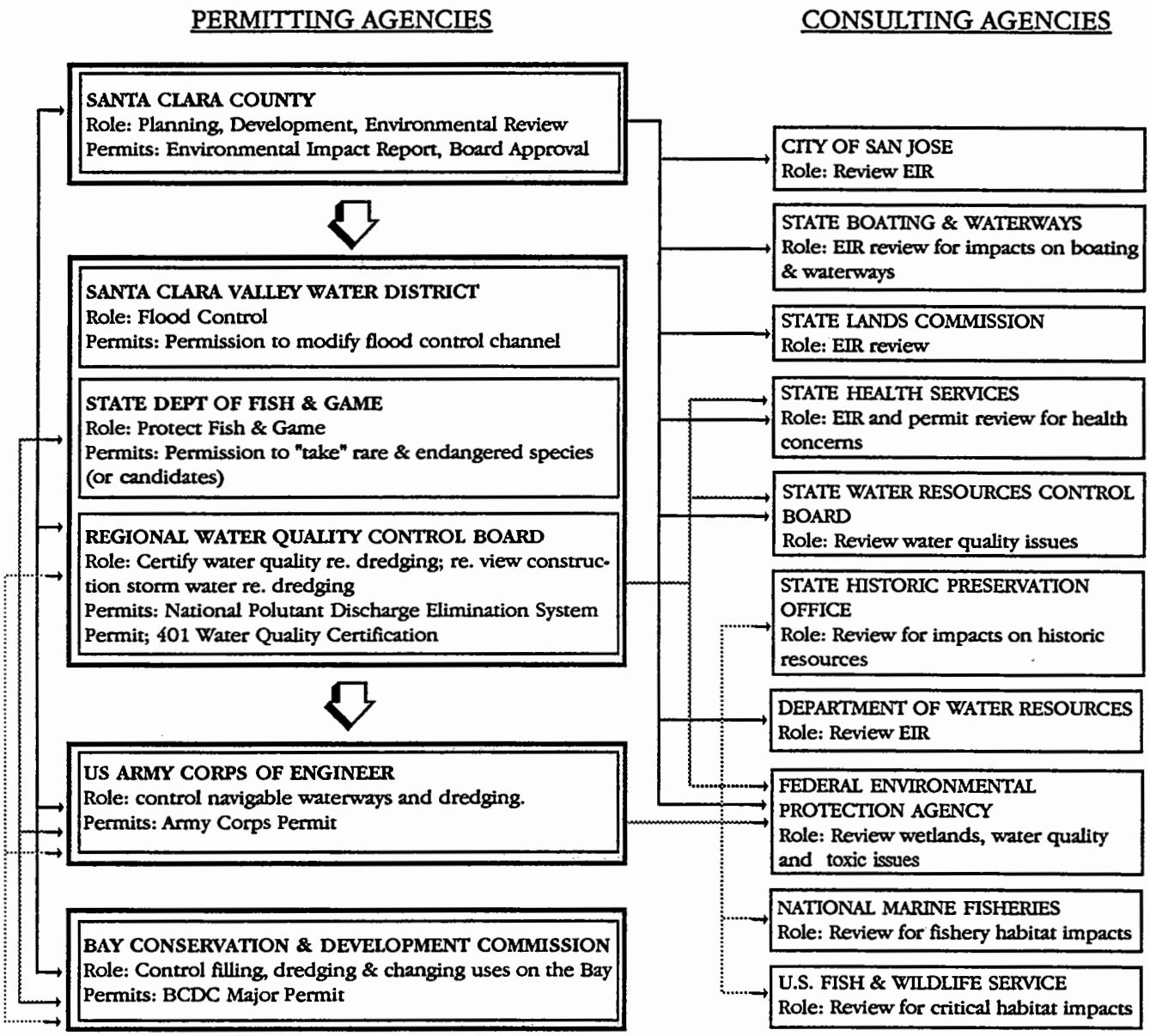
Santa Clara Valley Water District (SCVWD)

This agency handles flood control projects and monitoring/reviewing development adjacent to their properties. They protect against freshwater (creek and river) flooding. The agency issues encroachment permits if their facilities such as flood control levees are affected. The permit processing time varies with a 1 month minimum. In addition, Ordinance 83-2 (in part) requires that a permit may be required if: any structure is placed or grading is performed within 50 feet of the top of a flood control levee; levees are modified; planting or trespassing on a levee occurs; or drainage is discharged into a floodway. A permit is also required for grading or construction within 50 feet of the top of the bank of a SCVWD watercourse.

California Department of Fish and Game (DFG)

This agency protects fish and wildlife habitat (California Administrative Code, Title 14). They are the regulatory authority for the take of a species protected by the California Endangered Species Act (CESA). A section 2081 Management Agreement Permit is required. The processing time varies depending on complexity and there is no fee. It is not anticipated that such a permit will be required for work at the Alviso Marina.

SUMMARY OF AGENCY PERMITTING
ALVISO MARINA COUNTY PARK



This agency also comments on Corps of Engineers permit applications and any Environmental Impact Report documents regarding fish and wildlife habitats and rare plants. The review if the EIR costs $850 and $1,250 for review of Negative Declaration. The comments take 30 days on a Notice of Preparation and 30 days of a Draft Environmental Impact Report.

Regional Water Quality Control Board (RWQCB)

This agency reviews activities that affect water quality and have jurisdiction over disposal of dredge material. Permit authority under the National Pollutant Discharge Elimination System (NPDES) program for discharge into surface waters and storm water runoff. The RWQCB also oversees water quality certification under Section 401 of the Federal Clean Water Act for activities regulated under Section 404 of the act (Corps 404 permits).

The first permit possibly required by the RWQCB for work at the Alviso Marina is the NPDES General Construction Activity Storm Water Permit. This permit does not require formal approval but does require submittal of a Storm Water Pollution Prevention Plan (SWPPP). The General Construction Activity Storm Water Permit requires an annual fee of $250 or $500 depending on location.

The second permit that may be required by the RWQCB is the NPDES Waste Discharge Permit for dredge spoil disposal. This permit usually typically takes 6 months for the entire review and issuance process. The Waste Discharge Permit requires a fee for fill or dredge operations assessed on an annual basis for the term of the permit based on threat to water quality and complexity of discharge ranging from 4500 to $10,000.

A Section 401 Water Quality Certification or Waiver Permit is also required for a Corps of Engineers permit. This permit takes typically 60 days after receiving the letter of request for certification, but may take longer. There is an initial filing fee of $250.

U.S. Army Corps of Engineers (COE)

This agency is a regulatory authority for discharge of dredged or filled material into waters of the U.S. under Section 404 of the Federal Water Pollution Control Act (amended as the Clean Water Act in 1977). The type of permit that may be required for changes to the marina is a Section 404 Permit.

This agency is also the regulatory authority for the construction of any structure in or over any navigable water of the U.S., the excavation from or deposition of materials in such waters, or any obstruction or alteration in such waters (including fill and stream channelization) under Section 10 of the River and Harbor Act of 1899. A Section 10 Permit is required for any of the above activities. This permit's processing time is the same as the 404 permit. A single permit would cover Section 404 and Section 10, if both apply. There is no fee.

The COE also prepares environmental assessment and/or environmental impact statements to satisfy NEPA requirements. This requires NEPA compliance (EA or EIS) and the processing time varies. There is no fee.

The Corps of Engineers consults with many other federal and state agencies in reviewing permit applications. These agencies include: the federal Environmental Protection Agency, the

state Department of Fish & Game, the National Marina Fisheries agency, the U.S. Fish & Wildlife Service, and the State Historic Preservation Office.

San Francisco Bay Conservation and Development Commission (BCDC)

This agency regulates all filling or changes in the use of approximately 550 square miles of the Bay, including tidal marshes; ensures that all development within 100 feet if the Bay jurisdiction provides maximum feasible public access consistent with the development. This agency also has some jurisdiction over salt ponds and managed wetlands.

This agency requires a Development Permit either "administrative" or "major". The processing time varies depending on complexity from 2 to 6 months or more. The fee also varies depending on type of permit and cost of project from $100 to $10,000.

Consulting Agencies

City of San Jose

Department of City Planning and Building: This department is the permit authority for projects within the city of San Jose.

Fire and Police: This department provides fire and police services in the city. They review development proposals and coordinate with other city departments.

Public Works Department: This department is responsible for the planning, design, construction and operation of public facilities (sewer, water, storm drain, etc.). They review public improvements funded by private developers. They coordinate with other city departments also and issue easements and encroachment permits. They form assessment districts.

State Boating & Waterways

This agency monitors and assists in development of boating facilities throughout the state. In the Alviso Marina County Park Master Plan, they will review and comment on the Environmental Impact Report.

State Lands Commission (SLC)

This agency owns lands underlying navigable waterways, including tidelands. Allowable uses consist of commerce, navigation, fisheries, recreation, and preservation as ecological units. This agency requires consultation through the CEQA process and the BCDC permit process. The processing time varies and there are no costs. A dredging permit is required only if work will be carried out in the former Steamboat Slough. There is a $25 filing fee with a minimum expense deposit of $800.

This agency also handles land use leases for encroachments, docks, crossing on tide and submerged lands. A Land Use Lease Form 54.2 is required. The leases are currently on file with SLC. A $25 filing fee is required with expense costs to process the application ranging

from $600 to $15,000. Annual rent is equal to 9% of appraised value. The county has a SLC lease across former Steamboat Slough for the access road into Alviso County Park.

State Health Services

This agency will review the environmental impact report for health related concerns.

State Water Resources Control Board

This state agency will review any water quality issues related to modifications at the marina.

State Historic Preservation Office (SHPO)

This agency implements Section 106 of the National Historic Preservation Act and Executive Order 11593. The community of Alviso contains a National Register Historic District. The SHPO requires consultation when the project affects properties listed or eligible for listing on the National Register. Accordingly., the Corps of Engineers will review any proposals at the marina with the SHPO. Because the Alviso Marina is outside the historic district, it is not anticipated that a SHPO permit will be required. However, if required, the permit would be a COE 404 permit with a Section 106 consultation. There is a minimum 2 to 3 month processing time and there is no fee.

Department of Water Resources

This agency will comment upon the environmental impact report for any modifications at the Alviso Marina.

Environmental Protection Agency (EPA)

This agency administers the Federal Water Pollution Control Act and many other pieces of federal legislation related to the environment. Regarding Alviso Marina, it will specifically evaluate all COE permit applications to determine possible impacts on wetlands, water quality, air quality or toxic substances.

National Marine Fisheries Service (NMFS)

This agency offers consultation on a Corps of Engineers permit. It also conserves, manages and develops loving marine resources and protects marine mammals and endangered species. It is not anticipated that a permit from this agency will be required for the Alviso Marina. This agency requires NEPA compliance (EA or EIS) and the permit processing time varies. There is no fee.

U.S. Fish and Wildlife Service (USFWS)

This agency conserves, enhances, and protects wildlife habitat resources. It is a regulatory authority for the "take" of a species protected under the Endangered Species Act (ESA). The type of permit required is a Section 7 consultation and/or Section 10a "Incidental Take" permit under Section 7 of ESA. It is not anticipated that such a permit will be required at Alviso Marina. The processing time for this permit varies depending on the complexity. There is no

fee. As part of the permitting process, COE requires the applicant to consult with the USFWS regarding wildlife impacts and federally listed endangered species.

Possible Sources of Funding

Santa Clara County has listed a number of agencies that would be a possible source of funding for improvements to the Alviso Marina County Park.

The Department of Boating and Waterways

DBW offers a Planning Loan program. This program offers loans for the planning and development of marinas, and it grants for the development of boat launching facilities.

The California Coastal Conservancy

The CCC offers loans through the Urban Waterfronts Restoration Program. This program is designed to assist local governments in planning waterfront areas and specifically for public recreation and coastal access.

The California Water Resources Control Board

The CWRCB has a Water Quality Planning Grant program. Although the priority is given to watershed related projects, the Alviso Marina County Park may be eligible.

APPENDIX C

RECREATION ACTIVITIES INVENTORY

The purpose of the Recreation Activities Inventory is to present data used to establish a range of possible recreation uses for Alviso Marina County Park. The range of activities were established by reviewing existing recreational uses and needs from surrounding areas including the South Bay region. In addition, the recreation needs of the community of Alviso were investigated through a community survey. See Appendix A. Possible recreation activities were reviewed for their recreation value as well as construction and operations compatibility at the marina. In addition, potential revenue generation through commercial or concession activities at the marina was also reviewed. A preliminary listing of recreation activities at Alviso Marina County Park was formed from these studies as well as discussions with interested citizens and the public at large.

Regional Recreation in the South Bay

Although Alviso Marina was originally established in 1966 to provide a boat berthing facility for Santa Clara County, the master plan process reviewed a wide range of alternative site uses, including renovation of the marina and/or boat launch ramp. Through understanding the range of existing or proposed recreation facilities we considered new facilities at the Alviso Marina to complement rather than duplicate those already available. Figures 4 and 5 in the Master Plan list existing regional recreation in the South Bay and activities that are allowed in those recreational areas. Following is a summary of existing and proposed facilities in the South Bay.

Boat Launch Ramps

The nearest boat ramps to Alviso are located on the east side of the Bay, eight miles north of Alviso at Thornton Avenue in Fremont. On the west side of the Bay, a second launch ramp is located fourteen miles to the northwest at the Docktown Marina in Redwood City. There are also marinas located at Blair Island and Uccelli Boulevard in Redwood City. Until recently , another boat launch ramp was located eight miles to the northwest at Palo Alto Baylands. It has been closed due to sedimentation.

The San Francisco Bay National Wildlife Refuge

The 23,000 acre San Francisco Bay National Wildlife Refuge is located in and among the mudflats, wetlands, salt evaporation ponds and Bay waters to the north and west of Alviso. It was created in 1972 to protect important wildlife habitat. However, it also provides valuable open space recreation opportunities for hiking and boating. Trails are located along the levees that ring the salt ponds. Trail heads are limited to areas near the Dumbarton Bridge Visitor Center, Ravenswood at the west end of the Dumbarton Bridge and the Alviso Environmental Education Center. Other agencies provide connecting bicycling and walking trails. Boating, hunting and fishing are permitted with an appropriate state license and within limited areas and seasons. The Visitor Center and the Environmental Education Center provide information to the public about the refuge and its resources. The Visitor Center is

open to the public; the Environmental Education Center is only open to school classes by reservation. Starting at the Alviso Marina, about ten miles of levee-top refuge trails are available for walkers. Attendance at the National Wildlife Refuge has tripled over the last ten years from about 100,000 persons in 1984 to 303,000 in 1994. Of these totals, about 50,000 persons in 1994 visited the visitor center and 8,000 persons visited the Environmental Education Center.

The San Francisco Bay Trail

When complete, the Bay trail will be a 400 mile long network of trails that will circle San Francisco Bay. Forty-percent complete in 1994, it will run through all nine Bay Area counties and 42 shoreline cities. It will be multi-use in nature, accommodating walkers, runners and bicyclists. Although the Bay Trail project is administered and supported by the Association of Bay Area Governments and the Metropolitan Transportation Commission, specific planning in the area of Alviso is being coordinated by the city of San Jose. In the area of Alviso, a final trail alignment is still not fixed and recent alternative proposals are no longer valid. Sensitive land uses such as methane treatment, outfall for the city's sewage treatment plant, wildlife nesting sites, and salt production have eliminated several alternative alignments. The city of San Jose, working with the Bay Trail Project and Cal Trans, is presently discussing alignment of the trail. Current maps show the trail routed to the Alviso Marina from the east on Zanker Road, Los Esteros Road, Grand Boulevard and Gold Street.

Sunnyvale Baylands Park

About one mile west of Alviso is Sunnyvale Baylands Park, a 217 acre park owned by Santa Clara County and operated by the City of Sunnyvale. It was completed in 1993 and includes 72 developed acres for active recreation such as turf meadows, picnicking, an open amphitheater and play areas. 105 acres are dedicated wetlands and walking trails and wildlife observation areas.

Twin Creeks Softball Complex

Adjacent to Sunnyvale Baylands Park is the Twin Creeks Softball Complex, a recreation facility located on land leased from Santa Clara County, offering softballs fields and batting practice facilities.

Palo Alto Baylands

The city of Palo Alto operates a park and recreation facility adjacent to San Francisco Bay about eight miles west of Alviso. It includes a visitor center, walking trails and wildlife observation. Guided educational walking tours are also available. About fifteen years ago, Santa Clara County operated a marina at this location. However, severe sedimentation problems and dredging costs caused the closure of the marina and, later, the boat launch ramp. Currently the city of Palo Alto operates a "sailing station" which is a long pier into the slough where a hand-carried boat can be set into slough waters. This station is used by kayaks, canoes and wind surfers or sail boarders. The kayaks and canoes tend to use the

nearby marsh areas. The wind surfers tend to use the open Bay waters, about a thousand feet away.

Shoreline Park, Mountain View

The city of Mountain View operates a 700 acre park at the edge of the Bay, about six miles west of Alviso. This facility, built over an old landfill, includes a golf course, an outdoor amphitheater, a historic house, a boating and wind-surfing lake, and walking and bicycling trails, picnicking and nature study. The boating lake rents paddle-boats, kayaks, canoes, and sailboats.

Coyote Hills Regional Park, Newark

This 1,000 acre regional park, operated by the East Bay Regional Park District, is located ten miles northwest of Alviso on the low Coyote Hills adjacent to salt evaporation ponds and the east end of the Dumbarton Bridge. In addition to hiking, bicycling and nature study, this park features a nature interpretive center with displays related to the park's habitation by Native Americans. Park trails connect to the Alameda Creek Regional Trail. There is no direct access to the Bay.

Parks in Alviso

Alviso currently has a 7.5 acre park, located on North First Street, operated by the City of San Jose. It includes a swimming pool, a playground and a baseball field. San Jose city park standards require 3.5 acres of neighborhood park as well as 7.5 acres of regional park for each 1,000 persons. By these standards, the approximately 2,000 individuals living in Alviso would require 15 acres of regional recreation and seven acres of city park.

Recreation Needs

The recreation needs of large and heterogeneous population groups are very difficult to assess with any degree of precision. Although there are many standards, there are few statistics that can be directly used to show how and why people recreate or use park facilities. However, the following information can give a general sense of recently increasing recreation demand.

Growing Population and Park Attendance

The Santa Clara County population in 1990 was 1,464,000. The population estimate for the year 2000, according to the Santa Clara County Planning Department, is 1,615,000. This change represents a growth of about 10 percent, or slightly more than one percent per year, the equivalent of 14,000 new residents each year.

In addition to growing population, actual park attendance has been increasing over the last several decades. In 1960, attendance at state parks was about 1.5 visits per resident. In 1990, that had increased to 2.6 visits per resident. Similar rates of increase are likely at regional and local parks. (*San Jose Mercury News, September 1, 1991*).

Boating

Boat ownership, and presumably use, in Santa Clara has remained relatively constant over the last ten years. Statistics from the State of California Department of Boating & Waterways show that the numbers of boats registered in Santa Clara County and Alameda County have remained fairly level over the last ten years. The lowest number of registered boats in Santa Clara County was 31,274 in 1984 while the highest number was 33,538 in 1988. Alameda County totals varied from 28,267 in 1988 to 32,462 in 1991 (*California Department of Boating & Waterways, 1994*). In addition, the lack of heavy demand for boating and boating facilities is reflected in occupancy rates for marinas of only around 70%. Ten or 15 years ago a boat buyer was wise to find a berth before the purchase. In 1994, marinas advertised in boating magazines to attract berth renters (*Leonard, 1994*).

In 1994, 32,733 boats were registered in Santa Clara (*Santa Clara County Assessor's Office*). These boats pay a 1.15% property tax to the county which would be about $11.50 for a boat valued at $1,000. Boats also pay a registration fee to the State of California through the Department of Motor Vehicles. There is no information on the total tax revenues received by the county from boats.

Baylands

For many years, the edges of the San Francisco Bay were largely unknown to Bay Area residents. Except for bridge crossings, most Bay margins were privately held and more or less invisible to the public. In the last 20 to 30 years, publicly held land around the Bay has increased dramatically. Holdings near Alviso include the National Wildlife refuge (1972), Sunnyvale Baylands, Shoreline Park in Mountain View, Coyote Hills near Newark, and others. As a result, awareness and interest in the Bay and its wetland margins has increased, as well as visits to related recreation facilities. For example, attendance at the national Wildlife Refuge has tripled over the last ten years from about 100,000 persons in 1984 to 303,000 in 1994.

Potential for Commercial Activities

Where appropriate, Santa Clara County Parks and Recreation may permit operation of commercial activities within parks in order to provide valuable recreation facilities or activities that might not otherwise be available to the public. These concessions might be facilities such as horse stables, boat rentals or food sales. Concessions are operated under a lease from the county which covers such items as services to be provided, rent payments, insurance, etc. In considering the possibility for a commercial activity at the Alviso Marina County Park, there are three basic limitations. First, the commercial activity must produce income for the operator. No concessionaire can afford to operate for very long unless they can produce some profit from their operations. Second, the upland (non-wetland) areas of the park site that could be used for concession are severely limited. Most upland areas are currently devoted to parking; wetland area activities are limited by regulatory agencies. And third, commercial use of parks in Santa Clara County are subject to the *Policy on Commercial Development on Parklands* which sets forth the types of commercial developments allowed in county parks. The policy, comprised of 23 guidelines, is divided into six sections: Park Philosophy, Safety and Insurance,

Administrative Considerations, Operation of Facilities, Financial Accountability, and Environmental Considerations.

Relative to possible commercial activities at the Alviso Marina, the most relevant guidelines indicate that commercial development should: a) contribute to the recreation related enjoyment of the park; b) be compatible with regional (not local) recreation activities; c) enhance park enjoyment; d) support a generally recognized park and recreation function for the general public; e) be affordable to the general public; f) attract individuals from throughout the county; g) be compatible with the natural character of the area; h) be compatible with the surrounding park area and neighborhood relative to traffic and other impacts. While these guidelines are open to interpretation, their general tone clearly defines the kinds of concessions that are appropriate to a regional recreation facility such as the Alviso Marina.

The activities that would fit the above mentioned guidelines are varied. For example, an active marina, boat and kayak rentals, and wind surfing concessions might contribute to the recreation enjoyment of the park by taking advantage of the natural features of the site and increasing the types of recreational activities that could occur. While jet skis may also add to the recreation activities at the site, the wakes and noise generated might be incompatible with the natural character of the site. Indoor recreation, batting cages, and other similar sports activities would be incompatible with the site because they would ignore the surrounding natural character. A food concession that was operated on the site in conjunction with other operations would fit the commercial guidelines. A larger restaurant, however, would not be acceptable because of its scale, and it would not contribute to the recreation related enjoyment of the site nor support a generally recognized park and recreating function. Bait and marine supplies on a small scale would support a generally recognized park and recreation function for the general public, and would be acceptable.

The commercial development guidelines listed above do not address regulatory or fiscal constraints. The cost and/or the regulations and permits required to implement certain commercial activities would impose additional restrictions on the types of commercial development allowable in the marina.

Marina Concession

The existing condition of the marina and previous estimates of the cost for dredging have shown that any marina operation at the park site will have substantial financial requirements beyond everyday operating costs. While it is beyond the scope of this master plan study to perform a detailed economic feasibility assessment, some basic dredging costs can be considered. If an economical dredge spoils disposal site suitable for marina sediments could be located, dredging costs might be around $10 to $15 per cubic yard. Based on an accumulation of 2.0 feet of sediment per year (Ruth & Going, 1980), the marina would need to be dredged every two years to remove an estimated quantity of 100,000 cubic yards.

Possible Dredging Costs at Alviso Marina

Total cost of dredging:	$1,000,000 - $1,500,000
Dredging cost per year:	$500,000 - $750,000
Dredging cost per berth (80 berths) per year:	$6,250 - $9,375
Dredging cost per berth per month:	$520 - $781
Dredging cost per berth foot per month:	$17.36 - $26.03

The cost of dredging would have to be added on to berth rental fees. According to a survey of berth rental rates conducted by the Coyote Point Marina (*Leonard, 1994*) average per foot berth rents for public marinas in San Francisco Bay are about $5.00. Marina rents are normally charged at a rate per foot of berth. The cost of dredging at Coyote Point is only about 13 percent of rental income or about $0.65 per foot per month. The cost of dredging at Alviso is twenty-three to thirty-four times this rate. When dredging costs are added on to normal marina operating costs, it seems extremely unlikely that a marina concessionaire could rent berths at a rate that would be economically feasible or competitive. This problem is compounded by the fact that berth occupancy rates for marinas around San Francisco Bay are currently about 70 percent and have been for the last five years.

Dry Stack Boat Storage Concession

The 1980 Ruth and Going study discussed various alternatives for marina arrangements. A dry stack storage system was one of the economically feasible alternatives identified at that time. This dry storage type of facility would store boats out of the water, eliminating the need for dredging much of the marina area. When a boat owner wishes to launch his or her boat, the boat is removed from storage and placed in the water using either a fork lift or stacker crane. The crane is used to launch, retrieve and store boats. A plan from the 1980 Ruth and Going Study (*Appendix B, Moffatt & Nichol, Draft Engineering Report on Alviso Marina Alternative Shoaling Mitigation Plans*), indicates how such a facility might be designed at the Alviso Marina. Dredging would still be required for water areas at the launch ramp or around a hoist.

As indicated by the County Tax Assessor's Office (*Santa Clara County Tax Assessor's Office, 1994*) and State Boating and Waterways, there have been about 32,000 registered boats in Santa Clara County over the last ten years. Since there are no marinas in the county, most large boats are probably berthed in another county while smaller boats are likely stored out of water. The smaller boats, which are probably the largest share of those registered, could form a market for a dry storage marina. Dry stack boat storage offers some benefits to owners in terms of reduced maintenance operations and costs. In addition, dry storage would minimize environmental damage to Bay water by minimizing contact of boat engine oils and zinc-based hull paints.

The Ruth and Going report notes that the initial development cost of a dry storage facility for 240 boats at the park site would be almost two million dollars (in 1980). Projected yearly operating costs were $85,000. A new dry stack storage system for 200 boats in Eureka is projected to cost about 1.5 million dollars (*Alderson, 1994*).

Lock System Marina

A lock system combined with dry stack storage would offer a second economically feasible plan for retaining boat berthing at the Alviso Marina site. A lock system marina would retain a water berthed marina, as originally developed, but shelter it from sediment by a system of locks which would separate the marina from Alviso Slough. Like the dry stack storage system, this alternative was considered economically feasible and could be combined with a dry stack storage system to accommodate a wide variety of boats. As many as 182 larger boats could be berthed in the water. Dredging would be minimized by careful management of sedimentation through use of the lock system. 240 smaller boats could be held in dry storage.

The combination system of lock and dry storage was the preferred alternative from the 1980 studies by Ruth & Going and Moffatt & Nichol. The initial development cost of a combination dry storage and lock system marina was projected at about six million dollars (1980 costs). Projected yearly costs were $124,000.

Bait & Marine Supplies/Food Concession

Existing businesses in Alviso currently provide bait and marine supplies. In a limited market, it is possible that a concession operating in a county park site could put a competing operation out of business. In addition, without the redevelopment of the marina, it is fair to assume that a marine supply business in the marina would not be viable or appropriate at the park site. Bait and marine supply concessions should be considered secondary concessions to strengthen a principal one such as a marina.

Wind Surf/Boat & Kayak/Jet Ski Rentals

Although they do not require dredging, wind surfing and jet skis require large areas of open water. These conditions are not generally available in the slough and salt pond environment around the Alviso Marina. Use of a salt pond for these activities would require purchase from either Cargill Salt (areas west of the Alviso Slough) or the United States Fish & Wildlife Service (as well as purchase of Cargill Salt's lease for areas north of the marina). Assuming that a salt pond was purchased or leased for wind surfing or sailing, use of the pond is questionable. Depths are usually as little as one or two feet and the bottom can be muddy. Although expert wind surfers set speed records in very shallow water, novices may need at least two feet. The salt ponds do offer the advantages of generally smooth water, free from tides and currents. On the open Bay, strong northwest winds can easily blow wind surfers off course and across to the east side of the Bay.

Boats and kayaks could use the sloughs around the marina. Actual demand for such rentals in the boating environment around the salt ponds and sloughs is not known. Boats, canoes and kayaks use similar marsh and slough areas near the Palo Alto Baylands.

Concessions for leasing kayaks, canoes, etc. could be operated on a seasonal basis with reasonably small overhead, possibly as an adjunct to an existing store or business located elsewhere in Santa Clara County. A jet ski concession has been operating on a seasonal basis at another county park, Calero Reservoir.

APPENDIX D:

ALTERNATIVES AND PREFERRED PLAN

ALTERNATIVES

This discussion is a summary of possible long-range development alternatives considered for Alviso Marina County Park. The purpose of this planning phase was to explore various alternative planning directions in order to reach a consensus regarding a preferred plan. These alternatives were intended to address the recreational needs of the community and at the same time take into account the opportunities and constraints of the site. In previous planning phases, the opportunities and constraints, as well as key goals were identified for recreational uses of the park so that clear criteria for design could be established. These goals provided a framework for developing the alternatives, and established the general design direction for later phases of the Master Plan.

Four alternatives were studied for the park, representing a range of development from low intensity to high intensity. The intensity of development coincides with the expense of implementation and the amount of permitting required. The alternatives are listed in order from the lowest intensity and least expensive (first), to the highest intensity and most expensive (last).

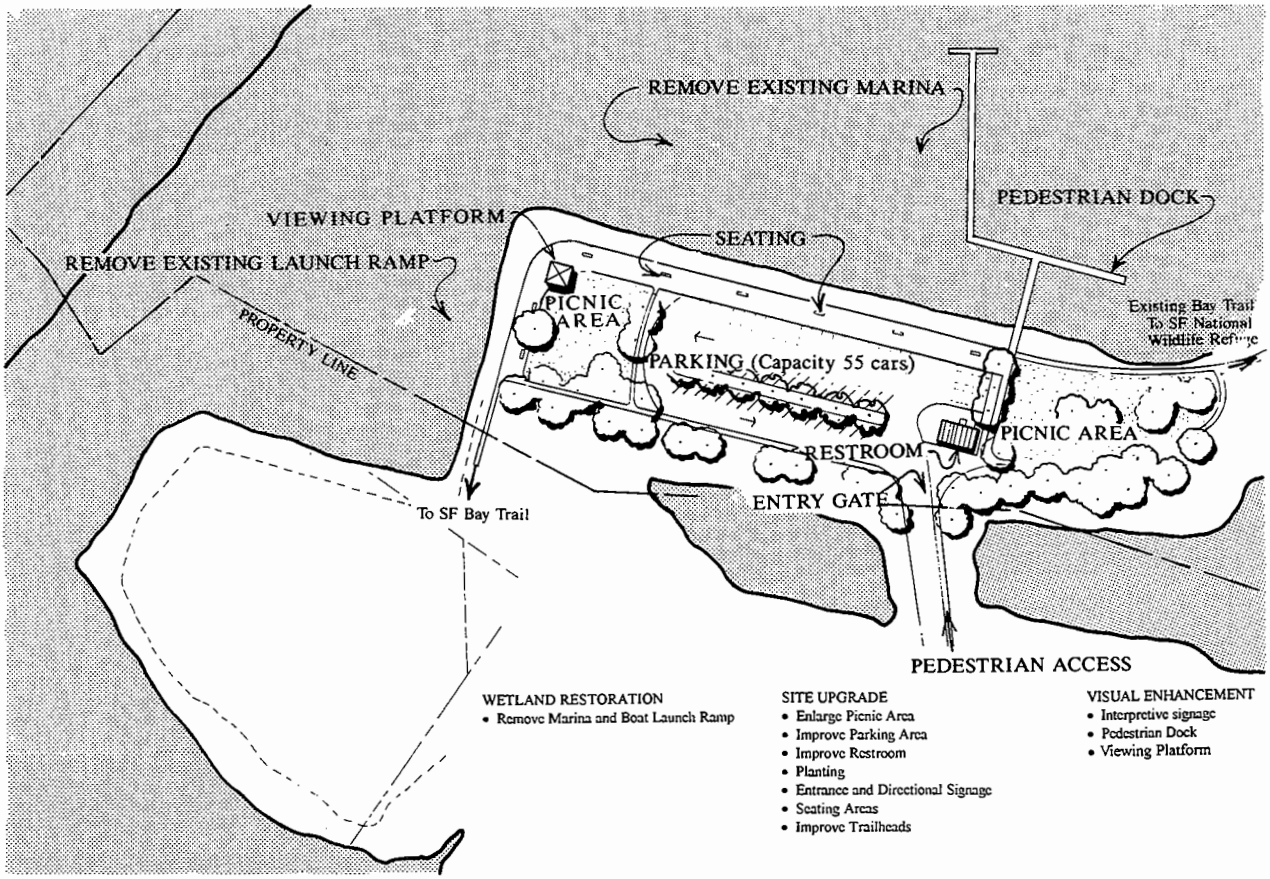
These alternatives are meant as suggestions for the *Preferred Plan* and, eventually, the *Final Master Plan*. Choices are not strictly limited to one alternative or another. The final plan could be a combination of different elements from each alternative.

Given the specific qualities of the site, each alternative has both positive and negative aspects of their implementation. These are listed under each alternative as a 'Pro' or 'Con'.

The park will be designed in a way that accentuates it's inherent qualities. Site beautification and upgrading of facilities will be a common factor in all alternatives. Restroom, parking, and entrance improvements, as well as a picnic area and seating that take advantage of the views will be provided. Interpretive signage, as well as an informational kiosk or sign-board, will also be included. In addition, all of the alternatives improve trail connections to the San Francisco Bay National Wildlife Refuge and the San Francisco Bay Trail through marked trailheads and directional signage.

Alternative 1:
Wetland Restoration / Site Beautification and Facility Upgrade

DESCRIPTION: The purpose of this alternative is the development of the site as a wildlife area and open space connection for the recreational enjoyment of visitors to the site. Alternative 1 represents the minimal development plan and the one most easily implemented. Emphasis would be on the restoration of wildlife habitat and the development of recreation associated with wildlife, such as hiking, bird-watching, bicycling, and picnicking. The existing marina and boat ramp would be removed, and the marina site allowed to revert to wetland habitat. The removal of the Marina would encourage plant and animal life, as well as hydrologic conditions. Wetland restoration could be eligible for implementation grants. Interpretive signs explaining the natural and historic aspects of the site would be installed. In the short-term, if feasible, an existing dock could be used for pedestrian access into the



WETLAND RESTORATION
- Remove Marina and Boat Launch Ramp

SITE UPGRADE
- Enlarge Picnic Area
- Improve Parking Area
- Improve Restroom
- Planting
- Entrance and Directional Signage
- Seating Areas
- Improve Trailheads

VISUAL ENHANCEMENT
- Interpretive signage
- Pedestrian Dock
- Viewing Platform

ALTERNATIVE 1
WETLAND RESTORATION/ STAGING AREA

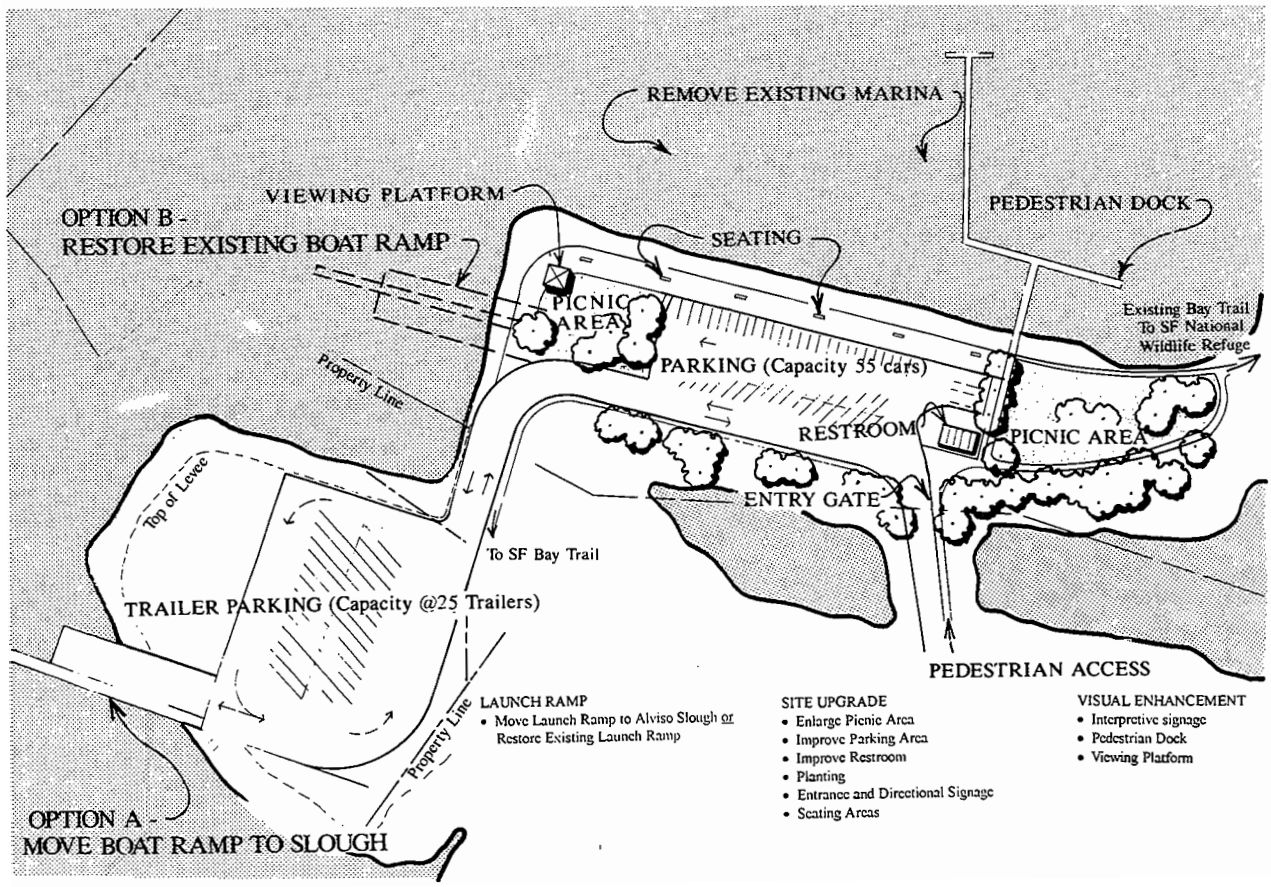
ALVISO MARINA COUNTY PARK

COUNTY OF SANTA CLARA
ENVIRONMENTAL RESOURCES AGENCY
DEPARTMENT OF PARKS AND RECREATION

DILLINGHAM ASSOCIATES
LANDSCAPE ARCHITECTS AND PLANNERS

NORTH

0 30 60 90



LAUNCH RAMP
- Move Launch Ramp to Alviso Slough or Restore Existing Launch Ramp

SITE UPGRADE
- Enlarge Picnic Area
- Improve Parking Area
- Improve Restroom
- Planting
- Entrance and Directional Signage
- Seating Areas

VISUAL ENHANCEMENT
- Interpretive signage
- Pedestrian Dock
- Viewing Platform

ALTERNATIVE 2
LAUNCH RAMP

ALVISO MARINA COUNTY PARK

COUNTY OF SANTA CLARA
ENVIRONMENTAL RESOURCES AGENCY
DEPARTMENT OF PARKS AND RECREATION

DILLINGHAM ASSOCIATES
LANDSCAPE ARCHITECTS AND PLANNERS

NORTH

0 30 60 90

marsh area. In the long-term, a bridge / boardwalk would be built from the south side of the Marina to the levee on the north side of the Marina. In addition, a viewing tower or platform could be constructed which would not only reveal scenic vistas, but serve as a symbol of the park that is recognizable from the surrounding area. Trail connections to the San Francisco Bay National Wildlife Refuge, and possibly the San Francisco Bay Trail, would be enhanced. The entrance to the park would be improved with planting, a gateway and entrance signs. Restroom and parking facilities, would be improved. Picnic areas, planting and irrigation, an informational kiosk, seating, directional and interpretive signage would be provided. Many of the elements in Alternative 1 would be included in the other alternatives. This alternative would meet most of the goals stated in the previous report section, especially ease of maintenance and cost effectiveness in comparison with other alternatives. The park's natural character, identity, and the quality of recreational experience would be greatly enhanced. Conflicts between different recreational uses would be minimized. This alternative would not provide water access for boating or other activities, eliminating the difficult permitting process and dredging requirements.

PROS:
Easy to implement
Minimal environmental impact
Low construction cost
Not contingent on Corps of Engineers or other permits
Low maintenance cost
No land swap or purchase necessary
No 24-hour-open policy needed
Improves park identity
Increases environmental awareness.
No increase in large vehicle traffic
Improves security through increased use
Creates open space linkages with the San Francisco Bay National Wildlife Refuge, and possibly the San Francisco Bay Trail
Visual enhancement of park

CONS:
Does not provide recreational emergency access to bay

Alternative 2:
Launch Ramp / Site Beautification and Facility Upgrade

DESCRIPTION: . The purpose of this alternative is to restore small boat access to the Alviso Slough through the construction or restoration of a boat ramp at the Marina site. Alternative 2 represents a moderate development plan. Emphasis would be placed on providing facilities that promote small boat use of the site and the activities associated with it, such as fishing. Two launch ramp options have been identified.

Option A: The Launch ramp would be relocated to the edge of the Alviso Slough on property that is presently owned by the Federal Government (US Fish and Wildlife Service). A land trade or purchase would be necessary. The Park's 14-acre northern parcel (salt evaporation pond) could be used in the land trade. The existing marina and boat ramp would be removed, and the marina site allowed to revert

to wetland habitat. Trailer parking would also be relocated to the new property. Wetland restoration could be eligible for implementation grants. Approximately 1000 to 1,500 cubic yards of sediment would need to be dredged from the slough to make the launch ramp operational.

PROS:
- Provides recreational and emergency access to Bay
- Launch ramp development funding available from the State
- Lower maintenance than present marina
- Moderate construction costs
- Improves security through increased use
- Improves park identity
- Visual enhancement of park
- Open space linkage to San Francisco National Wildlife Refuge and San Francisco Bay Trail

CONS:
- Permitting required
- Some maintenance dredging required (easier than Option B)
- Land exchange or purchase necessary
- Environmental disturbance
- Disposal of dredge spoils expensive
- Some increase of trailer traffic to park.

Option B: The existing launch ramp would be restored and improved. The existing marina would be removed, and the marina site allowed to revert to wetland habitat. Wetland restoration could be eligible for grants Facilities, such as restroom and parking area, would be improved. Approximately, 15,000 cubic yards of sediment would need to be dredged to provide access from the ramp to the slough. about 80,000 square feet of bulrush habitat would need to be cleared for the dredging and channel.

PROS:
- Provides recreational and emergency access to bay
- Lower maintenance than present marina
- Moderate construction costs
- Improves security through increased use
- Improves park identity
- Visual enhancement of park

CONS:
- Permitting required (more difficult than Option A)
- Environmental disturbance
- Dredging required
- Disposal of dredge spoils expensive
- Increased maintenance required
- Some increase of trailer traffic to park

Option A is recommended as the first alternative to pursue, given the fact that less dredging would be necessary and permitting would be easier. However, this option is contingent upon acquisition of additional property, either through a land swap or purchase. Initial investigations have indicated this may be possible. In the event this is not possible, Option B would be recommended. In either option, facilities such as the restroom and parking area would be improved, and other enhancements shown as part of Alternative 1 would be provided. This alternative meets many of the stated goals, such as taking advantage of the site's characteristics and resources as well as enhancement of park identity. By removing the existing marina and allowing the marina basin to revert to wetland, the site's natural character and wildlife habitat would be preserved. Cessation of dredging in the marina would reduce

environmental degradation and maintenance expenses. However, continued maintenance dredging around the ramp and the disposal of dredge spoils would still be a considerable expense. Option A, although more expensive initially, would require less maintenance dredging than Option B. Dredging to open the channel from the existing launch ramp, as shown in Option B, would be around 15,000 cubic yards (700-foot channel, 15-feet wide, 10-feet deep with five to one side slopes). Approximately 80,000 square feet of bulrush habitiat would be removed for the channel.

Alternative 3:
Dry Stack Storage / Launch Ramp / Site Beautification and Facility Upgrade

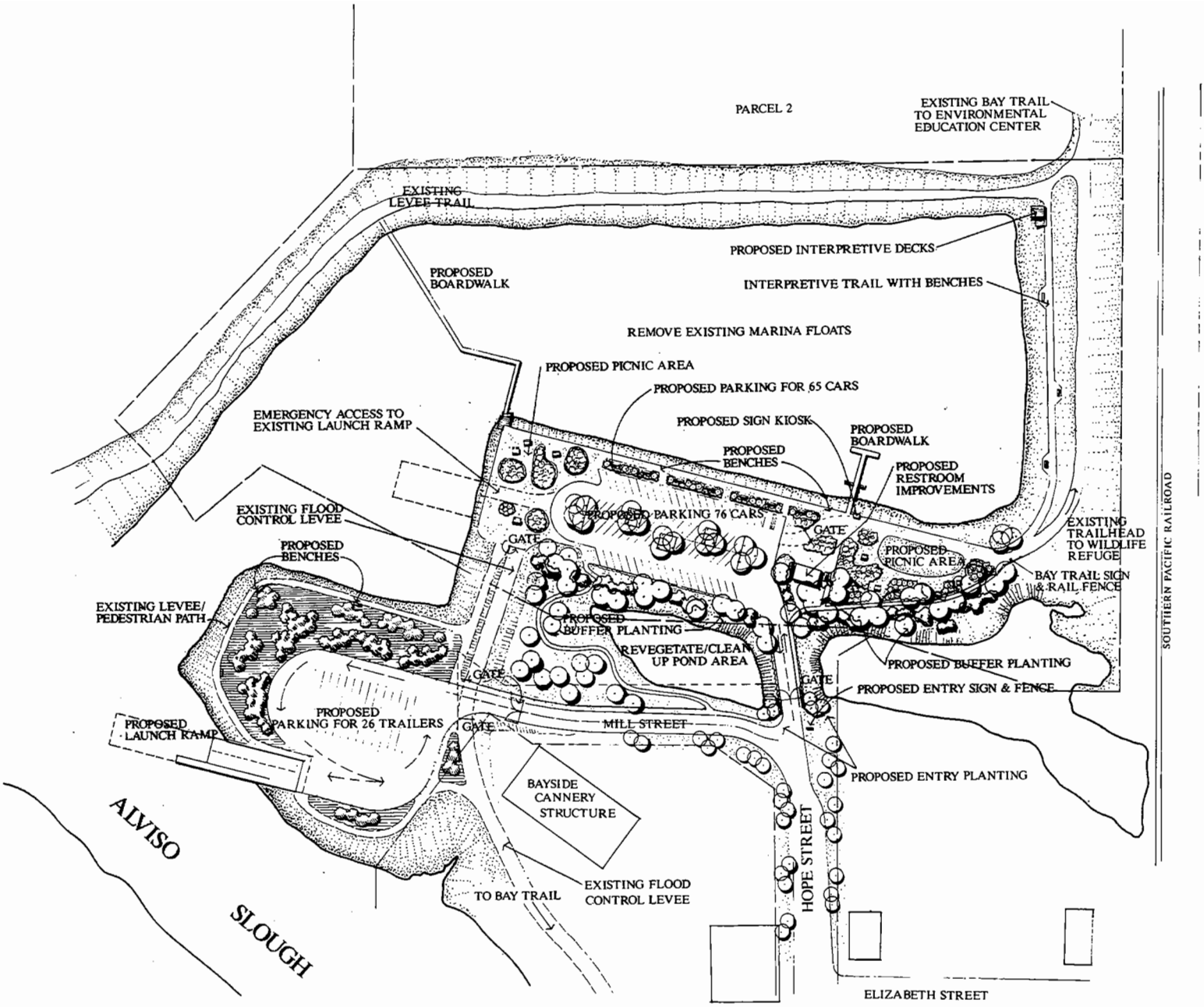
DESCRIPTION: Alternative 3 represents a high development plan. The purpose of this alternative is to provide a substitute method for boat storage on the park site in a manner that is less expensive to construct and easier to maintain than a marina. In addition, this method would cause less environmental degradation than a marina. Dry stack storage is primarily for power boats that weigh less than 6,000 pounds and are less than twenty-five feet long. Boats are stacked on racks in a shed or in the open. Sailboats cannot be stacked and must be stored outside the shed. Boats are then carried with a fork lift to a launching area. A hoist is needed to lift boats in and out of the water. A 100 foot-square concrete platform at the water's edge would be necessary, as well as holding docks for five or six boats. A fork-lift stacking system requires a high level of maintenance, raising the expense of such an operation. This alternative is much more expensive to implement than either Alternative 1 or 2, and is contingent upon further study to determine the cost effectiveness, visual impact, and economic demand for such a facility. It would also be contingent upon a land trade or purchase of the adjoining Federal Government property as well as a right-of-way easement through State property. Some dredging would be required to create a small basin on the side of the slough. Due to the heavy metal concentrations in the Marina sediment, a suitable dredge spoil location would need to be found. A permanent staff of two people would be necessary. Facilities such as the restroom and parking area would be improved, and other enhancements shown as part of Alternative 1 would be provided. This alternative could be combined with a launch ramp and would meet many of the goals in the previous section, such as enhancement of park identity and providing recreational facilities that take advantage of the site's characteristics. However, the initial expense of construction would be high.

PROS:
- Provides recreational and emergency access to bay
- Less dredging required than marina
- Lower environmental impact than
- Lower maintenance than marina
- Improves security through increased use and part-time staffing
- Visual enhancement of park
- Improves park identity

CONS:
- Expensive to construct
- Some dredging necessary
- Disposal of dredge spoils expensive
- Land exchange or purchase could be necessary
- Permitting necessary
- Expensive to maintain
- Visually intrusive

Alternative 4:
Restore Marina / Site Beautification and Facility Upgrade

DESCRIPTION: Alternative 4 represents a maximum development plan. The purpose of this alternative is to restore marina facilities to the park. Some of the existing degraded marina facilities



PREFERRED PLAN IMPROVEMENTS

LAUNCH RAMP
RELOCATE TO ALVISO SLOUGH
ACCESS ROAD VIA MILL STREET
PARKING FOR 20 TRAILERS
EMERGENCY ACCESS TO EXISTING LAUNCH RAMP

REMOVE MARINA
REMOVE FLOATS AND PILES

PICNIC FACILITIES
PICNIC AT EAST END OF SITE
PICNIC AT WESY END OF SITE

BOARDWALK
BOARDWALK ACROSS MARINA BASIN
BOARDWALK USING FORMER MARINA FLOATS

RESTROOM IMPROVEMENTS
IMPROVE DISABLED ACCESS
LIGHTING

PARKING IMPROVEMENTS
IMPROVE PARKING FOR 76 CARS (LOSE 4 CARS)

TRAILS AND SITE AMENITIES

INTERPRETIVE TRAIL AND DECKS
INTERPRETATION OF ECOLOGY
INTERPRETATION OF LOCAL HISTORY

SIGN PROGRAM
INTERPRETIVE SIGNS
DIRECTIONAL SIGNS

PLANTING AND IRRIGATION
SOUTH EDGE OF PARKING
ENTRY ROAD

PARK ENTRANCE IMPROVEMENTS
ENTRY SIGN & FENCE
ENTRY WALK
ENTRY PLANTING
CLEAN-UP AND REVEGETATE POND AREA ON STATE DS

UTILITIES
BURY OVERHEAD ELECTRIC
REACTIVATEFIR HANT
RE ETIFLCONLES

RETAIN EXISTING FLOOD CONTROL LEVEES

PREFERRED PLAN

ALVISO MARINA COUNTY PARK

COUNTY OF SANTA CLARA
ENVIRONMENTAL RESOURCES AGENCY
DEPARTMENT OF PARKS AND RECREATION

DILLINGHAM ASSOCIATES
LANDSCAPE ARCHITECTS AND PLANNERS

0 20 60 120
SCALE IN FEET

NORTH

Surveys of vegetation and the soil surface indicate that the central portion of this property is likely to be a seasonal wetland as defined by the Corps. However, staff members from the Corps and other regulatory agencies indicated at an informal meeting (February 8, 1995), that launch ramp development of this parcel with its likely seasonal wetland is preferable to dredging of the existing launch ramp and consequent damage of bulrush vegetation and wildlife habitat. In addition, with proposed location at the Slough, the new launch ramp would be exposed to greater tidal flow than the present ramp and, as a result, less sedimentation would occur. Because of this slower buildup of sediment, the proposed ramp would need to be dredged less frequently and there would be less impact on wildlife and surrounding habitat. The launch ramp at the slough was preliminarily viewed by the staff of regulatory agencies as *"the least environmentally damaging, practicable alternative."* The proposed launch ramp at the Slough would be usable a much greater percentage of the time than the current ramp.

The proposed launch ramp at the Slough would consist of two fifteen-foot lanes and a single float along one side. In order to maintain the lower levees along the edge of the Slough and around the acquisition parcel[1], two concrete walls would flank the ramp as it projects through the levees.

The center of the acquisition parcel is lower than the surrounding levees which separate it from the slough. Portions of this area are considered to be a seasonal wetland. In order to bring the low area of the 1.8-acre parcel up to a grade that would be even with the levees, about 3,000 cubic yards of earth would be brought to the site. Development in this area would require a permit from the Corps of Engineers. See the report on *Alviso Marina Master Plan - Agencies, Responsibilities and Permits.*

A paved access road from Hope Street along Mill Street to the launch ramp site would be required as well as 30,000 square feet of paving (160 feet x 180 feet) to accommodate 26 car/boat trailer stalls. The access roadway would need to be constructed on earth fill in order to ascend from the level of Mill Street to the elevation of the proposed parking and over the higher levee, the existing Santa Clara Valley Water District (SCVWD) flood control levee, to the elevation of the ramp may be turned from the alignment shown on the *Preferred Plan.* The entry road to the launch ramp trailer parking area would be gated (see section *5. Operations*). Gates to control access to adjacent flood control levees would also be required.

After completion of the launch ramp, parking, and access roads, about half of the 1.8-acre parcel would remain vegetated and undeveloped. Existing levees around the parcel would be retained so their flood control capability would not be compromised. Walkways on the levees around the 1.8-acre acquisition parcel would be retained for recreation use. Other portions of the launch ramp area would be revegetated with species native to the site.

The existing flood control levee ("higher levee") constructed and maintained by the SCVWD will not be modified by the proposed launch ramp and related facilities. However, the access road from Mill Street to the launch ramp parking area would cross it without reducing the elevation of its top nor removing material. Modifications to the area will not impact the ability of the SCVWD to access the levee south of the trailer parking lot. A system of bollards and service gates will be used to restrict vehicular access to the levee-top service/maintenance road. Prior to development of detailed plans, proposals will be coordinated with the SCVWD and plans will be submitted to them for approval per SCVWD ordinance 83-2.

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[1]Levees around the acquisition parcel, with a top elevation of about +12 (NGVD), will be referred to as the "lower levees." The adjacent flood control levees, owned and maintained by the Santa Clara Valley Water District, have a top elevation of about +16 and will be referred to as the "higher levee."

The existing concrete launch ramp would remained for emergency use. The existing floats would be removed, however, and the piles would be cut-off at the mud (high water) line.

If the 1.8-acre parcel cannot be acquired, or if required permits cannot be obtained, then the existing ramp and parking configuration would be retained. If permits for construction of the Mill Street access route are not obtainable, an alternative access route would be required. In this case, access could be through the existing parking lot and along the levee-top service road. This would require a wider roadway than the existing service-only road. In order to accommodate this extra width, the existing levee embankment would need to be widened about ten to fifteen feet through the addition of approximately 1,000 cubic yards of earth fill.

Removal of the Marina

Most of the existing marina facilities would be removed as part of the Master Plan implementation.

Picnic Facilities

The *Preferred Plan* proposes expansion of picnic facilities. The parking lot east of the restroom would be removed and replaced with a picnic area with shade trees and picnic tables. If the new launch ramp is not constructed, the picnic area on the west end of the site would not be built in order to retain the present access to the existing launch ramp.

Boardwalk

A wooden boardwalk is proposed to cross the bulrush habitat of the former marina basin.

Restroom Improvements

The existing restroom facilities would be renovated and brought to the accessibility standards required by State Title 24 and the Federal Americans with Disabilities Act.

Parking Improvements

Although originally designed for 28 cars and 33 trailers, the present capacity of the parking area is about 80 cars and 15 trailers. The *Preferred Plan* proposes that the parking be reconfigured to separate the car parking from the trailer parking and launch ramp. This allows the paved area within the current park boundaries to be smaller while still providing parking for essentially the same number of cars. The new car parking will have a capacity of 76 cars, a decrease of only 4 car stalls. Parking for 26 trailers will be located adjacent to the proposed ramp, increasing potential trailer parking by 11 stalls. As noted under the discussion of picnic facilities, parking on the eastern and western ends of the park would be removed and replaced with picnic areas, allowing a more diverse use of the site.

Trails and Site Amenities

Site pedestrian circulation would occur on pathways separated from vehicular areas. A widened pathway would pass along the marsh edge, separated from the parking area by a low buffer planting in such a way that views from adjacent cars would not be blocked. Benches would be set along the path and oriented to take full advantage of the views. A trail with interpretive information and benches would

be located along the pedestrian path on top of the levee at the east end of the marina to take full advantage of the views from this area.

Interpretive Decks

Interpretive decks are proposed at the north-east corner of the existing levees surrounding the marina area. The wooden deck structures would consist of two fifteen-foot square platforms with rails, one of which would rise about 20 feet above the level of the existing parking area. The intent of the structures is to provide a platform to observe the surrounding landscape as well as plant and animal life. The decks would be combined with interpretive signs.

Planting and Irrigation

Planting and irrigation throughout the park site would serve to beautify and enhance the site in several ways.

Park Entrance Improvements

The entrance to the Park would be made clearer and more attractive by installing an entry sign, wood-rail fences, gates, and gateway planting.

Utilities

The Preferred Plan would not make significant changes in the utilities at the park site.

Other Facilities Considered

In the course of preparing plan alternatives, the Preferred Plan and the Master Plan, other facilities were considered for inclusion, but for various reasons, these were eliminated. The potential facilities and the reasons for not including them are:

Marina

Due to changes in the environmental regulations over the past ten years and the anticipated high level of environmental impacts caused by dredging the marina, the staff of regulatory agencies have indicated that it is very unlikely that marina dredging would receive necessary permits. The existing condition of the former marina and cost estimates for dredging the former marina basin have shown that any marina operation at the park site would have substantial costs for initial dredging as well as periodic maintenance dredging. As detailed in the "Park Program / Activities" section of the *Program Document*, the cost of dredging, if included as a portion of monthly berth rentals, might be in the range of $300 to $750 ($15 to $25 per berth foot). Relative to average berth rental rates of $100 to $200 (about $5 per berth foot), these costs are exorbitant. In addition, berthing space around San Francisco Bay is currently very available, including inexpensive berths at the nearby South Bay Yacht Club.

Dry Stack Boat Storage Concession

A dry-stack storage facility stores boats out of the water in a structure with vertical racks. This system would eliminate the need for dredging most of the marina area. When boat owners wish to use their

boat, the boat would be removed from storage and placed in the water at the edge of the Slough using either a fork lift or stacker-crane to launch, retrieve and store boats. Although the environmental impacts of a dry-stack storage system are dramatically less than those for a marina, there are four reasons why this idea was not considered. First, the cost of such a facility is in the range of one-and-a-half to two million dollars, more than is likely to be available from County budgets for some time. While loans from the State may be available for construction, income from a dry-stack storage facility would likely be inadequate to cover loan costs. Second, the market demand for such a facility is not known. There are no local examples from which parallels could be drawn and an economic study would be necessary to research the demand. Third, a dry-stack storage building would be a large structure and local residents expressed concern regarding its visual impact. Finally, there has been no public expression of interest in this option.

Use of Salt Evaporation Pond for Recreational Use

Use of a salt pond for wind surfing (board sailing) or other recreational boating was suggested by the public. However, use of a salt pond for wind-surfing or other recreation would require purchase from either Cargill Salt (areas west of the Alviso Slough) or the United States Fish & Wildlife Service (as well as purchase of Cargill Salt's lease) for areas north of the Marina. Even if a salt pond were purchased or leased, shallow water depths would make the water unusable for boating or board sailing by most persons.

Replacement of Storm Water Outfalls

Three 60-inch metal culverts under the east end of the parking area, leading to the marina basin from the larger remnant pond of Steamboat Slough, would not be replaced. These three culverts were installed to permit high water in the pond area to drain into the marina basin. In the first few years after the culverts were installed, the rising sediment in the marina basin buried the culverts and eliminated their usefulness. Since these culverts were filled-in, other improvements have been implemented by the Santa Clara Valley Water District for flood control and the City of San Jose for storm drainage. Due to the fact that they are buried in sediment, the existing culverts have had no flood control or other function for some time and, as such, there is no reason to replace them.

APPENDIX E

INTERIM PLAN

October 30, 1995

Introduction

The intent of the Interim Plan for Alviso Marina County Park is to provide a plan for park improvements which can be immediately implemented while a park Master Plan is being completed. The improvements proposed in the Interim Plan would make the park more attractive as well as resolving some current problems.

The improvements proposed here are feasible for immediate implementation; they do not require permits from regulatory agencies and do not have significant environmental impacts. Nor will they require extensive sets of construction documents or even outside contracting. Most, or all, of the proposed projects can be carried out with field staff, volunteers, the California Conservation Corps or prison labor.

While the Interim Plan is being implemented, efforts can be continued on the Master Plan to resolve some of the more long term, comprehensive issues.

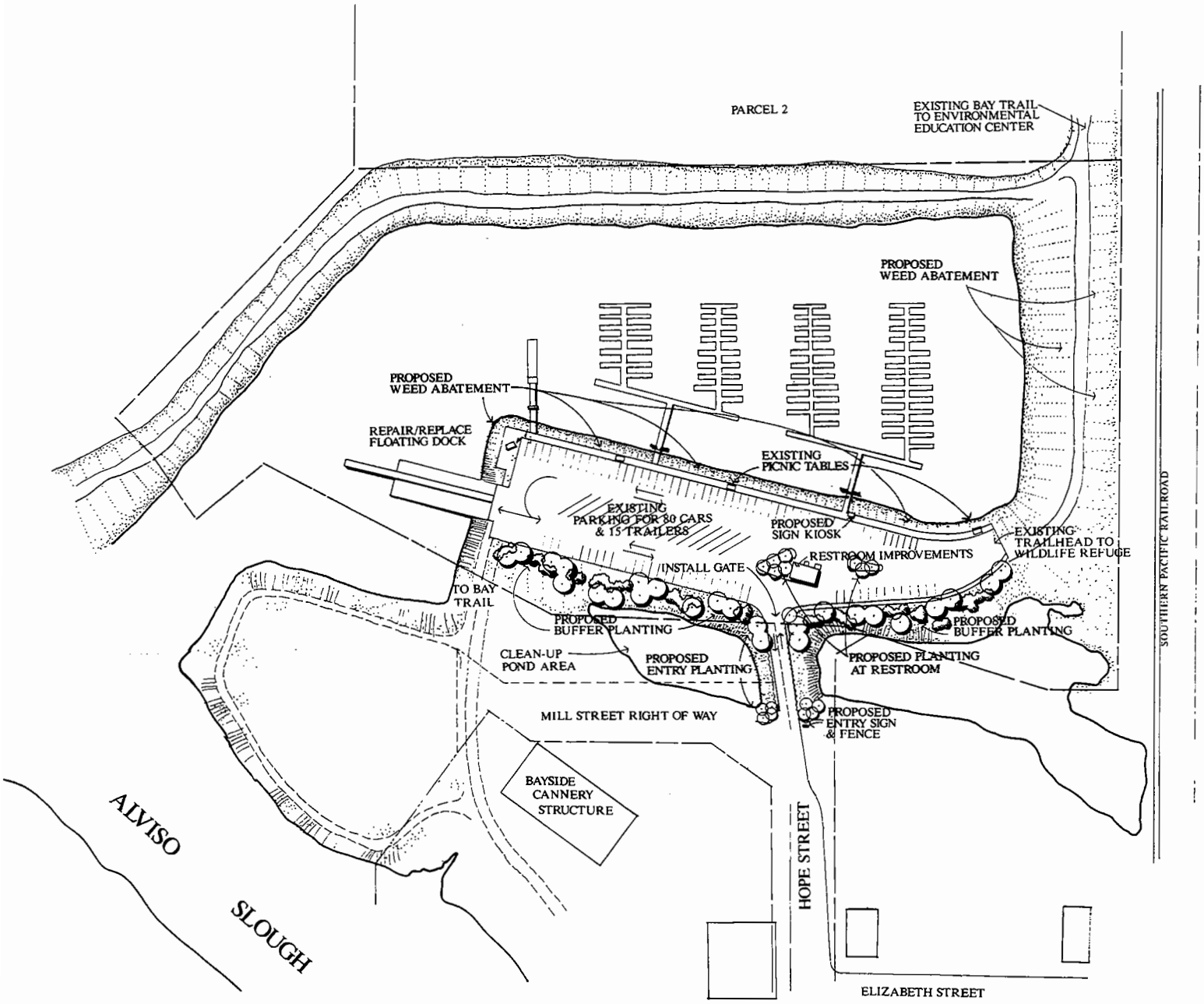
Change in Park Closure Policy

Unlike most County Parks, the Alviso Marina County Park has had a policy of remaining open at all times, 24 hours per day. This policy was required for twenty years, until about 1985, under the terms of the original grant from State Boating and Waterways for construction of the existing launch ramp. While the current policy has provided convenience for boaters dealing with shallow water and changing tides, it has created security problems for the County and the community by inadvertently permitting night-time use of the park for undesirable activities such as drinking and illegal camping in a vehicle. The San Jose Police Department has strongly urged the night-time closing of the park. And now, because the terms of the original grant have expired, it is no longer required to retain the 24-hour open policy. This plan proposes that the park be closed at sunset and opened at sunrise, like all other County Parks. For a small fee, the County Parks and Recreation Department would issue a "launching permit." The permit would give the recipient gate access and a parking sticker to exempt it from police action during night hours. The facility would be off limits for other uses between dawn and dusk.

Description of Proposed Improvements

Entrance Improvements

The entrance to the park will be developed to more clearly identify the site as a County Park. A park entry sign and wood-rail fence will be installed to create a clearer park identity. In addition, trees, shrubs and ground covers will be used to frame the entry and make it more attractive. Where the entry road crosses between the two ponds (remnants of Steamboat Slough) planting will be kept low to retain the pleasant sense of crossing a bridge. At either end, higher plants will be used.



PROPOSED INTERIM IMPROVEMENTS

- ENTRANCE IMPROVEMENTS
  - ENTRY SIGN
  - WOOD-RAIL FENCE
- POND AREA CLEAN-UP
- PLANTING & IRRIGATION
  - AT PARKING PERIMETER
  - AROUND RESTROOM
  - AT PARK ENTRY
- WEED ABATEMENT
- SIGNS
  - SIGN KIOSK IMPROVEMENTS
  - DIRECTIONAL SIGNS
  - BAY TRAIL SIGN
- LAUNCH RAMP
  - REPLACE/REPAIR FLOAT DOCK
- GENERAL FACILITY IMPROVEMENTS
  - EMERGENCY TELEPHONE
  - INVESTIGATE FIRE HYDRANTS
  - RESTROOM IMPROVEMENTS
  - SLURRY SEAL/RESTRIPE PARKING
  - INSTALL GATE
- PERMITTING
  - AMEND EXISTING BCDC PERMIT

INTERIM PLAN

ALVISO MARINA COUNTY PARK

COUNTY OF SANTA CLARA
ENVIRONMENTAL RESOURCES AGENCY
DEPARTMENT OF PARKS AND RECREATION

DILLINGHAM ASSOCIATES
LANDSCAPE ARCHITECTS AND PLANNERS

0 20 60 120
SCALE IN FEET

NORTH

Clean-up of the Pond and Surroundings

Public comments have requested that the western remnant pond from the former Steamboat Slough be cleaned-up. With the approval of the State Lands Commission, owner of the site, this area would be cleaned-up. Because of limitations in County Parks funding, the County Parks Volunteer Coordinator would work with staff to pursue alternative sources of volunteer effort. These may include the annual Coastal Clean-up Day sponsored by the State Coastal Conservancy, and the City of San Jose's Adopt-A-Park program. In addition, the efforts of the San Jose Conservation Corps or the California Conservation Corps could also be utilized at a minimal cost. County staff would also explore the possibility of restoring tidal circulation to the western pond by re-opening the existing 24-inch culvert which passes under the entry road. Because re-opening of the culvert would require less than 25-cubic yards of sediment removal, this work could be done under a "Nation-wide Permit" from the Corps of Engineers.

Planting and Irrigation

Planting is proposed to improve the appearance of the park, to provide wind shelter and erosion control. Planting would be added in bare areas around the existing restroom (as noted below) and in another nearby island in the parking lot. In addition, areas along the south border of the parking lot and park would be planted to provide a more attractive separation between the park and its neighbors. Where possible, planting would be used to provide wind breaks. Eroded areas on the south-facing slope along the south side of the park will be repaired, revegetated and covered with erosion control netting. And finally, as noted above, planting along the entry drive is proposed to create a stronger gateway into the park. New planting would be irrigated with an automatically-controlled system.

Weed Abatement Program

Weeds surrounding the park and marina basin are unattractive and could pose a fire hazard. They would be cut-back or removed by Parks' operations staff on an as-needed basis.

Sign Program

New signs in and around the site are proposed to establish a better understanding of the park. An entry sign and directional signs on roads leading to the park would make it easier to find the park and improve the park's image in the community. Maps and signs inside the park would make park rules clearer and assist visitors in finding trails or other facilities. Signs, fencing and planting would be used to better define the trailhead at the east end of the parking area. The existing kiosk or sign board next to the restroom would be completed with painting and the addition of plexiglass display covers and will advise park visitors about information related to the park.

Launch Ramp

The existing launch ramp would remain in operation as much as the limitations of mud and tides allow. The County would repair damage to the existing launch ramp floats, pilings or other facilities. One existing ramp float will be completely replaced because the side rail has split. Initial discussions between the County and the Corps of Engineers have indicated that the County must first pursue an alternative site for the launch ramp prior to any possibility of obtaining a permit to dredge the existing site. This is being done in the current master plan effort. For this reason, the County would not apply for permits to dredge the areas around the launch ramp and would not undertake removal of any sediment.

General Facility Improvements

A number of park improvements would be accomplished through the continuing program of park management and maintenance.

- An emergency telephone (911 calls only) would be installed on the exterior of the restroom.
- The conditions of the existing fire hydrants would be investigated and, depending on conditions, the County would plan either to make them operational or to remove them.
- The existing restroom would be improved in several ways. Interior floor and wall surfaces will be replaced. Existing electrical outlets will be removed to discourage transient use of the restroom. Exterior areas will be planted with drought-tolerant shrubs and trees.
- The existing parking area will be resurfaced with a slurry seal and new striping.
- In line with new park closure policies, a metal gate will be installed to close both lanes of the entry road.

Operations

The term "operations" refers to County policies and staff activities which are necessary to manage and maintain the park.

Alviso Marina County Park is one of the smaller parks in the County Park system. It is part of the Ed Levin Unit, which includes 1500-acre Ed Levin County Park near Milpitas and Penitencia Creek Park in east San Jose, a six-mile park chain. Alviso Marina County Park is remote from the others with a one-hour round-trip drive separating them.

Existing staffing for Alviso Marina County Park consists of: a Park Ranger based at Ed Levin County Park with about 200 hours annually devoted to the Alviso Marina; a permanent maintenance worker, also based at Ed Levin, who spend about 550 hours annually at Alviso Marina; a seasonal park worker, with 430 hours per year, assists the maintenance staff worker. This staff is supervised through a Regional Manager. Maintenance duties include general clean-up, building repairs, weeding, implementation of staff projects such as picnic improvements. Parks staffing is further discussed in the *Preferred Plan*.

The Interim Plan will require some effort from maintenance staff to complete the work outlined, including weed abatement, restroom improvements, launch ramp float repair. Improvements

such as the parking lot slurry seal, planting and irrigation, construction of the metal gate, could be handled through an outside contractor.

General park operations will continue including clean-up, trash removal and miscellaneous repair of the restroom, launch ramp and other park areas. The County will continue to work with Police Department of the City of San Jose to improve security and public safety at the park.

Permitting

An Administrative Amendment to the existing Permit from the San Francisco Bay Conservation & Development Commission (BCDC) would be necessary for completing several of the minor proposals outlined here. These include repair of the launch ramp float, planting and irrigation near the shore, and weed abatement. This amendment would be handled simply at the staff level at a fee of $100.

Priorities

General priorities for completion of the work items outlined above fall in the following order:

- Installation of metal gate at park entry.
- Repair or replacement of broken float at launch ramp.
- Planting around parking perimeter, at areas adjacent to the restroom and at park entry.
- Resurface and striping of parking lot.
- Improvements to the interior of the restroom.

Other improvements such as fabrication and installation of signs, entry improvements, weed abatement, review and/or reactivation of fire hydrants, and installation of the emergency telephone will be carried out as staff time or budget allow.