

CARQUINEZ STRAIT
REGIONAL SHORELINE
LAND EVALUATION/FEASIBILITY STUDY



**CARQUINEZ STRAIT REGIONAL SHORELINE
LAND EVALUATION/FEASIBILITY STUDY**

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TABLE OF CONTENTS

I.	Introduction	1
II.	Project Description and Location	1
III.	Land Evaluation/Existing Conditions	3
	A. Natural Resources Inventory	3
	B. Circulation and Facilities Inventory	8
	C. Public Safety	8
IV.	Initial Public Access	13
	A. Time Table for Initial Public Access	13
	B. Cost Estimates	13
V.	Feasibility Study	15
	A. Recreation and Open Space Designations	15
	B. Natural Resources Management	15
	C. Railroad Crossing	17

LIST OF FIGURES

Figure 1	Location Map	2
Figure 2	Vegetation	5
Figure 3	Circulation and Facilities Inventory	9
Figure 4	Fencing Requirements	12
Figure 5	Feasibility Study	16

TABLE

Cost Estimate Breakdown	18
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CARQUINEZ STRAIT REGIONAL SHORELINE LAND EVALUATION/ FEASIBILITY STUDY

I. Introduction

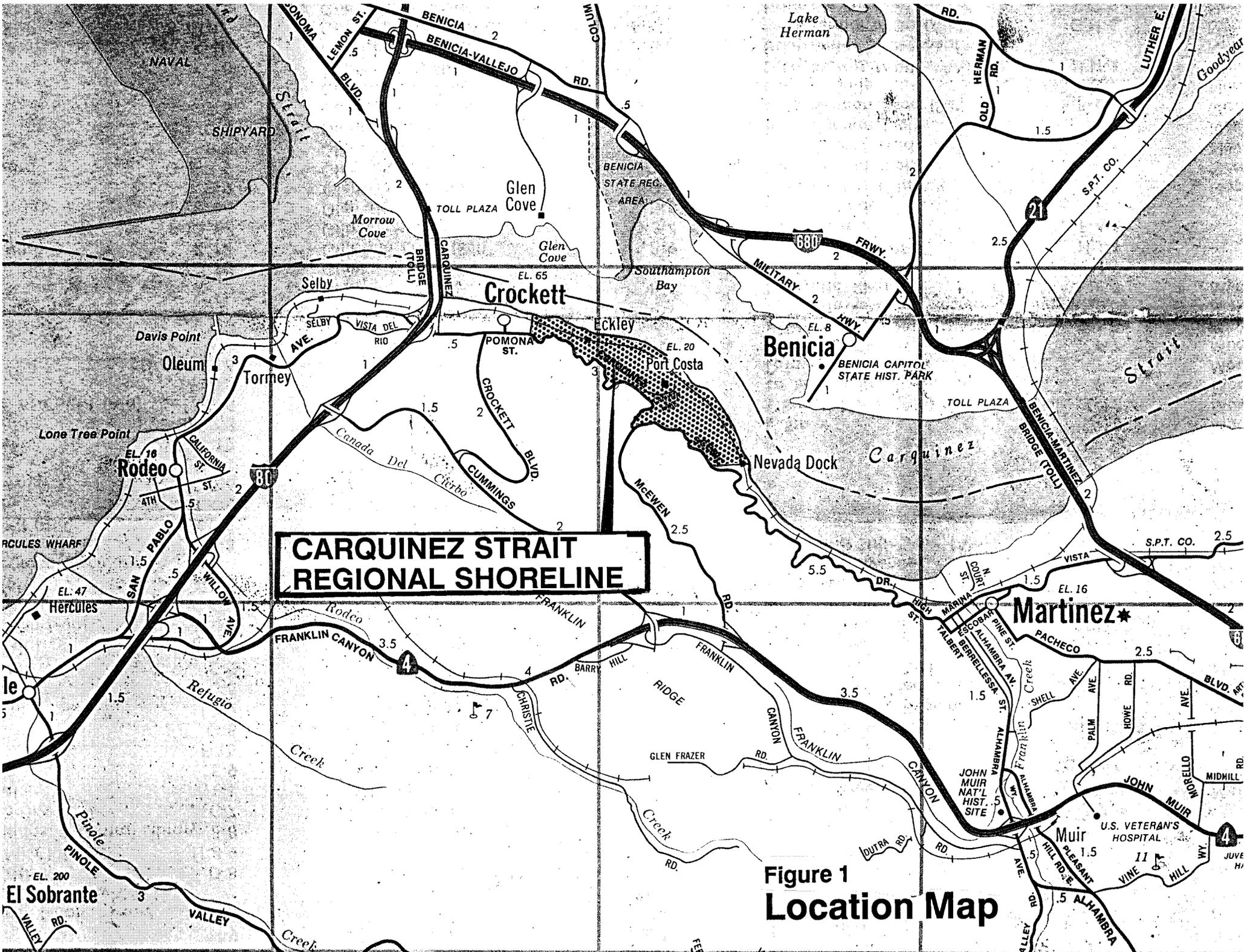
The Land Evaluation report will establish the minimum actions required to provide safe initial public access to the land acquisitions forming the Carquinez Strait Regional Shoreline. The objective of the Land Evaluation is to allow interim use of new acquisitions while minimizing the need for any capital development. The 1988 Master Plan provides for a Land Evaluation concerning the "resource protection, safety requirements, and interim public access" of an acquisition prior to the Land Use-Development planning process. This report includes site inventories of: natural resources, existing roads, trails, structures, sensitive habitats, and cultural resources. The report identifies hazardous conditions and discusses required actions to correct each hazard. Recommendations are also made for suitable off-site or peripheral staging areas (requiring a minimum of development), trails and restricted areas. The report also contains a time table and cost estimates for securing the site and providing operational support.

The Carquinez Strait Regional Shoreline currently includes the Maguire and Hivest/Bema properties. Negotiations for the Tosco property are continuing. In July, 1986 the East Bay Regional Park District Board approved the acquisition and implementation program required by the California State Coastal Conservancy for a loan for purchase of the Hivest/Bema property, acquired in 1985, and the Tosco property. To meet the terms of a second Conservancy loan, the District must prepare a park feasibility study for the Maguire property addressing public access, recreation and open space preservation, appropriate types and levels of use, railroad crossing alternatives, and a time table for implementation of public use. The Land Evaluation Report addresses most of these requirements with the exception of the recreation and use level recommendations and railroad crossing alternatives. These issues are addressed in Section V under "feasibility study." The Coastal Conservancy has requested that this Land Evaluation report for the Maguire property incorporate the implementation program prepared in 1986 for the Hivest/Bema and Tosco properties.

II. Project Description and Location

At present, the Carquinez Strait Regional Shoreline totals 190 acres of bluffs and shoreline along the Carquinez Strait. This regional shoreline is located in an unincorporated part of Contra Costa County between Crockett and Port Costa. (See Figure 1.)

These properties combine to provide a gateway to the river/delta region along the northern edge of Contra Costa County. The coastal hills rise steeply up to 400 feet above the Carquinez Strait with views of Solano County, Suisun Bay, and Mt. Diablo. The climate of the area is influenced by the strong marine air flow through the Golden Gate, keeping the shoreline hills cooler than adjacent inland areas during the hot summer



**CARQUINEZ STRAIT
REGIONAL SHORELINE**

**Figure 1
Location Map**

months. The topography of the project area consists of open rolling grasslands, wooded ravines, eucalyptus shaded meadows, and river shoreline access. The remnants of a former brickworks, grain wharf and resort, dating back to the turn of the century, recall the historic character of the site. The sights and sounds of tugboats and trains along this broad waterway are also part of the charm and excitement of the Carquinez Strait Regional Shoreline.

This Land Evaluation project encompasses three properties referred to in the attached figure as the Maguire, Tosco, and Hivest/Bema parcels. The acquisition, initial development and subsequent long-term planning development of the Maguire, Hivest/Bema and Tosco properties is significant because it provides the public with continuous open space from Port Costa to Crockett and water access to the Sacramento River shoreline in Contra Costa County. However, until a safe crossing can be provided, the railroad tracks isolate the park properties from shoreline use. Every effort will be made to secure public waterfront access.

The Tosco property is located next to land owned by the Port Costa Conservation Society (PCCS). The District intends to secure an agreement with the PCCS to provide public access to Tosco. The Hivest/Bema parcel is located adjacent to the town of Port Costa. The East Bay Regional Park District met with a representative of the Port Costa Conservation Society to review this Land Evaluation with the understanding that future public hearings will be held in Port Costa when the Resource Analysis and Land Use-Development Plan/Environmental Impact Report are undertaken for the parkland. The District will endeavor to work closely with the town and Conservation Society to serve community needs.

The goal of the Carquinez Strait Regional Shoreline is to maximize public enjoyment of a unique waterfront opportunity. The purpose of the Regional Shoreline classification is the preservation of significant natural, scenic, recreational, and educational values of shorelines for their public use. The buildings on the site are not primary to the waterfront access objective. However, staff will evaluate all structures to determine their historical importance. If significant discoveries are uncovered, then the overall park objective will be reevaluated.

These three properties will be administered as one parkland unit, the Carquinez Strait Regional Shoreline. They will be developed in accordance with East Bay Regional Park District policies for this classification as defined in the East Bay Regional Park District 1988 Master Plan.

III. Land Evaluation/Existing Conditions

A. Natural Resources Inventory

The property consists of moderately sloping terrain, terminating at the shoreline on the north. Steep slopes occur where the railroad was cut through the hillside, and as an artifact of past quarrying

activities. The vegetation on the Hivest/Bema and Tosco properties consists primarily of grassland with stands of eucalyptus. The eucalyptus on Hivest/Bema have been fire damaged and will need to be removed for safety purposes. The diverse vegetation on Maguire represents grassland, coastal scrub and riparian associations. The wildlife on these sites is diverse and abundant.

An inventory of the significant biological, geological, aquatic and archaeological resources of the property was conducted by District staff. The results of this inventory are described below. Discussion of potential public safety concerns and recommended corrective actions is included.

This report incorporates the Acquisition and Implementation Study previously approved for the Hivest/Bema and Tosco properties (Resolution No. 1986-7-155, adopted by the Board July 22, 1986). Because of the complexity and diversity of the Maguire parcel, an in-depth inventory of the natural resources and public safety issues was prepared, which follows:

Vegetation

The vegetation is similar to that occurring in much of the surrounding area. Associations present are grassland, coastal scrub and riparian. Isolated occurrences of eucalyptus and native bunchgrass are also present.

The vegetation appears healthy and diverse except for the scattered occurrence of noxious weeds. Noxious weeds include, in descending order of relative abundance, yellow star thistle, sweet fennel, artichoke thistle, purple star thistle and mustards. A native perennial bunchgrass, beardless wildrye occurs in two small but dense populations. (See Figure 2.) Purple needlegrass grows in scattered patches within the grassland areas. Beardless wildrye has a rhizomatous root system and is valuable as a soil binder. It is also palatable to livestock and stands up well to grazing pressure. Purple needlegrass is the most common of the native perennial bunchgrasses found on East Bay Regional Park District lands. No state or federally listed threatened or endangered plants were noted, nor are they expected to occur here.

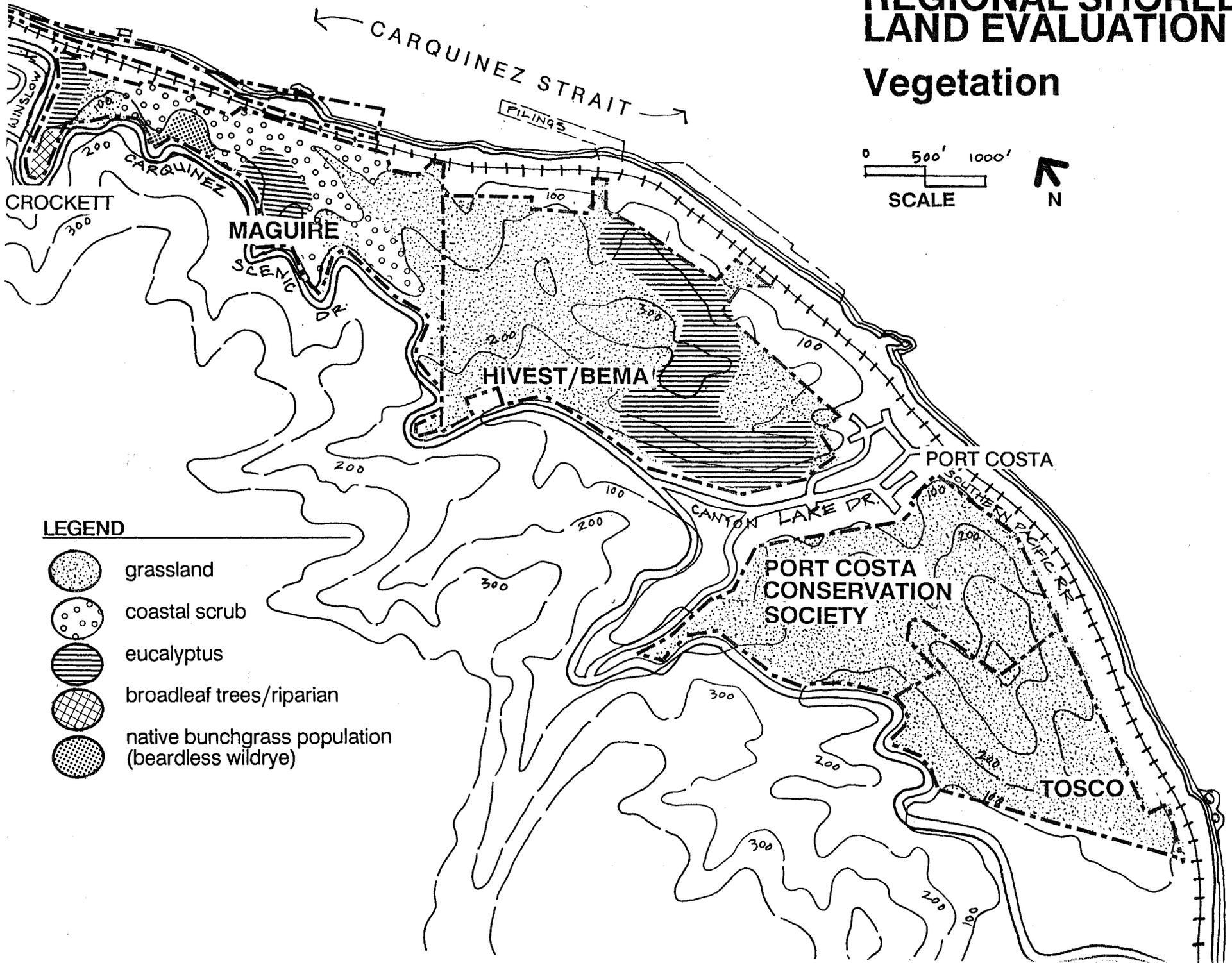
In general, the slopes below Carquinez Scenic Highway are heavily vegetated with baccharis and poison oak, some buckeye and elderberry, a single major grove of blue gum eucalyptus (*E. globulus*), and a handful of other species. Some of the eucalyptus have been killed, presumably by fire, and there appears to be considerable reproduction within the stand; these conditions need to be addressed in the long run.

The grassland along the east boundary can easily be combined with the adjacent Bema property for livestock grazing. In so doing, the dilapidated fence separating the two properties could be reconstructed

Figure 2

CARQUINEZ STRAIT REGIONAL SHORELINE LAND EVALUATION

Vegetation



LEGEND

-  grassland
-  coastal scrub
-  eucalyptus
-  broadleaf trees/riparian
-  native bunchgrass population (beardless wildrye)

to incorporate this grassland area into the existing lease on the Bema property to form a more logical grazing unit.

Wildlife

Wildlife on the site consists primarily of upland species. Mammals present include: long-tailed weasel, domestic dog, domestic cat, pocket gopher, deer mouse, house mouse, bush rabbit and black-tailed deer. Amphibians are limited to the westerly ravine where there is a small seasonal pond. They include the Pacific treefrog, slender salamander, and possibly the California newt. Reptiles of the site include western fence lizard, northern alligator lizard, western garter snake, sharp-tail snake and gopher snake. Bird life is abundant and includes turkey vulture, red-tailed hawk, sparrow hawk, mourning dove, great horned owl, Anna's hummingbird, scrub jay, bushtit, house sparrow, Brewer's blackbird, house finch, valley quail, lesser goldfinch, brown towhee, dark-eyed junco, white-crowned sparrow and song sparrow. No survey of invertebrates was attempted.

No species which is protected as threatened or endangered under state or federal law has been noted nor are any expected to be present. No wildlife species of concern, which could receive such status, was present.

Aquatic

The site's shoreline provides fishing opportunities along a relatively accessible portion of the Carquinez Strait. Striped bass and sturgeon, highly popular sport species, are present here.

A number of drainage gullies exist on the property draining to the Carquinez Strait. Drainage beneath the railroad tracks is provided by at least one culvert installed and maintained by Southern Pacific. The culvert appears blocked on both sides. Staff presumes this is a Southern Pacific maintenance problem, but it could result in flooding above the railroad grade in wet years. It is recommended that inquiry be made of Southern Pacific in an attempt to establish a more preferable route.

A small pond exists within the drainage at the bottom of the Winslow Street access road. This pond (about 20 feet by 20 feet and one foot deep) was reportedly created by a property caretaker who lived in a trailer parked at the eucalyptus grove nearby. This pond will likely "wash out" at some point due to storm runoff. A more permanent pond may be desirable to provide fresh water for wildlife use.

Geotechnical/Soils

The geology of the property primarily consists of micaceous shale and minor thin sandstone beds. The nearest active faults in the vicinity are the Concord (about five miles to the east), and the Hayward (about ten miles to the west). Maximum intensity of ground shaking from an earthquake is considered to be weak for this site.

Typically, the landslides are shallow in nature and are classified as either debris flows or debris slides. Sediment loads to the intermittent channel within the eastern portion of the property could occasionally be high as a result of landslide processes. Road runoff may also aggravate erosion. Thus maintenance of culverts below the road and within the property is an important management implication, particularly since the entrance road crosses the channel and since there are structures on alluvial fill at the base of the draw.

The residential structures and shed in the north central portion of the property are at the base of a large quarry cut. Since the quarry was abandoned, landsliding and rockfalls have undercut and/or eroded portions of the cut face, posing a potential hazard to the structures below. Additionally, the larger white house to the east is at the base of an ephemeral draw that has a colluvial landslide scar in its headwaters.

On the northeast side of the property a landslide is presently undermining an abandoned tank; this should be mitigated. Several minor slides exist along the steep cuts adjacent to the railroad tracks in the eastern and western sectors. These slides may supply occasional debris to the base of the slope, necessitating periodic maintenance to ensure no conflict with railroad use.

Soils are the Los Osos clay loam which is indicative of slopes ranging from 30 to 50 percent. Runoff is medium to rapid, and erosion hazard is moderate to high where soils are bare. Low strength, high shrink-swell potential, slow permeability and susceptibility to piping are characteristics of this soil.

Archaeology

The property contains the former townsite of Eckley named after Commodore John L. Eckley who settled here in 1868. Several remnants of historic use are present on the property. Two houses and a wharf along the shoreline are probably associated with grain and export of the late 1800's. The wharf at the western end of the property was constructed in 1876 and was the first such wharf in the Port Costa area. A house with a swimming pool and outbuildings is associated with resort use in the early to middle 1900's. The house may have been constructed much earlier than its associated structures. A brick building adjacent to the railroad tracks was probably associated with the brick manufacturing that occurred here in the early 1900's. A brick and concrete structure on the eastern edge of the property may have supplied the oil used for fueling the brickworks. A metal warehouse type structure exists near the eastern edge of the property. A partially submerged ferry, the Garden City, built for Southern Pacific in 1879 and used as a dance hall and fishing spot until it burned in the early 1980's, is also present. A residence of undetermined origin and associated outbuildings exist near the shoreline. Additionally, scattered artifacts occur on the property; further research may be able to tie these into a particular period of

A record search was conducted at the Northwest Information Center of the California Archaeological Inventory. No recorded archaeological sites exist on the property; however, no archaeological survey has been conducted. Further investigation in the form of an archaeological survey, additional archival research, and analysis by an architectural historian, will occur before the parkland is open to the public. The architectural historian will make recommendations regarding the appropriate course of action for treatment of the historic structures present. Until such time, once the properties have been vacated by the present tenants, fencing around the structures will be placed as protection against potential vandalism.

B. Circulation and Facilities Inventory

Access to the parkland will be available to hikers and to automobiles at parking areas established at key locations. Legal access to the Carquinez Strait Regional Shoreline is from Carquinez Scenic Highway, approximately one mile east of Winslow Street in Crockett. (See Figure 3.)

A turnout (on the north roadside shoulder) at the intersection of Carquinez Scenic Highway and the entrance road into the Maguire and Hivest/Bema properties will serve as an automobile staging area for the western end of the parkland. The turnout can accommodate approximately a dozen vehicles. At the eastern end of the properties Tosco will also have a parking area adjacent to the road to accommodate early public use.

Pedestrian access will be provided on existing roads and pathways. A suitable hiking trail exists on an access road across the ridgetops of the Hivest/Bema property. A road on the Maguire property descends through a ravine and valley providing access to the shoreline. An informal footpath from the valley area follows an old fence line up to the Maguire bluffs. Two access roads/hiking trails traverse the ridgetop and eastern portion of the Tosco property.

Five houses are located on the Maguire property and are occupied by tenants. All of the tenants will be relocated. The largest house can be retained for a District security residence. These residences and other structures on the site will be evaluated by an architectural historian for their historical significance.

C. Public Safety

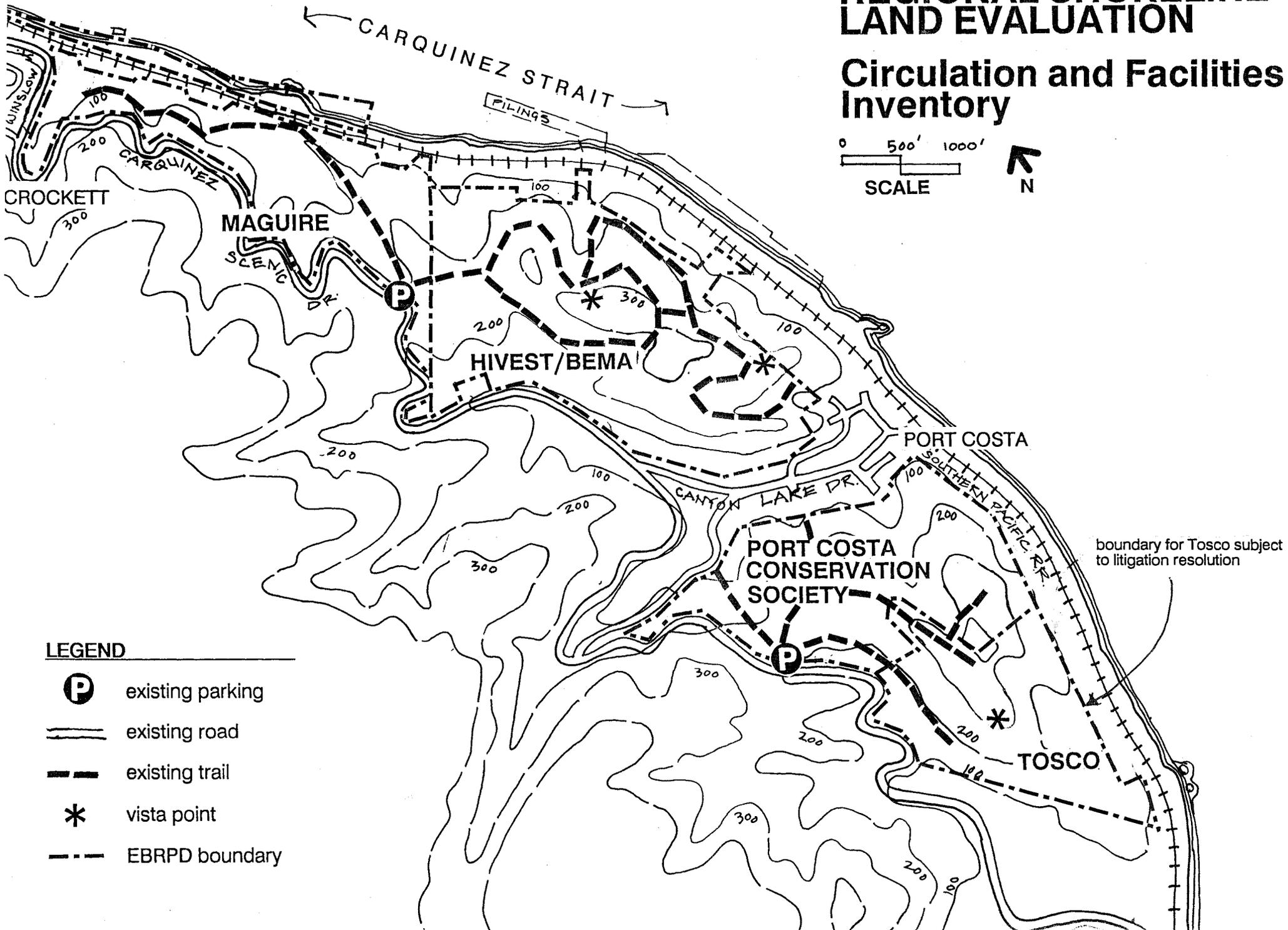
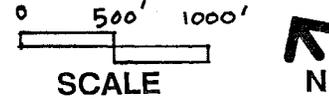
Several hazards exist on the property and are described below. Recommended corrective actions are included in the discussion of each hazard. The costs of corrective measures are included in the cost estimates for securing the Maguire property for public access.

Buildings in various states of repair, pilings and planks (remnants of former wharves), and a partially submerged and charred ferry present attractive hazards to park users of the shoreline. It is

Figure 3

CARQUINEZ STRAIT REGIONAL SHORELINE LAND EVALUATION

Circulation and Facilities Inventory



LEGEND

-  existing parking
-  existing road
-  existing trail
-  vista point
-  EBRPD boundary

recommended that until the historic significance of these remains is assessed and recommendations for treatment made, and posting and fencing recommendations for treatment made, the posting and fencing of the shoreline, identifying potential hazards, be undertaken. Exposed conduit near the western edge of the property also poses a hazard and should be included within the fenced area. (See Figure 4.)

Several potential hazards exist on the grassy ridge at the eastern edge of the property. Percolation test holes measuring approximately one foot in diameter and three feet deep need to be located and filled.

There is a circular brick structure with a plastered exterior, approximately 40 feet in diameter and 12 feet high, which could pose a hazard to those adventurous enough to climb over the top. This structure may be the oil tank that provided fuel to the brick foundry of the early 1900's and needs to be protected until a determination of its historic status has been made. Fencing of the site is, therefore, recommended.

A downed barbed wire fence along the property line presents a hazard to hikers and needs to be removed.

Crossing of the railroad tracks poses a hazard to the public and needs to be discouraged until safe crossing is constructed. Fencing along the southern edge of the railroad tracks is recommended and should include the adjacent small brick structure. (See Figure 4.)

The valley at the west end of the property poses several potential hazards which need to be addressed prior to allowing public access. These include: overhanging eucalyptus limbs which need to be trimmed for user safety if picnicking or other use is to occur in the grove; cleanup of debris (e.g., old furniture); and reconstruction of a retaining wall near the junction of the site's access road with Winslow Street may be necessary if this route is to be used for service vehicles due to evident soil and pavement cracking suggestive of ongoing earth movement.

The occupied flat in the north central portion of the property could present an attractive nuisance once these structures are vacated. In an effort to protect the historic structures until a significance determination has been made, and in an effort to protect the public from potential hazards, this area will be fenced until a course of treatment has been determined.

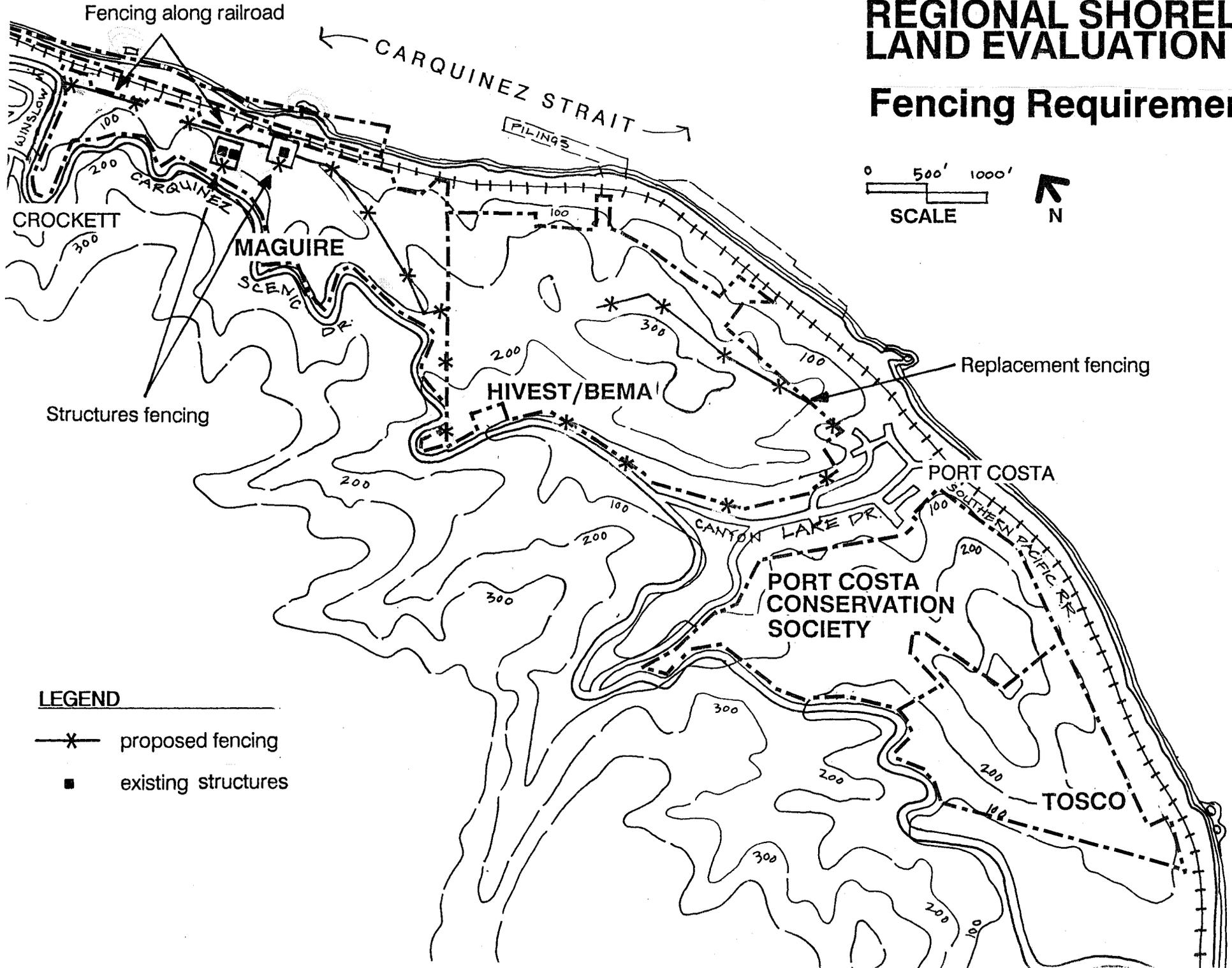
The upper occupied flat contains an abandoned swimming pool which could pose a safety hazard unless it is removed or existing fencing is retained or improved.

Lead is present in the surface layers of the soil in amounts which have been measured up to 400 parts per million. This occurs generally over the entirety of the Maguire, Bema and Tosco properties as a result of airborne lead particulates originating from the former lead smelter at Selby. The primary hazard of lead to animals occurs if it is ingested. Since it is not excreted it can build up, causing symptoms of heavy metal poisoning. This occurs primarily among grazing animals as lead is taken up preferentially by oat grass. The result is reduced weight gain in livestock. There is no clear and present danger to humans.

Figure 4

CARQUINEZ STRAIT REGIONAL SHORELINE LAND EVALUATION

Fencing Requirements



LEGEND

- *— proposed fencing
- existing structures

IV. Initial Public Access

A. Time Table for Initial Public Access

Three factors affect the opening of Carquinez Strait Regional Shoreline to the public: the relocation of the tenants occupying the Maguire property residences, the mitigation of hazardous conditions, and additional investigation of the residences and other structures for historical significance.

When the Board adopts the required Carquinez Strait Regional Shoreline Park Relocation Plan, historical analysis of the residential structures and clean-up operations of the property can begin after the relocation of these tenants. An estimated three weeks will be required to complete an architectural and cultural resources assessment of the site. Subsequent to the recommendations of an architectural historian, demolition and salvage operations, debris removal, and fencing will require up to one month to complete. However, an estimated two months is recommended to take into account delays that might occur during the rainy season months of November and December. Therefore, if supplemental funding can be made available in this budget cycle the initial opening of the Carquinez Strait Regional Shoreline can be scheduled for January 1, 1989. Otherwise funds to open this shoreline for initial use will be handled through the normal budget process.

B. Cost Estimates

The following estimated costs of clean-up and minimal development to secure these shoreline properties for public access have been based on preliminary field investigation.

Hivest/Bema

Hivest/Bema will require funds for equipment for the removal of fire-damaged stands of eucalyptus for safety purposes. Additionally, fencing on the perimeter of the property needs to be replaced in several locations for a program of cattle grazing necessary to keep fuel levels low.

\$100,000

Tosco

Tosco is subject to condemnation action and cannot be discussed until after a final settlement is reached. Initial site clean-up will be part of the acquisition agreement and included in the acquisition costs.

Maguire

An architectural historian will be retained to complete the cultural resources evaluation of the site. This service is included in the Maguire cost estimates. Fencing will be needed for the

shoreline boundary along the railroad tracks until a safe crossing can be provided. Fencing will also be necessary around structures to prevent vandalism until they have been evaluated by the architectural historian. Demolition costs may be incurred to eliminate several hazardous conditions. The Maguire cost estimate includes the demolition of some of the residences and ferry wreckage if these actions are recommended.

\$108,000

Operational Support

Ongoing operational support will be needed to prepare the properties for initial public access and to maintain them after the opening date. Additional park ranger staff should be added to the Martinez Shoreline field staff. This parkland unit will provide the maintenance services for the Carquinez shoreline properties: fencing, signing, trail work, fire clearance, litter pick-up and patrolling. This cost estimate includes the annual salary and benefits for 18 months of park ranger staff, a vehicle, base budget start up, entrance and boundary signs, a storage container, two chemical toilets, and security residences renovations.

\$115,538

Total cost for initial, safe public use of the Carquinez Strait Regional Shoreline is:

\$323,538

V. Feasibility Study

The Conservancy grant for the acquisition of the Maguire and other Carquinez shoreline properties stipulates the preparation of a park feasibility study. Although a Land Evaluation normally focuses principally on securing the acquisitions for initial public access, this one will include the feasibility study as an additional feature to meet the terms of the grant.

In addition to the issues already addressed in the Land Evaluation (e.g., access, parking, time table) the Coastal Conservancy grant requires designation of recreation and open space preservation, appropriate types and levels of public use, and railroad crossing alternatives. (See Figure 5.)

A. Recreation and Open Space Designations

The feasibility study has been carried out in accordance with the planning and management guidelines for a regional shoreline. These properties may contain both Recreation and Natural Units. Recreation Units could include picnic areas, and meadows for unstructured outdoor field games. The Natural Units would preserve the significant natural and scenic resources and could be utilized for hiking, horseback riding, and fishing. Pedestrian and automobile access staging would be developed.

These three properties provide an outstanding opportunity to enjoy the scenic qualities of the Carquinez Strait, the splendid vistas of the Sacramento/San Joaquin Rivers and potential shoreline access and activities such as fishing.

The Recreation Units (shown on Figure 1) would contain the major developed facilities, such as family and reservable group picnic areas, and will have relatively higher levels of use when compared with the surrounding open lands. If water and electricity can be supplied, irrigated meadows could be provided. The wider, flat valleys of the Maguire property appear suited for these types of day-use recreational facilities. A small camp site may be considered. Restrooms would be located at staging areas and picnic sites. One acre of dry land on the waterfront side of the railroad could provide opportunities for fishing, boat landings, and interpretive study of the historic maritime activity. Wharf rehabilitation at the Maguire property would be considered in the Land Use-Development Plan process.

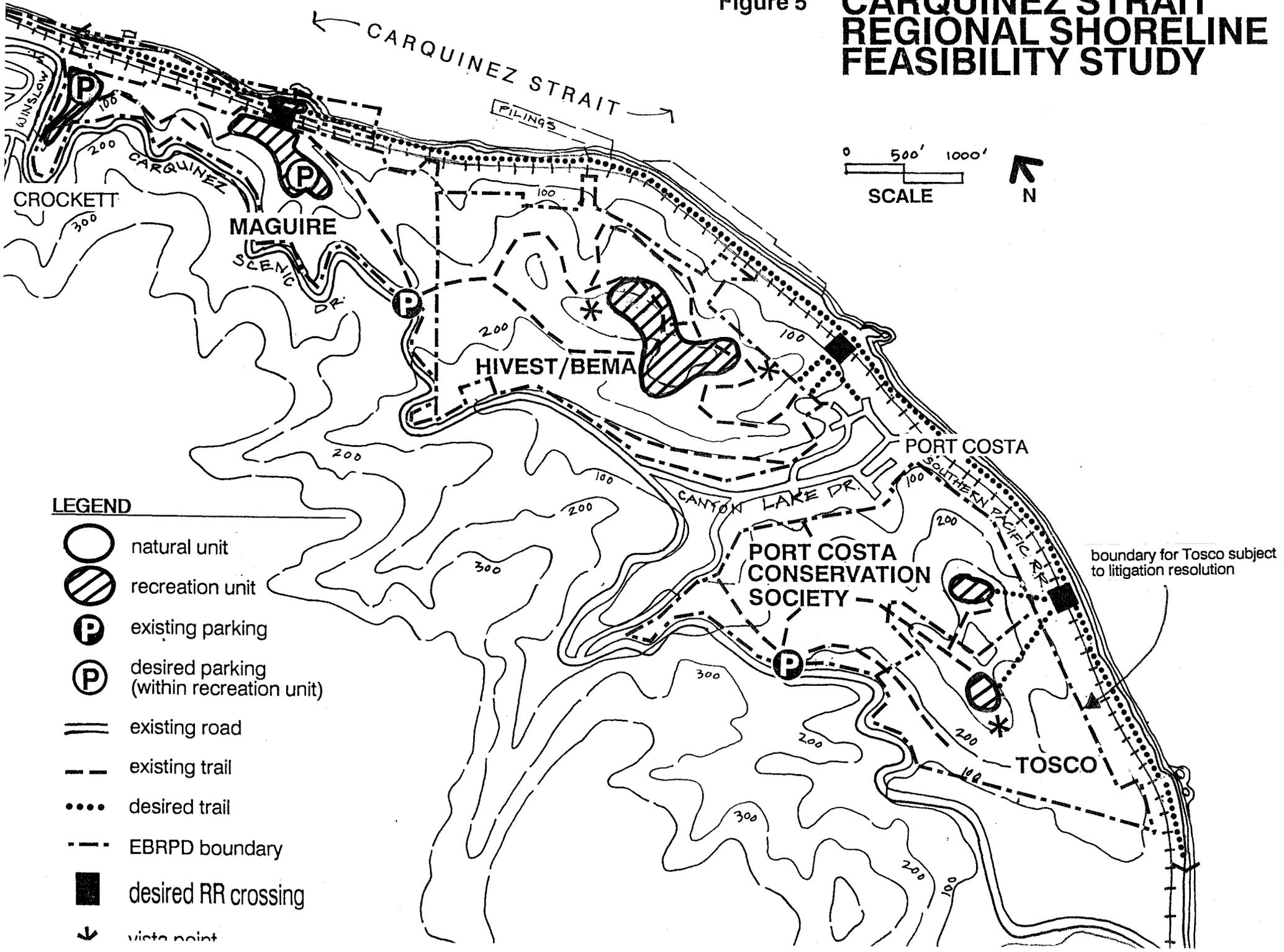
The Natural Units will remain undeveloped. Hiking/equestrian trails will be the major recreational facility with relatively low levels of use.

B. Natural Resources Management

A recent fire on the Hivest/Bema property damaged stands of eucalyptus in the potential Natural Unit. An initial program of removal of the dead or severely damaged trees will be undertaken for

Figure 5

CARQUINEZ STRAIT REGIONAL SHORELINE FEASIBILITY STUDY



LEGEND

-  natural unit
-  recreation unit
-  existing parking
-  desired parking (within recreation unit)
-  existing road
-  existing trail
-  desired trail
-  EBRPD boundary
-  desired RR crossing
-  vista point

aesthetic and safety purposes. For long term management, a program of cattle grazing and possible periodic controlled burning may be undertaken in the Natural Units to keep fuel levels low. These programs would be undertaken to encourage the increase of native species. Barbed wire fencing with pedestrian stiles or overcrossings could be provided where trails and fencing intersect.

C. Railroad Crossing

Railroad crossings are essential to the future planning of the Carquinez Strait Regional Shoreline. When an access agreement with Southern Pacific has been reached, design solutions for tunnels, bridges and ongrade railroad crossings will be considered to provide safe public access to the waterfront.

The full planning process, including a Resource Analysis, Land Use-Development Plan/Environmental Impact Report and public hearings, will be scheduled before permanent development is undertaken. Development of the recreational facilities may be done in phases over the next 10 to 20 years, depending on the availability of funds.

CARQUINEZ STRAIT REGIONAL SHORELINE

Cost Estimate Breakdown

Hivest/Bema

Eucalyptus Removal
(contractor's estimate for equipment and labor) \$30,000

Replacement Fencing
(\$11.00 per linear foot) \$70,000

- realign fencing along Port Costa boundary line
- replace dilapidated fence adjacent to eucalyptus grove
- realign fencing to include grassland on Maguire to create a more logical grazing unit

100,000

Maguire

- Consulting services of an architectural historian \$ 3,500

- demolition and removal of hazardous structures: concession stand, trailer, garage, swimming pool, pig pen, railroad shacks, brick building, 2 shoreline houses) \$34,000

- ferry wreckage removal \$30,000
(dependent upon access and salvageable material)

- concrete water tank \$15,000

- fencing along railroad tracks \$22,000

- fencing for structures \$ 3,500

(prior to historic evaluation)

108,000

Operational Support

- 18 months Park Ranger to be added to Martinez staff \$50,538

- Truck 4x4, radio, tool box, lumber racks \$14,000

- Base budget start up \$10,000

- Signs, entrance, boundary, trails \$ 5,000

- Cargo container storage \$ 3,000

- 2 chemical toilets \$ 3,000

- Materials to repair and improve a house for park residence \$30,000

\$115,538

TOTAL

\$323,538