CITY OF MORRO BAY

LAND USE PLAN

OF THE

LOCAL COASTAL PROGRAM

CERTIFIED AS LEGALLY ADEQUATE
BY THE CALIFORNIA COASTAL
COMMISSION ON 10/24/84

Prepared and Edited with Revisions by

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LUP ERRATA
(July, 1983)

Page 9 — 5th paragraph: revise item 8 as follows:
"(8) Housing -- deleted, as provided by S.B.626."

Page 25 — Revise fourth paragraph as follows:
"Agriculture: This land use designation is intended to identify and preserve agricultural land for the cultivation of plant crops and the raising of animals. Lands eligible for this designation shall include lands with prime soils, prime agricultural land, land in existing agricultural use, land with agricultural potential and lands under Williamson Act contracts."

Page 26 — Mixed Use Area "A"
Lines 1 and 7: change "redevelopment" to "development".

Mixed Use Area "B"
Line 10: delete "The existing number of residential units located in Mixed Use Area B shall be permitted to remain".

Page 28 — Restricted area
Line 5: following "...near the Stocking site" insert "and the wetlands portion of the bay."

Page 49 — Policy 1.12, section "c"
Line 4: change "may" to "shall".

Policy 1.13
Line 2: delete "the development of".

Page 51 — Policy 1.13 section "e"
Line 8: change "an 8-foot wide, off-street, two-directional bicycle path" to "8 feet wide off street two direction bicycle paths..."

Page 52 — Policy 1.17
Line 5: after "...Policy 5.02" add "Preference shall be given to dry dock storage and to overflow camping facilities."

Page 53 — Policy 1.19
Renumbered as Policy 7.06 and located on page 162-163

NOTE: Policy 1.20 in 7/82 version of theLUP is renumbered Policy 7.06(A) and located on page 163. Policy 1.20(A) in the 7/82 version of the LUP is renumbered Policy 1.20 and is located on page 53.

Page 55 Policy 1.23 is renumbered Policy 7.07 and located on pages 163-164

Policy 1.26
Line 2: following "developments," insert "rehabilitation or addition projects".

Policy 1.27 and 1.28 are renumbered as Policies 7.08 and 7.09 respectively and locatd on pages 164-165.

Page 56 Policy 1.31
Line 16: at end of line insert "Wildlife and Department of Fish and".

Page 57 Policies 1.34 - 1.36 and 1.38 - 1.42 are renumbered as Policies 7.10, 7.11, 7.12, 7.13, 7.14, 7.15, 7.16, and 7.17 respectively (with 1.37 deleted).

Page 94 Policy 3.01
Line 3: delete "for actual construction and/or implementation";
Line 8: delete "within the Coastal Zone";
Line 14: delete "except that additional wastewater treatment service may be provided based on plant capacity.";
Line 30: delete: "Methods of obtaining additional water resources shall protect the biological productivity of coastal water."
Add to policy: "Methods of obtaining additional water resurces shall ensure protection of the biological productivity of coastal waters. Accordingly, extractions of water from groundwater basins shall not exceed Basin Safe Yield except under a conjunctive use program. Determinations of Basin Safe Yield shall ensure that groundwater extractions, stream diversions, etc. do not exceed a magnitude when the biological productivity of coastal waters is adversely affected."

Page 95 Policy 3.02
Line 5: change to "Commercial Fishing/Agriculture".

Page 96 Policy 3.06
Line 3: delete "ultimate".

Page 143 Policy 6.01
Line 3: change "management" to "arrangement".

Page 144 Policy 6.02 "e"
Line 15: delete "(In any event, the City singularly shall take such actions deemed necessary to implement these activities.)"

Page 146 Policy 6.06

Add "(5) Reduction in City tax assessments based on use and lack of need for urban services and removal of in-lieu fees (i.e. Parks and Recreation) where partial site development occurs and agricultural land is maintained."

Policy 6.07

Line 1: change "Urban/Rural Boundary" to "Urban Reserve and Urban Service Lines".

Page 159 Policy 7.01

Line 7: delete "Commercial fishing facilities may be allowed on an interim basis south of Beach Street until adequate comparable facilities are provided north of Beach Street."

Policy 7.02

Line 2: following "Morro" insert "Bay".

Page 161 Policy 7.04

Line 5: following "docks" insert "for the purpose of loading and unloading boats on moorings";

Line 13: delete "The number of slip facilities created shall assure a priority of space allotted for commercial fishing use, and shall be located in areas of the bay deemed appropriate for further expansion of commercial fishing facilities (as per Policy 7.01 and the LUP land use map). In order to minimize conflicts between commercial fishing activities and recreational boating, the development of floating docks for recreational boating shall be located in areas of the bay deemed appropriate for further expansion (as per Policy 7.01 and the LUP land use map)."

Page 162 Policy 7.06

Delete "No further development shall be allowed in the Coleman-Den Dulk land and wetland area shown on Figure 9 and designated "Morro Rock Precise Deelopment Plan Area" until a precise development plan and EIR are prepared. The plan may be prepared independently and/or in conjunction with the possible development of an overall Harbor Development Plan."; replace with "A precise development plan and EIR for the land and wetland area located in the Coleman-Den Dulk area shown on Figure 9 and designation "Morro Rock Precise Development Plan Area" shall be prepared by the City for review by the Coastal Commission, Department of Fish and Game, and U. S. Fish and Wildlife prior to allowing further development of

the area."

Page 163 Policy 7.06 A
Line 7: delete "the access policies of Chapter III of the Coastal Act and consistent with".

Page 164 Policy 7.07
Section (b), line 3: delete "and interior commercial boats until adequate facilities for commercial fishing are available in appropriate locations in the harbor;"
Section (e), line 1: delete "and circulation".

Page 165 Policy 7.09
Line 5: delete "and coastal-related"

Policy 7.10
Line 5: change "302033" to "30233";
following line 6, add "Development shall not cause further degradation of the Morro Bay estaurine and wetland habitat."

Page 181 Policy 9.04
Line 2: delete "not".

Policy 9.05
Line 3: following "shall be" insert "modified or".

Page 182 Policy 9.07
Line 2: change "practicable" to "practical".
Line 7: change "should" to "shall".

Page 183 Policy 9.14
Line 1: change "bluff tops must" to "bluffs shall".
Line 4: following "existing" insert "bluff".

Page 194 Policy 10.11
Line 3: following "with" insert "Section 30233".

Page 209 Policy 11.01
Line 20: change "comment" to "approval"

Policy 11.03
Delete per revisions of July, 1982.

Page 211 Policy 11.11
Delete per revisions of July, 1982

Policy 11.14
Line 1: change "the" to "all".

Page 212 Policy 11.16

Line 7: delete "except where undesirable for flood control purposes."

Page 213 Policy 11.18
Line 6: change "minimum" to "maximum".

Policy 11.20
Line 25: change "reestablished" to "established".

Page 229 Policy 12.02 C
Line 2: delete "for all divisions and/or nonagricultural development on non-prime agricultural land,".

Policy 12.03
Line 4: change "block views of travelers on the Highway", to "degrade views to and along the coast from Highway One."

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I. INTRODUCTION

A. THE CALIFORNIA COASTAL ACT OF 1976

The California coastline has been determined by the people of California to be a resource of special statewide importance, to be protected and enhanced through the regulation of land uses and initiation of special programs. In November, 1972, California voters approved the Coastal Zone Conservation Act (CZCA, or Proposition 20). This initiative called for the preparation of a comprehensive plan to preserve, protect, restore and enhance California's remaining coastal resources for present and future generations.

Passage of the initiative was the first step on the road to halting wasteful, piecemeal coastal development. The principal provisions were to:

(1) Create a state and six regional commissions,
(2) Require a comprehensive study of the coastal zone and its resources,
(3) Require the preparation of a plan for the orderly, long-range management of the coastal zone,
(4) Regulate development by a permit system during preparation of the plan.

The plan was to include recommendations with respect to:

- Public access, recreation, marine resources,
- Ecology, land use, and maximum desirable population densities,
- Transportation, public services and facilities,
- Methodology for implementation of the plan.

Moreover, the initiative mandated that, "No development permit shall be issued unless the regional commission, or the State commission on appeal, has found that the development will not have any substantial adverse environmental or ecological effect and will be consistent with the objectives of the initiative which specify orderly, balanced preservation and utilization of coastal zone resources..."

From early 1973 to the fall of 1975, the eighty-four regional and State commissioners conducted hundreds of meetings and hearings in a major effort to involve the general public in the development of the California Coastal Plan. The completed Plan was presented to the California Legislature on December 1, 1975. The document's letter of transmittal informed the legislature and the people of California that the Plan had been designed to

consider two overriding objectives:

(1) Protect the California coast as a great natural resource for the benefit of present and future generations,
(2) Use the coast to meet human needs in a manner that protects the irreplaceable resources of coastal lands and waters.

The California Coastal Act of 1976 evolved from the California Coastal Plan and the immense amount of work that occurred as a result of the Coastal Zone Conservation Act.

The Coastal Act sets policies and provides guidelines for preparation of Local Coastal Programs by cities and counties consisting of a land use plan and implementing ordinances.

In enacting the Coastal Act, the state legislature established the following goals for future activity in the coastal zone:

"(a) Protect, maintain, and where feasible, enhance and restore the overall quality of the coastal zone environment and its natural and manmade resources;
(b) Assure orderly, balanced utilization and conservation of coastal zone resources taking into account the social and economic needs of the people of the state;
(c) Maximize public access to and along the coast and maximize public recreational opportunities in the coastal zone consistent with sound resources, conservation principles and constitutionally protected rights of private owners;
(d) Assure priority for coastal-dependent development over other development on the coast;
(e) Encourage state and local initiatives and cooperation in preparing procedures to implement coordinated planning and development for mutually beneficial uses, including educational uses, in the coastal zone." (Section 30001.5 of the Coastal Act)

The heart of the Coastal Act is found in Chapter 3, "Coastal Resources Planning and Management Policies." These policies constitute the standards that local plans must meet in order to be certified by the State as well as the yardstick for evaluating proposed developments within the coastal zone. Topics covered by the Coastal Policies include: beach access, recreation, marine environment, environmentally sensitive habitat areas, agriculture, visual resources, and coastal-dependent and and industrial development. In essence, these policies are the rules for future growth and development in the coastal zone.

The Coastal Act also established a framework for resolving conflicts among competing uses for limited coastal lands. The policies which spell out priority uses constitute this framework. The Coastal Act places as its highest priority the preservation and protection of natural resources including environmentally

sensitive habitat areas and prime agricultural lands. In the case of habitat areas, only uses dependent on these resources are allowed within such areas. On lands not suited for agricultural use, coastal-dependent development (a use which requires a site adjacent to or on the sea to function) has the highest priority. Public recreational uses have priority on coastal sites which are not habitat areas and are not needed for coastal-dependent uses. For sites that are not reserved for habitat preservation, agriculture, coastal-dependent uses, or public recreation, private development is permitted. However, visitor-serving commercial recreation has priority over private residential development. These priorities must be reflected in the land use plan prepared by local governments. Specifically, the sections of the Act relating to priority land uses are given in Chapter II, Part C of this document.

The Coastal Act directed local governments, with a portion or all of their lands within the coastal zone to develop a Local Coastal Plan (LCP) and authorized the California Coastal Commission to retain permit authority over development in the coastal zone until local LCP's were adopted and certified.

A local coastal program is a local government's land use plan, zoning ordinances, zoning district maps, and implementing actions which, when taken together, meet the requirements of and implement the provisions of the Coastal Act at the local level. The precise content of each program is to be determined by the local jurisdiction in consultation with the California Coastal Commission and with full public participation.

Local coastal programs will determine future development on the coast. Where public access and urbanization will occur, where industrial facilities will be placed, and how wildlife, open spaces, and recreational areas will be protected are among the determinations local coastal programs must make. Uses that are of more than local importance are to be considered in preparing LCP's.

Presently, the Coastal Commission regulates coastal development. Once state certification of local coastal programs is accomplished, development control within the local coastal zone will revert to the local government. Certified coastal programs become legally binding on local jurisdictions and provide permanent systems of guidelines and strategies for protecting and managing the coastal environment.

Once the LCP is certified, an action taken by the City of Morro Bay on a coastal development permit application may be appealed to the California Coastal Commission. In addition, any amendments to the City's Land Use Plan must be approved by the California Coastal Commission. If the City does not wish to amend the plan, a request for amendment may be appealed to the Commission. Appeals may also be made to the Commission on any permit action taken by the City concerning any development which

is a major energy project, is not the designated principal permitted use under the Zoning Ordinance, or is located in an appealable area. Appealable areas include (Section 30603 of the Coastal Act):

"(1) Developments approved by the local government between the sea and the first public road paralleling the sea or within 300 feet of the inland extent of any beach or of the mean high tide line of the sea where there is no beach, whichever is the greater distance.

(2) Developments approved by the local government not included within paragraph (1) of this subdivision located on tidelands, submerged lands, public trust lands, within 100 feet of any wetland, estuary, stream or within 300 feet of the top of the seaward face of any coastal bluff.

(3) Development approved by the local government not included within paragraph (1) or (2) of this subdivision located in a sensitive coastal resource area if the allegation on appeal is that the development is not in conformity with the implementing actions of the certified local coastal program.

(4) Any development approved by a coastal county that is not designated as the principal permitted use under the zoning ordinance or zoning district map approved pursuant to Chapter 6 (commencing with Sec. 30500).

(5) Any development which constitutes a major public works project or a major energy facility."

The grounds for an appeal is limited in the Act to the following (Sec. 30603 [b], and the standard of review for any development reviewed is conformity with the implementing actions of the City's certified Local Coastal Program (Sec. 30603 [c]):

"(1) The development fails to provide adequate physical access or public or private commercial use or interferes with such uses.

(2) The development fails to protect public views from any public road or from a recreational area to, and along, the coast.

(3) The development is not compatible with the established physical scale of the area.

(4) The development may significantly alter existing natural landforms.

(5) The development does not comply with shoreline erosion and geologic setback requirements."

The State Coastal Zone Conservation Commission is also required to review periodically, the progress of local governments in carrying out the Coastal Act. This review is to occur at least once every five years.

Pursuant to Section 30519 of The Coastal Act, the California Coastal Commission retains permit authority after LCP certification on tidelands, submerged lands and public trust lands, whether filled or unfilled. Section 30519 (b) however specifies exceptions to this including those lands or waters granted to a local government by the Legislature providing that certain conditions exist. Section 30519 follows:

> "Except for appeals to the commission, as provided in Section 30603, after a local coastal program, or any portion thereof, has been certified and all implementing actions within the area affected have become effective, the development review authority provided for in Chapter 7 (commencing with Section 30600) shall no longer be exercised by the regional commission or by the commission where there is no regional commission over any new development proposed within the area to which such certified local coastal program, or any portion thereof, applies and shall at that time be delegated to the local coastal program or any portion thereof.
>
> (b) Subdivision (a) shall not apply to any development proposed or undertaken on any tidelands, submerged lands, or on public trust lands, whether filled or unfilled, lying within the coastal zone, nor shall it apply to any development proposed or undertaken within ports covered by Chapter 8 (commencing wtih Section 30700) or within any state university or college within the coastal zone; however, this section shall apply to any development proposed or undertaken by a port or harbor district or authority on lands or waters granted by the Legislature to a local government whose certified local coastal program includes the specific development plans for such district or authority."

Within Morro Bay Harbor, the Legislature has granted certain tideland areas to the City of Morro Bay. Under Section 30519 (b) of the Act, the City will obtain coastal development authority when the following conditions are met:

(1) The City has a certified LCP.
(2) The certified LCP contains specific port or harbor district or authority development plans for those granted lands.
(3) The harbor has a designated harbor authority or district which can supervise or propose development specified under the LCP.

The term tidelands has a specific meaning in public land law.

Tidelands mean lands which, in the last natural state of the shoreline lay between the ordinary high water mark (mean high tide line) and the ordinary low water mark (mean low tide line). Submerged lands are lands which, in the last natural shoreline state, lay below the ordinary low water mark. The term "tideland" can be used to describe both tide and submerged lands (City of Long Beach v. Mansell, 1970).

Figure 1 shows the official tidelands boundaries of 1956 and the recent change of 1981. These lands were transferred to the City of Morro Bay by the State legislature in 1964. The City as the grantee, has primary responsibility for administering these lands. The responsibility of the State Lands Commission is to ensure that such administration is carried out consistent with the granting statutes and the public trust.

B. THE LOCAL COASTAL PROGRAM - LAND USE PLAN

Section 30108.5 defines the Land Use Plan of the Local Coastal Program as follows:

"'Land Use Plan' means the relevant portions of a local government's general plan, or local coastal element, which are sufficiently detailed to indicate the kinds, location, and intensity of land uses, the applicable resource protection and development policies, and, where necessary, a listing of implementing actions."

A local government may submit its entire local coastal program (LCP) at one time or in components. The two basic components are the land use plan and the ordinances and other measures which implement the plan. The land use plan sets the policies, standards, and objectives to be applied in guiding coastal zone land use decisions. The City of Morro Bay has chosen to submit its program in components. The implementing measures will be submitted separately from the land use plan. A summary of the Local Coastal Plan Process is given in Table 1.

1. Methodology

This Land Use Plan reflects the issues and concerns of the City of Morro Bay. This plan incorporates, to the maximum extent possible, the City's plans and policies which are consistent with the Coastal Act. Where inconsistencies have been identified, modification and revisions have been made to ensure consistency. The final Local Coastal Plan, incorporating the land use plan and the implementing ordinances, will thus constitute a separate element of the City's General Plan. Where there are conflicts between policies set forth in the adopted LCP and those in any other element of the General Plan, the LCP will take precedence.

Originally, the City was required to review Coastal Act issues as they related to the City and prepared a list of relevant issues. This list is called a Work Program and this program laid out those issues that needed to be discussed in its land use plan.

TIDELANDS BOUNDARIES

Figure 1

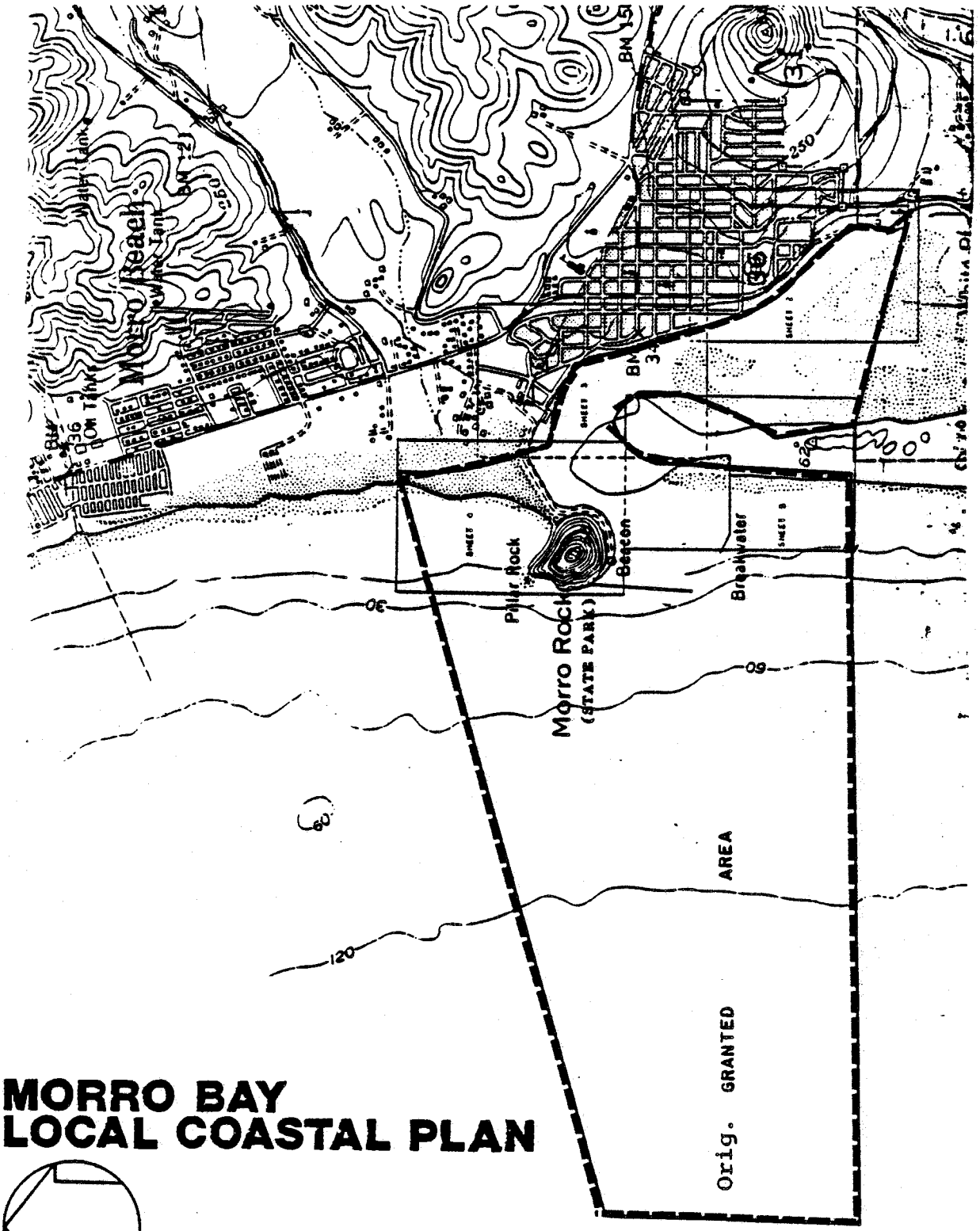

TABLE 1
LOCAL COASTAL PLAN PROCESS

PHASE I	•Issue Identification •Phase II Work Program •Local, Regional and State Hearings •Approval
PHASE II	•Resource Analysis •Distribution of Working Papers •Local Public Workshops and Meetings •Preparation of the Draft Land Use Plan •Local Public Workshops and Meetings •Preparation of Hearing Draft Land Use Plan •Local Public Hearings •Local Adoption of Land Use Plan •State Coastal Commission staff review and recommendations •State Coastal Commission Hearings •Certification of City's Land Use Plan •Phase III Work Program •Local and State Hearings
PHASE III	•Preparation of draft Implementation Plan •Local Public Workshops and Meetings •Revisions •Local Public Hearings •Local Adoption of Implementation Plan •State Coastal Commission staff review and recommendations •State Coastal Commission Hearings •Certification of Implementation Plan •Certified Local Coastal Program

The method of the Land Use Plan preparation is based on the Issues and Identification and work program. This work program and Chapter 3 of the Coastal Act are contained in Appendix B.

Precise term definitions used in the Land Use Plan are contained in Appendix A. Many of these definitions are based on those found in the Coastal Act of 1976 or are those used by the City in its planning processes.

2. Land Use Plan Contents

The LCP Land Use Plan consists of two major portions: the Land Use Plan map and text and the policies necessary to ensure protection of coastal resources and the regulation of development.

These policies are the basis for the Land Use Plan. They establish the criteria for evaluating future development within the community and set forth the measures the City should take to achieve the protection of coastal resources as required by the Coastal Act.

The major topics as established by the Coastal Act and applicable to the City of Morro Bay as identified in the Issues and Identification Work Program (Appendix B) are listed as follows:

(1) Shoreline Access and Recreation
(2) Visitor-serving Facilities
(3) Archaeology
(4) Public Works
(5) Energy (Industrial Development)
(6) Agriculture
(7) Commercial Fishing
(8) Housing
(9) Hazards
(10) Environmentally Sensitive Habitat
(11) Diking, Dredging and Filling
(12) Visual Resources and Neighborhood Character

These topics are discussed in the order they are presented above but are not necessarily listed in order of their importance. All of the topics are an important part of coastal land use planning, and all of the topics have been considered in the development of the Land Use Plan map.

3. Implementing Ordinances

The implementing ordinances will be prepared once the Land Use Plan has been approved by the California Coastal Commission. The implementing ordinances include necessary zoning ordinance revisions, revisions to the zoning map, categorical exclusions, permit procedures, necessary amendments to the City ordinances and regulations and preparation of new ordinances and programs necessary to implement this Land Use Plan. The implementing ordinances will require review and approval prior to

certification of the entire city Local Coastal Plan by the California Coastal Commission.

C. PLANNING AREA CHARACTERISTICS

As shown on Figure 2, almost all of the Morro Bay city limits are within the Coastal Zone. For ease in issues and policy discussion, the City has been divided into ten planning areas. These planning area designations are used throughout the Land Use Plan. Figure 3 shows the locations of the planning areas. The existing characteristics of each planning area are described in the following discussions. Included also is a summary of potential development and the major coastal issues relevant to the planning area. Table 2 summarizes coastal issues by planning area.

1. Area 1 - North Morro Bay

This area is bisected by State Highway One and comprises the northernmost portion of the community. Island and Azure Streets are the southern boundaries, and the City limits are the northern, eastern, and western boundaries.

a. Existing Land Use

The area includes the Atascadero State Beach, the Chevron Marine Terminal, the Navy Fuel Storage Facility, single family and multifamily residential development and some strip commercial uses along Main Street. The majority of the area is developed in residential uses.

b. Potential Development

The majority of the existing residential areas are developed; vacant lands adjacent to Del Mar Park would allow considerable residential development. There is commercial infill potential in the strip commercial areas. Future changes in type of energy-industrial use is possible in the existing industrial use areas.

c. Major Coastal Issues

The major issues facing this area include potential hazards, visual concerns, energy considerations, locating new development, provision of coastal access, housing rehabilitation and neighborhood character considerations. Refer to the area discussions in the appropriate issues chapters.

2. Area 2 - Atascadero Beach

This area consists of two large parcels bordered on the east by State Highway One, on the south by the Morro Bay High School, on the west by the Pacific Ocean and on the north by a westerly projection of the Sienna Street alignment.

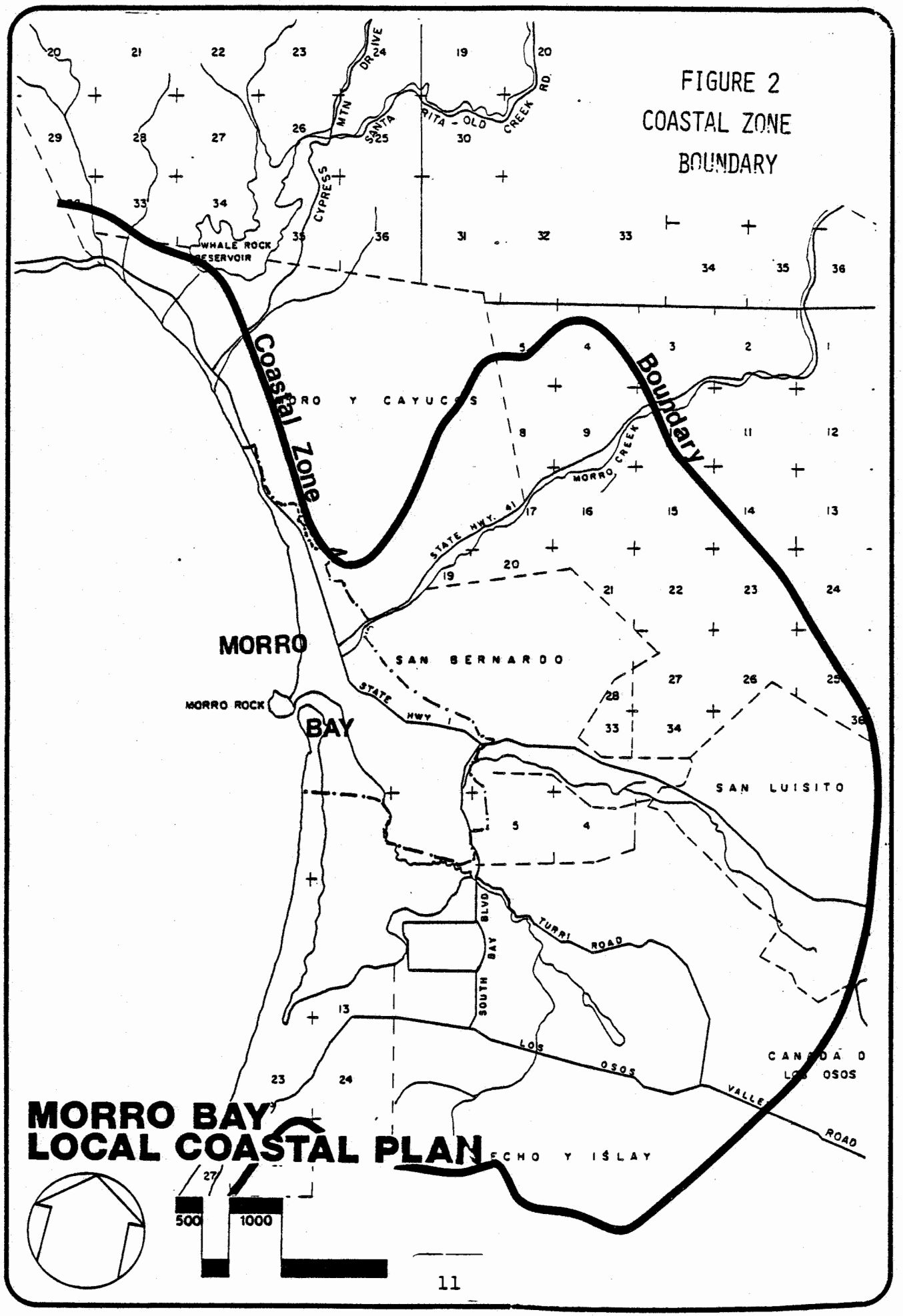
FIGURE 2
COASTAL ZONE
BOUNDARY
Coastal Zone
Boundary
MORRO
BAY
MORRO ROCK
SAN BERNARDO
SAN LUISITO
WHALE ROCK RESERVOIR
MORRO CREEK
STATE HWY 41
STATE HWY 1
TURRI ROAD
SOUTH BAY BLVD
LOS OSOS
VALLEY ROAD
CYPRESS MTN DRIVE
SANTA RITA - OLD CREEK RD
MORRO Y CAYUCOS
CANADA DE LOS OSOS
ECHO Y ISLAY
MORRO BAY
LOCAL COASTAL PLAN
500
1000

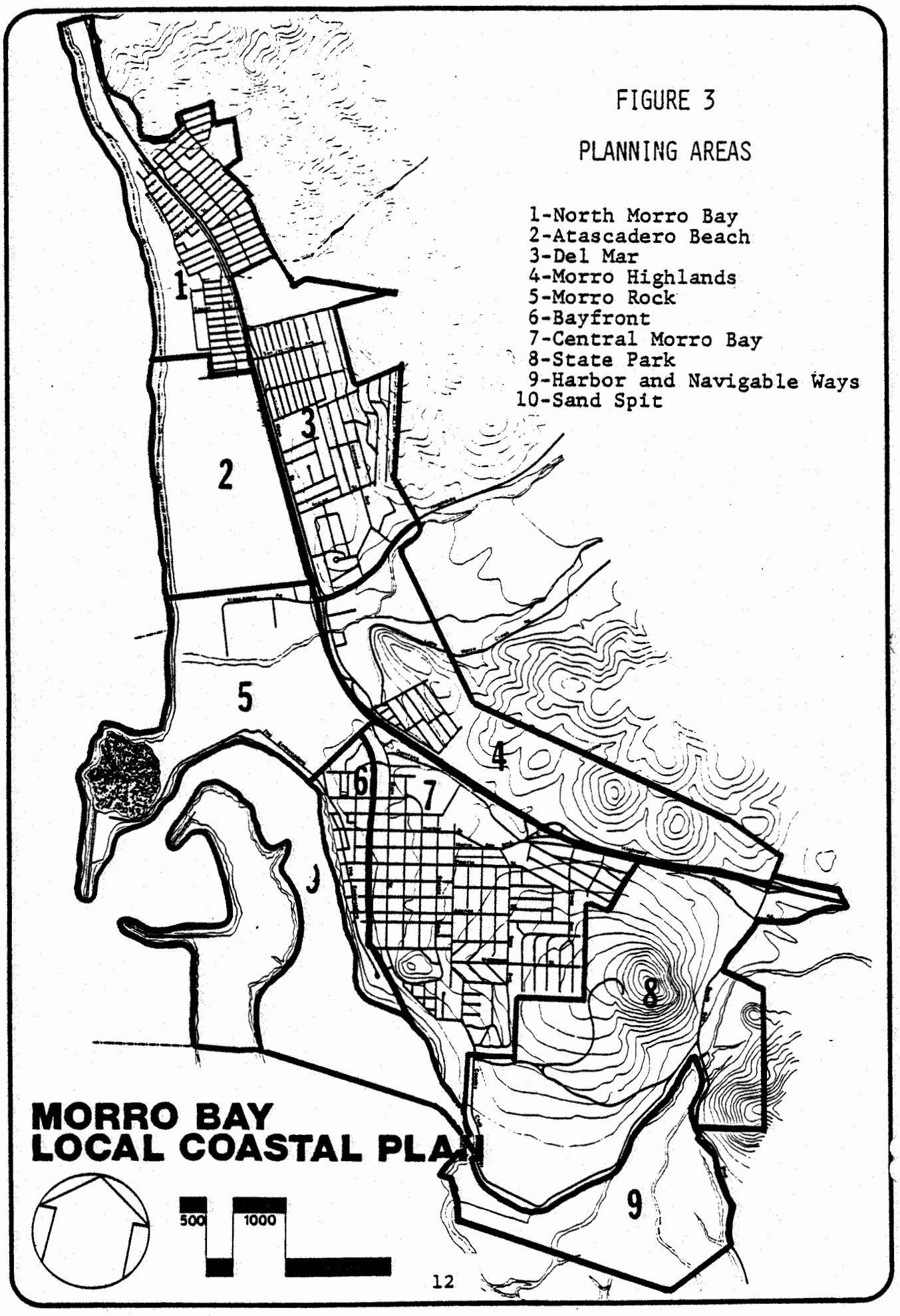
FIGURE 3
PLANNING AREAS
1-North Morro Bay
2-Atascadero Beach
3-Del Mar
4-Morro Highlands
5-Morro Rock
6-Bayfront
7-Central Morro Bay
8-State Park
9-Harbor and Navigable Ways
10-Sand Spit
1
2
3
4
5
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7
8
9
10
MORRO BAY
LOCAL COASTAL PLAN
500
1000

TABLE 2

MATRIX OF COASTAL ISSUES
BY PLANNING AREA*

MAJOR COASTAL ISSUES	AREA 1 North Morro Bay	AREA 2 Atascadero Beach	AREA 3 Del Mar	AREA 4 Morro Highlands	AREA 5 Morro Rock	AREA 6 Bayfront	AREA 7 Central Morro Bay	AREA 8 Morro Bay State Park	AREA 9 Harbor Navigable Ways	AREA 10 Morro Bay Sand Spit
Access & Recreation	X	X			X	X		X	X	X
Visitor Serving Facilities			X			X				
Archaeology	X	X	X	X	X	X	X	X	X	X
Energy	X		X		X	X			X	
Commercial Fishing					X	X		X	X	
Agriculture				X						
Environmentally Sensitive Habitat		X							X	
Hazards	X	X	X	X						
Diking, Dredging & Filling	X	X			X	X		X	X	X
Visual and/or Neighborhood Character	X	X	X	X		X	X			
Public Works & New Development	X	X	X	X	X	X	X	X		

*Refer to Appendix B for description of coastal issues as they relate to Morro Bay. Refer also to the coastal issues discussions by area in the appropriate issues chapters.

The area is vacant. A portion of the vacant property is covered with sand dunes.

b. Potential Development

Development proposals have included planned residential development and motel development. No development plans have been approved by the City. The State of California has set aside funds to acquire the area known as the Cloisters for Parks and Recreation purposes.

c. Major Coastal Issues

The major coastal issues within this area include: access and recreational use, hazards, (flooding and drainage), visual impacts, locating and planning new development and protection of sensitive dune habitats. Refer to the area discussions in the appropriate issues chapters.

3. Area 3 - Del Mar

This area is located east of State Highway One, north of State Highway 41, south of Island Street and west of the City limits.

a. Existing Land Use

Existing land uses include commercial strip development along Main Street which serve both community and visitor needs, motels and multifamily and single family residential uses, and Del Mar Park. There are conflicts existing between the General Plan and zoning ordinances which require resolution.

b. Potential Development

The commercial and residential areas have considerable vacant infill parcels.

c. Major Coastal Issues

The major issues facing this area include visual and hazard concerns, housing rehabilitation, locating and planning new development, and community character considerations. Refer to the area discussions in the appropriate issues chapters.

4. Area 4 - Morro Highlands

The Morro Highlands planning area is bounded on the north by State Highway 41, on the west by State Highway One, and on the east and south by the City limits.

a. Existing Land Use

family development. Approximately two thirds of this area is vacant and is used for marginal cattle grazing.

b. Potential Development

Approximately 200 acres are vacant and available for development. Much of Morro Bay's future growth may occur within this area. It is desireable to designate a nominal amount (approximately 30 acres) of District Commercial use in this area near the freeway interchange. Prior to approval of any use of this land use designation the City shall require a detailed market analysis to demonstrate the need for such use.

c. Major Coastal Issues

Major coastal issues to be addressed in this area include agricultural land uses, locating and planning new development, visual and hazard (hillside protection) concerns. Refer to the area discussion in the appropriate issues chapters.

5. Area 5 - Morro Rock

This area is located west of State Highway One and south of the Atascadero Beach Planning Area, and includes the PG & E Morro Bay Power Plant property line as the southernmost boundary.

a. Existing Land Use

The land uses include the Morro Rock and beach areas in recreation and wildlife preservation uses, the power plant, two City park areas, the high school, the City wastewater treatment plant, some visitor-serving commercial uses and a recreational vehicle park.

b. Potential Development

Potential development in this area is varied and could include increased commercial fishing uses, increased energy development-related uses, increases or changes in recreational uses, and some potential for increase in commercial visitor-serving uses. Extension of State Highway 41 - Embarcadero Road is possible.

c. Major Coastal Issues

Major coastal issues within this area include expansion of the commercial fishing industry, power plant expansion and energy-related development and shoreline access. Refer to the appropriate issues chapters.

6. Area 6 - Bayfront

This area is bounded generally on the north by the PG & E Morro Bay power plant property, on the east by Morro Avenue and the Tidelands Park eastern boundary, on the south by Morro Bay State Park and on the west by the bay.

a. Existing Land Use

The majority of this area is used for harbor-related, commercial fishing, and tourist commercial uses. There is some residential development in this area.

b. Potential Development

Most of this area is developed. Potential development includes increase in efficiency of the commercial areas along the Embarcadero, including additional visitor-serving commercial uses, increase in public access opportunities, and increase in commercial fishing uses. The Tidelands Park is planned for improvement.

c. Major Coastal Issues

The major coastal issues within the Bayfront Planning Area include commercial fishing, visual resources, recreation (boating) and access. Refer to the area discussions in the appropriate issues chapters.

7. Area 7 - Central Morro Bay

This area is bounded on the north by Scott Avenue and the PG & E property, on the east by State Highway One, on the south by the Morro Bay State Park, and on the west by Morro Avenue.

a. Existing Land Use

This area includes residential and commercial uses. Some visitor-serving uses are located in this area, particularly along Morro Bay Boulevard and Main Street north of Morro Bay Boulevard, and in the area adjacent to the Embarcadero.

b. Potential Development

Most of the residential areas are fully developed. There is potential for expansion of commercial services.

c. Coastal Issues

The major coastal issues are limited to housing rehabilitation, visual and community character concerns. Refer to area discussions in the appropriate issues chapters.

8. Area 8 - Morro Bay State Park

This planning area incorporates the Back Bay of Morro Bay and Morro Bay State Park. The boundaries are the existing line of residential development to the north, State Highway One to the northeast, and the bay to the west and south.

a. Existing Land Use

Morro Bay State Park and Black Mountain comprise the majority of this area. Along Quintana Road and South Bay Boulevard north of Country Club Drive are a trailer park, some single family residences and visitor-serving commercial uses.

b. Potential Development

There is a possibility for limited commercial fishing, recreational boating or visitor-serving uses adjacent to the tidelands area.

c. Major Coastal Issues

The major coastal issues in this planning area are protection of commercial fishing and coastal access and recreation.

9. Area 9 - Harbor and Navigable Ways

This planning area incorporates the area within the city limits covered by bay water, wetlands areas and tidelands.

a. Existing Use

The harbor is being utilized for a variety of harbor dependent uses which include dockage, moorage, governmental, commercial and recreational navigation, swimming, commercial and recreational fishing, mariculture and other similar uses. The harbor serves as de facto safe moorage during inclement weather.

b. Potential Development

It is anticipated that existing uses will be expanded. It is possible that the harbor could be utilized for some coastal-dependent energy uses in the future.

c. Major Coastal Issues

The major coastal issues in this planning area are commercial fishing, energy, access and recreation, diking, dredging and filling, environmentally sensitive habitat protection and locating and planning new development.

10. Area 10 - Morro Bay Sand Spit

The Morro Bay sand spit planning area is that area of the sand spit extending north from Montana de Oro State Park to its northerly terminus.

a. Existing Land Use

The existing land use is open space and recreation. No structures exist on the sand spit.

b. Potential Land Use

Based on governmental and private ownership decisions, there is the potential for development, but environmental and policy constraints may limit the potential for development.

c. Major Coastal Issues

The major coastal issues are the protection of environmentally sensitive habitat, visual and scenic value, access and recreation, and locating and planning new development.

Figure 4

LAND USE MAP

II. LAND USE PLAN MAP AND GENERAL LAND USE POLICIES

A. LAND USE PLAN MAP

Section 30108.5 defines a land use plan as follows:

"Land Use Plan" means the relevant portion of a local government's general plan, or local coastal element which is sufficiently detailed to indicate the kinds, location, and intensity of land uses, the applicable resource protection and development policies and, where necessary, a listing of implementing actions."

The land use designations depicted on the Land Use Plan map (Figure 4) reflect those policies contained in the chapters which follow and the discussion of land use in this chapter.

The Land Use Plan is intended to amend the City's General Plan. The Land Use Plan does not offer specific methods to implement policies; that task will be accomplished in Phase III of the City's Local Coastal Program. When this Land Use Plan is approved the other Elements of the General Plan must then be made consistent with the LUP.

B. COASTAL ACT POLICIES RELATING TO DEVELOPMENT

There are many sections of the Coastal Act that address, either directly or indirectly, the issue of development. In the Act, development is broadly defined to include the placement of, or construction of, any solid material or structure; land division; removal of major vegetation other than for agricultural purposes, kelp harvesting, or timber operations. Refer to Appendix A for other definitions. Coastal Act policies which are addressed in other sections of the Plan also apply.

Sec. 30106. "Development means, on land, in or under water, the placement or erection of any solid material or structure; discharge or disposal of any dredged material or of any gaseous liquid, solid or thermal waste; grading, removing, dredging, mining, or extraction of any materials; change in the density or intensity of use of land, including but not imited to, subdivision pursuant to the Subdivision Map Act (commencing with Section 66410 of the Government Code), and any other division of land, including lot splits, except where the land division is brought about in connection with the purchase of such land by a public agency for public recreational use; change in the intensity of use of water, or of access thereto; construction, reconstruction, demolition, or alteration of the size of any

structure, including any facility of any private, public, or municipal utility; and the removal or harvesting of a major vegetation other than for agricultural purposes, kelp harvesting, and timber operations which are in accordance with a timber harvesting plan submitted pursuant to the provisions of the Z'berg-Nejedly Forest Practice Act of 1973 (commencing with Section 4511)."

"As used in this section, "structure" includes, but is not limited to, any building, road, pipe, flume, conduit, siphon, aqueduct, telephone line, and electrical power transmission and distribution line."

Sec. 30220. "Coastal areas suited for water-oriented recreational activities that cannot readily be provided at inland water areas shall be protected for such uses."

Sec. 30221. "Oceanfront land suitable for recreational use shall be protected for recreational use and development unless present and forseeable future demand for public or commercial recreational activities that could be accommodated on the property is already adequately provided for in the area."

Sec. 30222. "The use of private lands suitable for visitor-serving commercial/recreational facilities designed to enhance public opportunities for coastal recreation shall have priority over private residential, general industrial, or general commercial development, but not over agriculture or coastal-dependent industry."

Sec. 30223. "Upland areas necessary to support coastal recreational uses shall be reserved for such uses, where feasible."

Sec. 30250. "(a) New residential, commercial, or industrial development, except as otherwise provided in this division, shall be located within, contiguous with, or in close proximity to, existing developed areas able to accommodate it or, where such areas are not able to accommodate it, in other areas with adequate public services and where it will not have significant adverse effects, either individually or cumulatively, on coastal resources. In addition, land divisions, other than leases for agricultural uses, outside existing developed areas shall be permitted only where 50 percent of the usable parcels in the area have been developed and the created parcels would be no smaller than the average size of surrounding parcels.

"(b) Where feasible, new hazardous industrial development shall be located away from existing developed areas.

"(c) Visitor-serving facilities that cannot feasibly be located in existing developed areas shall be located in existing isolated developments or at selected points of attraction for visitors."

Sec. 30252. "The location and amount of new development should maintain and enhance public access to the coast by: (1) facilitating the provision or extension of transit service; (2) providing commercial facilities within or adjoining residential development or in other areas that will minimize the use of coastal access roads; (3) providing non-automobile circulation within the development; (4) providing adequate parking facilities or providing substitute means of serving the development with public transportation; (5) assuring the potential for public transit for high-intensity uses such as high-rise office buildings, and by (6) assuring that the recreational needs of new residents will not overload nearby coastal recreation areas by correlating the amount of development with local park acquisition and development plans and with the provision of on-site recreational facilities to serve the new development."

C. LAND USE DESIGNATIONS

1. Residential Land Uses

Four residential land use categories are established to provide for a wide range of densities. The purpose is to ensure that residential land is developed to a density suitable to its location and physical characteristics.

One type of residential development that the City would encourage is cluster development. Some of the advantages include increased open space, better visual qualities, additional preservation of sensitive sites, decreased cost of municipal services and an opportunity to provide more affordable housing.

Density ranges are as follows:

Low Density	-	0	-	7 dwelling units per acre
Low-Medium Density	-	4	-	7 dwelling units per acre
Medium Density	-	7	-	15 dwelling units per acre
High Density	-	15	-	27 dwelling units per acre

2. Commercial Land Uses

Six commercial land use categories have been established to meet the varieties of commercial needs within the City.

Neighborhood Commercial: This land use designation is intended to provide for those commercial uses which cater to the daily needs of residents within a one-to-two mile radius. Typical land uses are grocery and convenience food stores, laundries, hardware and drug stores.

District Commercial: This land use designation is intended to provide for commercial uses which cater to the needs of more than one neighborhood. It would provide for suitable land area, primarily in the Central Morro Bay Planning Area, for commercial

businesses offering major household and personal goods and services.

Service Commercial: Many commercial uses must be located carefully with respect to residential neighborhoods. Those commercial businesses that create noise, require outdoor work areas, or have other characteristics which are not suitable to be located near residential land uses should be located in the areas designated for service commercial uses.

This land use category is intended to accommodate some forms of light industrial/manufacturing uses particularly relating to commercial fishing needs. Specifically, it is intended to encourage the continuation of boat building land uses and fish processing which does not require canning or extensive cooking facilities.

Visitor-Serving: The visitor-serving land use category is especially important to the City since tourism is a significant contributor to the local economy. This category encourages concentration of tourist-intensive uses at major destination points in the City or at locations easily accessable to travelers along State Highway One. Visitor-serving uses that should be developed in those areas designated as such are hotels/motels, overnight RV facilities, restaurants, gift shops, goods and supply stores, commercial recreation and other uses typically found to accommodate tourist needs and activities.

Mixed Commercial/Harbor Dependent Land Use: This land use designation allows a mixture of visitor-serving commercial uses, and harbor dependent land uses. It is intended to preserve the working harbor existing along the Embarcadero while facilitating visitor needs, since the Embarcadero is a major tourist destination. Examples of land uses that would be accommodated in this category are sportfishing facilities, fish stores, dockage for commercial fishing boats, restaurants, gift shops, visitor access and facilities, some fish processing facilities requiring the use of ocean water, recreational boat dockage and other similar activites.

Priority will be given to access and coastal-dependent development on the bay side of the Embarcadero from Olive Street to Beach Street for vacant parcels, or in the case of redevelopment of existing structures which involves additions equalling 50 percent or more of the square footage, or 2,000 square feet, whichever is greater.

Priority will be given to coastal-dependent projects and commercial fishing activities on the bay side of the Embarcadero from Beach Street north to Coleman Drive; however, existing uses may remain and be redeveloped in the same use as long as the intensity is not increased (i.e., parking demands unmet on the site).

Commercial/Recreational Fishing: This category is intended to implement Masure "D" of the June 2, 1981, City ballot, passed by the citizens of Morro Bay, which states in its full text (as a permitted use in the Planned Development "P.D." Zone):

> "The City shall not grant any permit, authorization or other approval of any state owned tidelands subject to city lease between Beach Street and Target Rock, unless such development or use is primarily for the purpose of serving or facilitating licensed commercial fishing activities or noncommercial recreational fishing activities, or is clearly incidental thereto. For purposes of illustration only, and not by way of limitation, no approval shall be granted for any new passenger-for-hire boats or supporting facilities, or for any new restaurant, cafe, gift shop or other retail establishments serving the general public, and any existing such uses shall hereafter be considered nonconforming and shall not be expanded or enlarged."

It is also noted that the Coastal Act of 1976 has preemptory status over local zoning.

Measure "D" added Section 17.36.020, to the Morro Bay Municipal Code (Zoning Ordinance); it is noted that by doing so, the described "nonconforming uses" become subject to the other provisions of that Municipal Code Title; also see LUP Policy 7.01.

3. Industrial Land Uses

Two industrial land use categories have been established, General (Light) Industrial and Coastal Dependent Industrial land uses. Both designations reflect the existence of two basic industrial uses in the City, commercial fishing and processing and public utility and energy land uses.

General Industry: Light industry land uses which do not require materials or equipment which would emit excessive air, audio, water or land pollutants, or would require considerable outdoor storge, are allowable in this designation. The City would like to encourage the location of light industries that would specifically cater to commercial fishing and regional needs, such as machine shops, auto mechanic shops, black smithing, cold storage, warehousing and food processng, light manufacturing, component assembling and small parts processing.

Coastal-Dependent Industrial Land Use: This land use specifically relates to those industrial land uses which are given priority by the Coastal Act of 1976 for location adjacent to the coastline. Examples of uses in this designation are thermal power plants, seawater intake structures, discharge structures, tanker support facilities, and other similar uses which must be located on or adjacent to the sea in order to function. The Morro Bay wastewater treatment faciliteis are protected in their present location since an important

operational element, the outfall line, is coastal-dependent; see Policy 5.Ø3.

Interim/Open Space Uses in Industrial Categories: This designation allows interim or temporary land uses in both industrial categories until such time as the area is needed for its primary use. These uses must have relocatable (not permanent) structures which are subordinate to the character of the visual setting and are limited to visitor-related, recreational or commercial fishing temporary uses as listed in Policy 5.Ø2.

4. Other Land Uses

There are five additional land uses which are designated within the City. These are Agriculture, Harbor and Navigational Ways, Open Space/Recreation and Mixed Uses.

Agriculture: This land use designation pertains to the existing agricultural use areas located in the Morro Valley east of Highway One and south of Highway 41, which includes lands with prime soils, prime agricultural land, land in existing agricultural use, land with agricultural potential and lands under Williamson Act contracts. All or portions of this designation may be used for grazing, dry and irrigated land crop production and auxillary uses necessary to facilitate agricultural uses.

Harbor and Navigable Ways: This use designation specifically addresses that area of the City covered by seawater and includes the mouth of the bay to the southern city limits. Uses allowed in the harbor are those which must be located on the water in order to function, including intake and discharge structures, mariculture, commercial and recreational boating and support facilites, visitor-serving uses where public access is enhanced or facilitates coastal-dependent use, open space for navigation, habitat preservation and viewshed.

Environmentally Sensitive Habitat: This designation is intended to protect those areas in which plant or animal life or their habitats are either rare or especially valuable because of their special nature or role in an ecosystem and which could be easily disturbed or degraded by human activities and developments. Resource-dependent activities such as fishing, clamming, hiking, viewshed enjoyment, etc., are allowable within this designation.

Open Space/Recreation: This designation includes that open space which is not defined environmentally sensitive habitat and is intended to accommodate more intensive recreational activities. Allowable uses include golf courses, boating clubs, athletic fields, stables, campgrounds and other commercial recreation uses.

Mixed Uses: The mixed uses land use designation combines neighborhood and visitor-serving commercial uses, high density

residential and professional uses. It recognizes those areas in the City which have existing mixed use development patterns which appear to be a positive land use function worth maintaining. Uses allowed in this designation will be those which can function compatibly and include but are not limited to apartments and condominiums, professional offices, small convenience stores and gift shops, and small capacity restaurants. Businesses which have later hours or tend to be noisy would be encouraged to locate in other areas with more appropriate land use categories. Mixed uses by specific areas designated on Figure 5 are defined as follows:

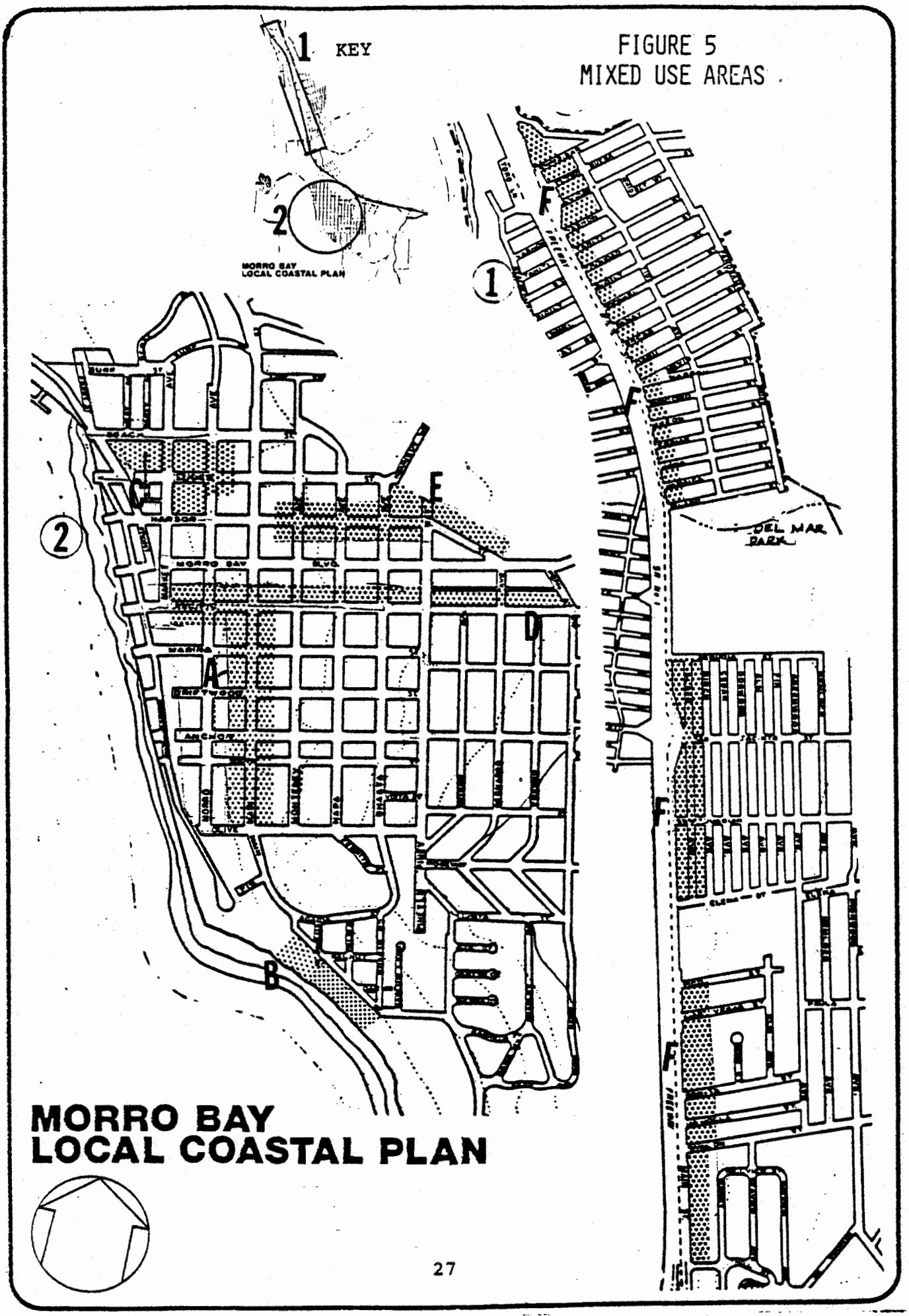
Mixed Use Area A: Vacant lots or major redevelopments (involving new structures or additions of more than 50 percent of the total floor area to existing structures or 2,000 square feet, whichever is greater) shall have priority for visitor-serving uses. Existing uses shall be allowed to remain excepting the above redevelopment requirement. In Mixed Use Area A, the primary permitted use is visitor-serving recreational/ commercial. The secondary permitted use is residential, however, the number of individual residential and office units or office space floor area within Mixed Use Area A, shall at no time exceed the amount existing at the time of the certification of the LUP.

Mixed Use Area B: Existing coastal-dependent and coastal-related uses shall be protected, maintained and provided where feasible in new development. Mixed Harbor Uses shall be for recreational boating and fishing rather than commercial fishing. Visitor-serving commercial/ recreational uses shall have priority over other land uses consistent with traffic, circulation and parking constraints in the Embarcadero. The existing number of residential units located in Mixed Use Area B shall be permitted to remain.

Mixed Use Area C: Lower cost visitor-serving uses shall be protected, encouraged, and where feasible provided in this area. Existing lower cost uses shall be protected and maintained; vacant parcels suitable in size and location shall be designated for such use.

In Mixed Use Areas A, B and C, additional general commercial, general office, professional office and non-priority use commercial development shall be prohibited.

Mixed Use Area D: Multifamily development shall be encouraged in this area.


1 KEY
FIGURE 5
MIXED USE AREAS
MORRO BAY
LOCAL COASTAL PLAN
1
2
A
B
C
D
E
F
DEL MAR
PARK
MORRO BAY BLVD.
MARINA
EMBARCADERO
ANCHOR
OLIVE
MORRO BAY
LOCAL COASTAL PLAN

Mixed Use Area E: Professional offices and public/quasi-public uses shall be encouraged in this area.

Mixed Use Area F: A mixture of all uses as appropriate shall be encouraged. An evaluation of appropriate uses on a parcel-by-parcel basis will be conducted during the implementation phase.

5. Overlay Designations

Overlay designations provide for land uses which are specific to certain locations within the City and which are allowable in more than one land use designation. The overlays are the exclusive use of the property so designated and are described as follows:

Planned Development: This overlay requires that any development must occur in accordance with a precise development plan, which has received discretionary City approval. If the overlay involves residential uses, they shall be developed in accordance with the density established under the residential land use designation.

Restricted Areas: This overlay identifies those sensitive habitats within the City which have resources so environmentally sensitive that even passive recreational uses must be prohibited. Such areas include the Morro Rock Peregrine Falcon area and the heron rookery near the Stocking site. Additional areas may be added within this definition after consultation with the Department of Fish and Game and U.S. Fish and Wildlife Service.

Park: This overlay identifies where public parks exist or are proposed.

School: This overlay identifies the location of public schools.

Public-Institutional: This overlay identifies the location of facilities which serve the public such as government buildings, power plant and transmission substations, and the City wastewater treatment facility; and quasi-public institutions such as hospital or facilities of a civic, cultural or religious nature.

D. GENERAL LAND USE POLICIES

Policy Ø.1. The City adopts the policies of the Coastal Act (PRC Sections 3Ø31Ø through 3Ø263) as the guiding policies of the Land Use Plan.

Policy Ø.2. Where policies within the Land Use Plan overlap, the policy which is the most protective of coastal resources shall take precedence.

Policy Ø.3. Where there are conflicts between the policies set forth in the Coastal Land Use Plan and those set

forth in any other element of the City's General Plan or existing ordinances, the policies of the Coastal Land Use Plan shall take precedence.

Policy 0.4. Prior to the issuance of a coastal development permit, the City shall make the finding that the development complies with all applicable Land Use Plan policies.

Policy 0.5. Land Use Plan policies calling for further studies, initiation of new programs, or acquisition of land or easements will be implemented as staff and funding become available.

III. SHORELINE ACCESS AND RECREATION

A. INTRODUCTION

Of all the issues the Coastal Act addresses, those concerned with provision of public access to the coast are perhaps the most significant and most familiar. Provision of coastal access was the primary concern of California voters who approved the 1973 Coastal Act initiative. Public access to the coast also is stressed in Section 4, Article X of the California State Constitution which guarantees the public's right of access to the beach along the 1072 miles of coastline.

The specific public access policies of the Coastal Act implicitly recognize that escalating coastal land values and the increasing demands of the private market for coastal land pose a threat to continuance of public right to have access to the coast. To insure that the public's constitutional right to have access to the coast will be enhanced and protected by local policy, the coastal act requires the following:

> "Each local coastal program prepared pursuant to this chapter (Chapter 1 of the Coastal Act) shall contain a specific public access component to assure that maximum public access to the coast and public recreation areas is provided." (Section 30500).

The primary purpose of the access component of the LCP is to describe in detail the ways in which local conditions do or do not conform to Coastal Act policies, and to recommend local policies and actions to correct non-conforming conditions. Because of the extent of overlap between concerns relevant to shoreline access and those involving coastal recreation, policies and plans concerning both are addressed together. Morro Bay enjoys an exceptionally large amount of shoreline public access and recreational opportunities, and some of these opportunities have the capability to be expanded or enhanced. With applicable policies and programs in addition to those existing in the City, access and recreational opportunities can be guaranteed to be in compliance with the requirements of the Coastal Act.

B. COASTAL ACT AND CITY POLICIES

1. State Policies

The Coastal Act policies directly related to access and recreation are as follows:

Sec. 30210. "In carrying out the requirement of Section 4 of Article X of the California Constitution, maximum access, which shall be conspicuously posted, and recreational opportunities shall be provided for all the people consistent with public safety needs and the need to protect public rights, rights of private property owners, and natural resource areas from overuse."

Sec. 30211. Development shall not interfere with the public's right of access to the sea where acquired through use or legislative authorization, including, but not limited to, the use of dry sand and rocky coastal beaches to the first line of terrestrial vegetation.

Sec. 30212. (a) Public access from the nearest public roadway to the shoreline and along the coast shall be provided in new development projects except where (1) it is inconsistent with public safety, military security needs, or the protection of fragile coastal resources, (2) adequate access exists nearby, or (3) agriculture would be adversely affected. Dedicated accessway shall not be required to be opened to public use until a public agency or private association agrees to accept responsibility for maintenance and liability of the accessway.

(b) For purposes of this section, "new development" does not include:

(1) Replacement of any structure pursuant to the provisions of subdivision (g) of Section 30610.

(2) The demolition and reconstruction of a single-family residence; provided, that the reconstructed residence shall not exceed either the floor area, height or bulk of the former structure by more than 10 percent, and that the reconstructed residence shall be sited in the same location on the affected property as the former structure.

(3) Improvements to any structure which do not change the intensity of its use, which do not increase either the floor area, height, or bulk of the structure by more than 10 percent, which do not block or impede public access, and which do not result in a seaward encroachment by the structure.

(4) Any repair or maintenance activity for which the commission has determined, pursuant to Section 30610, that a coastal development permit will be required unless the regional commission or the commission determines that such activity will have an adverse impact on lateral public access along the beach.

As used in this subdivision, "bulk" means total interior cubic volume as measured from the exterior surface of the structure.

(c) Nothing in this division shall restrict public access nor shall it excuse the performance of duties and responsibilities of public agencies which are required by Sections 66478.1 to 66478.14, inclusive, of the California Government Code and by Section 4 of Article X of the California Constitution.

Sec. 30212.5. "Wherever appropriate and feasible, public facilites, including parking areas or facilites, shall be distributed throughout an area so as to mitigate against the impacts, social and otherwise, of overcrowding or overuse by the public of any single area."

Sec. 30213. Lower cost visitor and recreational facilities shall be protected, encouraged, and, where feasible, provided. Developments providing public recreational opportunities are preferred.

Neither the commission nor any regional commission shall either: (1) require that overnight room rentals be fixed at an amount certain for any privately owned and operated hotel, motel, or other similar visitor-serving facility located on either public or private lands; or (2) establish or approve any method for the identification of low or moderate income persons for the purpose of determining eligibility for overnight room rentals in any such facilities.

Sec. 30214. (a) The public access policies of this article shall be implemented in a manner that takes into account the need to regulate the time, place, and manner of public access depending on the facts and circumstances in each case including, but not limited to, the following:

(1) Topographic and geologic site characteristics.

(2) The capacity of the site to sustain use and at what level of intensity.

(3) The appropriateness of limiting public access to the right to pass and repass depending on such factors as the fragility of the natural resources in the area and the proximity of the access area to adjacent residential uses.

(4) The need to provide for the management of access areas so as to protect the privacy of adjacent property owners and to protect the aesthetic values of the area by providing for the collection of litter.

(b) It is the intent of the Legislature that the public access policies of this article be carried out in a reasonable manner that considers the equities and that balances the rights of the individual property owner with the public's constitutional right of access pursuant to Section 4 of Article X of the California Constitution. Nothing in this section or any amendment thereto

shall be construed as a limitation on the rights guaranteed to the public under Section 4 of Article X of the California Constitution.

(c) In carrying out the public access policies of this article, the commission, regional commissions, and any other responsible public agency shall consider and encourage the utilization of innovative access management techniques, including, but not limited to, agreements with private organizations which would minimize management costs and encourage the use of volunteer programs.

Sec. 30220. "Coastal areas suited for water-oriented recreational activitites that cannot readily be provided at inland areas shall be protected for such use."

Sec. 30221. "Oceanfront land suitable for recreational use shall be protected for recreational use and development unless present and foreseeable future demand for public or commercial recreational activities that could be accomodated on the property is already adequately provided for in the area."

Sec. 30222. "The use of private lands suitable for visitor-serving commercial recreational facilities designed to enhance public opportunities for coastal recreation shall have priority over private residential, general industrial, or general commercial development but not over agriculture or coastal-dependent industry."

Sec. 30240. "(a) Environmentally sensitive habitat areas shall be protected against any significant disruption of habitat values, and only uses dependent on such resources shall be allowed within such areas.

(b) Development in areas adjacent to environmentally sensitive habitat areas and parks and recreation areas shall be sited and designed to prevent impacts which would significantly degrade such areas, and shall be compatible with the continuance of such habitat areas.

Article X, Section A of the California State Constitution states as follows:

> "No individual, partnership, or corporation, claiming or possessing the frontage or tidal lands of a harbor, bay inlet, estuary, or other navigable water in this state, shall be permitted to exclude the right-of-way to such water whenever it is required for any public purpose, nor to destroy or obstruct the free navigation of such water; and the Legislature shall enact such laws as will give the most liberal construction to this provision so that access to the navigable waters of this state shall be always attainable for the people."

The State Subdivision Map Act also incorporates a number of provisions regarding public access to navigable water and shoreline areas that can be found in Section 66478.1 through 66478.14 of the Government Code. Relevant portions are summarized as follows:

> "No local agency shall approve coastal or oceanfront subdivisions or subdivision involving waterways, lakes or reservoirs, unless public access is provided by fee or easement from a public highway to 'land below the ordinary highwater mark on any ocean coastlines or bay shoreline within or at a reasonable distance from the subdivision,' or 'that portion of the bank or stream bordering or lying within the proposed subdivision.'
>
> "Additionally, no local agency shall approve a subdivision that does not provide for dedication of public easement (designed in extent, width, and character to achieve public use of the waterway) along a portion of the waterfront bordering or within the proposed subdivision.
>
> "Reasonable access is to be determined by the local agency, considering: (1) mode of access; (2) size of subdivision; (3) common uses of bank or stream, or type of coastline or shoreline and appropriate uses; (4) likelihood of trespass and means of avoiding trespass. The subdivision need not be disapproved if access is not provided and the local agency finds that reasonable access is available nearby.
>
> "The subdivider is not required to improve access route(s) that benefit non-residents of the subdivision. Access route(s) may be conveyed or transferred to other governmental agencies."

2. City Policies on Public Shoreline Access

Morro Bay's General Plan identifies and responds to some of the issues of shoreline access in the context of its Parks and Recreation Element. While these attempts do not meet specificity of the Coastal Act, the Parks and Recreation Element provides some direction towards increasing public access.

One fact recognized by the Parks and Recreation Element is that Highway One bisects the City and isolates the northeastern part of the City's residential neighborhoods from reasonable access to schools as well as beaches. The Element recommends that access between areas on both sides of State Highway One should be improved by installing one or more separated pedestrian overcrossings.

The Element also proposes major improvements to and the expansion of Coleman Drive between the PG & E-owned property and Morro Rock. The conceptual plan proposes to increase access to and use of the beach areas and provide clustered parking in order to provide a more diverse and effective use of the area.

C. GENERAL ACCESS AND RECREATION CHARACTERISTICS

1. Physical Characteristics

Morro Bay is a community with a wealth of existing access, and has access opportunities which can be improved or expanded. There are a total of 10.75 linear miles of ocean and bayfront shoreline that fall within the city limits. Approximately 95.5% of the shoreline within Morro Bay corporate limits is presently open to lateral access. Moreover, existing vertical public access is provided along virtually all segments of the shoreline (see Figure 8). One of the primary intentions of the LUP policies pertaining to access and recreation is to maintain the abundance of existing access and further maximize access in new development, consistent with the provisions of the Coastal Act.

The majority of Morro Bay's coastline is dominated by flat sandy beaches that rise to dunes or short coastal bluffs. Significant portions of the City's bayfront are lined by manmade rock revetments or consumed by waterfront structures. Coastal bluffs and isolated natural rock outcroppings, the most notable of which is Morro Rock, make up a relatively small portion of the City's shoreline. The coastal physical characteristics are summarized in Table 3 and shown on Figure 6.

Table 3

Coastal Physical Characteristics

Physical Characteristics	Number of Lineal Miles	Percent of Total
Sandy Beach	5.19	48.2
Land Based Beach	2.77	25.6
Sand Spit	2.42	22.6
Manmade Rock Revetment/ Waterfront Structures	2.07	19.3
Estuarine	2.01	18.6
Coastal Bluffs	0.75	7.0
Rocky Outcroppings	0.73	6.9
TOTALS	10.75	100.0

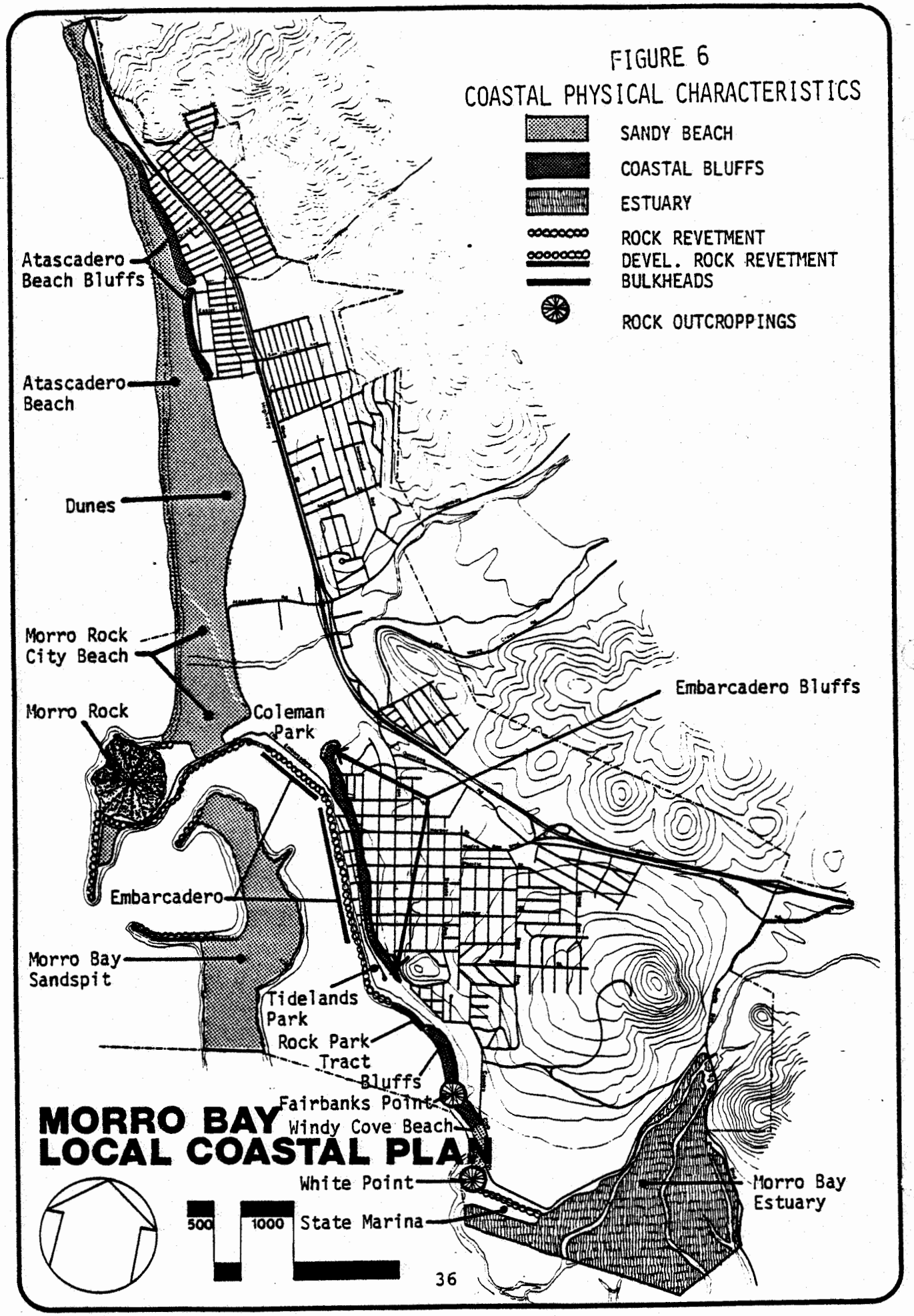


FIGURE 6
COASTAL PHYSICAL CHARACTERISTICS
SANDY BEACH
COASTAL BLUFFS
ESTUARY
ROCK REVETMENT
DEVEL. ROCK REVETMENT
BULKHEADS
ROCK OUTCROPPINGS
Atascadero Beach Bluffs
Atascadero Beach
Dunes
Morro Rock City Beach
Morro Rock
Coleman Park
Embarcadero Bluffs
Embarcadero
Morro Bay Sandspit
Tidelands Park
Rock Park Tract Bluffs
Fairbanks Point
Windy Cove Beach
White Point
State Marina
Morro Bay Estuary
MORRO BAY
LOCAL COASTAL PLA
500
1000

2. Land and Shoreline Ownership

Approximately 90 percent of land frontage immediately abutting the waters of the Pacific Ocean and Morro Bay are publicly owned. Figure 7 depicts the areas in Morro Bay owned or managed by public institutions.

Most of the bayfront lands managed by lease arrangements by the City of Morro Bay are tideland submerged lands held in trust by virtue of a state legislative grant. Technically, the City is the steward rather than the true owner of these lands, many of which have been leased out to and heavily developed by private concerns. Lands may be leased and developed by private concerns but they must be consistent with the public trust and granting statutes.

3. Access Considerations

The State Coastal Zone Conservation Commission Interpretive Guidelines for Shoreline Acess identifies four types of access that should be reviewed by each coastal community during preparation of its Local Coastal Program. Lateral, vertical, bluff-top and visual access types are defined in Appendix A and are discussed as follows as they relate to Morro Bay. Figure 8 depicts location of these access types.

Lateral Access: Unencumbered lateral access, or access along and parallel to the shoreline, is ample in Morro Bay. An open sandy beach from Morro Rock northward provides lateral access without interference or hindrance of any kind.

Vertical Access: Vertical access, or that which allows the public to achieve access to the shoreline from the first public road, is available at a number of locations. Due to the relatively flat terrain of northern Morro Bay west of Highway One, access to northern beach areas is made easier than in some of the southern sections of the City where bluff-top terrain, waterfront revetments, and wall-to-wall waterfront construction have directed access to the shoreline through street ends. There are at least 35 vertical access points along the shoreline and bluff tops. Access is provided to all beach and bayfront areas.

Bluff-Top Access: Lateral access across the bluff tops that form the backdrop for the City's Embarcadero area is available but is limited by the extensive building that has already occurred. Existing vertical access from the tops of coastal bluffs to beach areas or to the Embarcadero is adequately provided and is available for vehicles and pedestrians.

Visual Access: Visual access to shoreline areas will be discussed in Chapter XIII, Visual Resources.

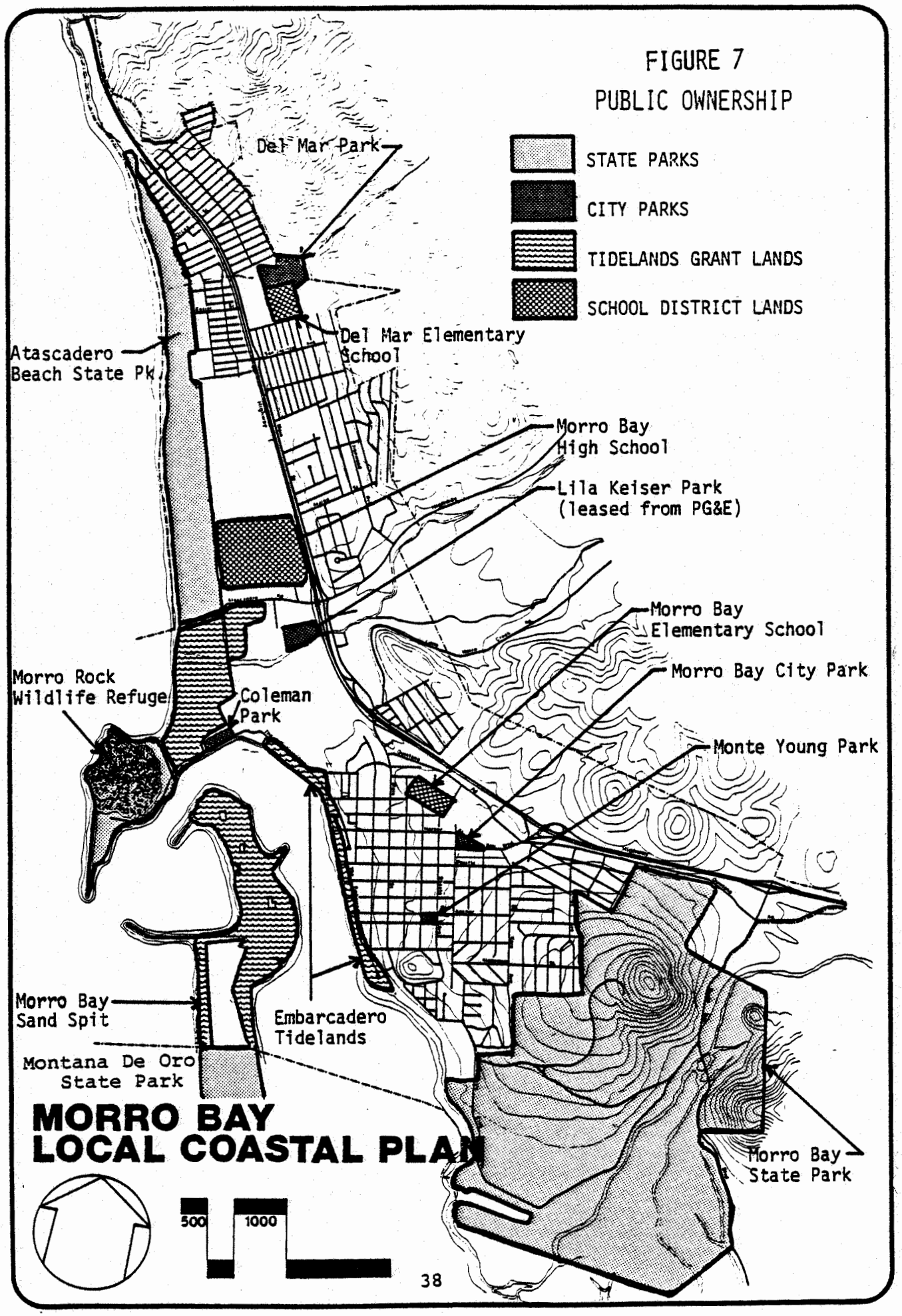


FIGURE 7
PUBLIC OWNERSHIP
STATE PARKS
CITY PARKS
TIDELANDS GRANT LANDS
SCHOOL DISTRICT LANDS
Del Mar Park
Del Mar Elementary School
Atascadero Beach State Pk
Morro Bay High School
Lila Keiser Park (leased from PG&E)
Morro Bay Elementary School
Morro Bay City Park
Morro Rock Wildlife Refuge
Coleman Park
Monte Young Park
Morro Bay Sand Spit
Embarcadero Tidelands
Montana De Oro State Park
Morro Bay State Park
MORRO BAY LOCAL COASTAL PLAN
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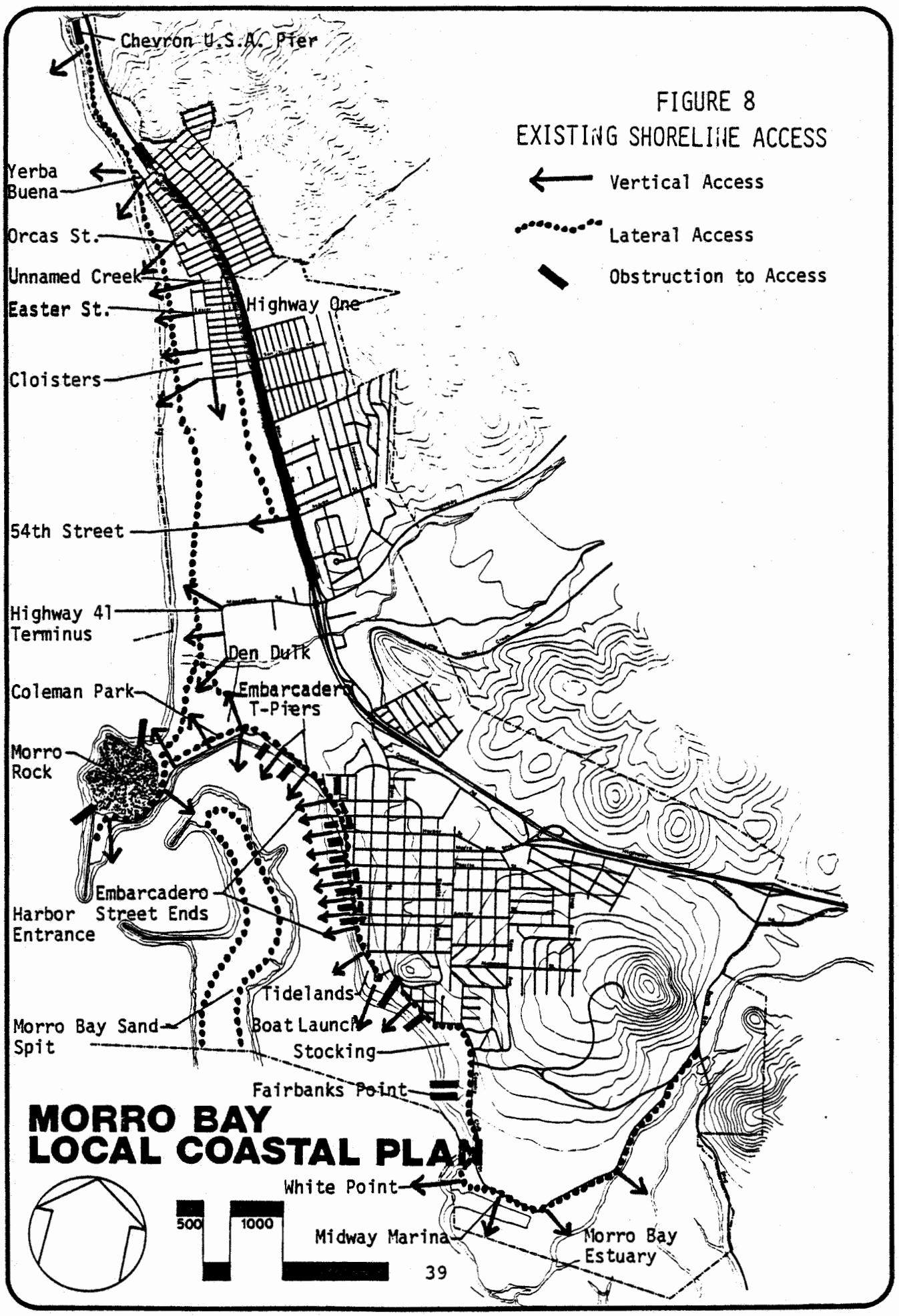
Chevron U.S.A. Pier
Yerba Buena
Orcas St.
Unnamed Creek
Easter St.
Highway One
Cloisters
54th Street
Highway 41 Terminus
Den Dulk
Coleman Park
Embarcadero T-Piers
Morro Rock
Embarcadero Street Ends
Harbor Entrance
Tidelands
Boat Launch
Morro Bay Sand Spit
Stocking
Fairbanks Point
White Point
Midway Marina
Morro Bay Estuary
500
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FIGURE 8
EXISTING SHORELINE ACCESS
Vertical Access
Lateral Access
Obstruction to Access
MORRO BAY
LOCAL COASTAL PLAN

4. Recreational Use Considerations

As a community with high tourist demand and with three major state park installations, Morro Bay's shoreline offers a wide variety of shoreline recreational opportunities to residents and visitors alike.

Recreational opportunities such as hiking, nature walks, and sightseeing, abound in Morro Bay. Water sports, such as surfing, fishing, diving, and recreational boating, are also prevalent along Morro Bay's shoreline areas. The state parks offer camping facilities, passive recreational opportunities, and active recreational facilities. In addition, the County operates the Morro Bay Golf Course in Morro Bay State Park. Figure 9 shows the location of recreational facilities in the City.

D. ACCESS ISSUES AND CONSTRAINTS

Morro Bay offers a wide variety of shoreline access. The City is a truly distinctive area that offers access and recreational opportunities to both its residents and visitors. In evaluating access issues and constraints, significant considerations include the following:

(1) The City of Morro Bay has extremely limited funds to improve existing accessways, to acquire, maintain and develop new accessways, or to manage and maintain new waterfront parks and recreational facilities. Additionally, it must fulfill obligations assumed in the Piptkin Tideland Settlement which thus far have not been accomplished.

(2) The City's present Zoning and Subdivision Ordinances will require review to ensure that acquisition or expansion of public access is provided for and meets Coastal Act policies.

(3) The City's present circulation system to and along the waterfront provides adequate accessibility to waterfront areas.

(4) Parking in the much used, heavily developed waterfront areas along the City's Embarcadero is barely adequate to meet the demands. Prospects to improve the situation, with the cooperation of landowners, is considered good under present conditions.

(5) Bicycle and pedestrian access is available but might be increased and better organized to provide maximum access potential.

(6) Continuous lateral access is provided but is not entirely contiguous to nor does it necessarily need to be contiguous to the waterfront.

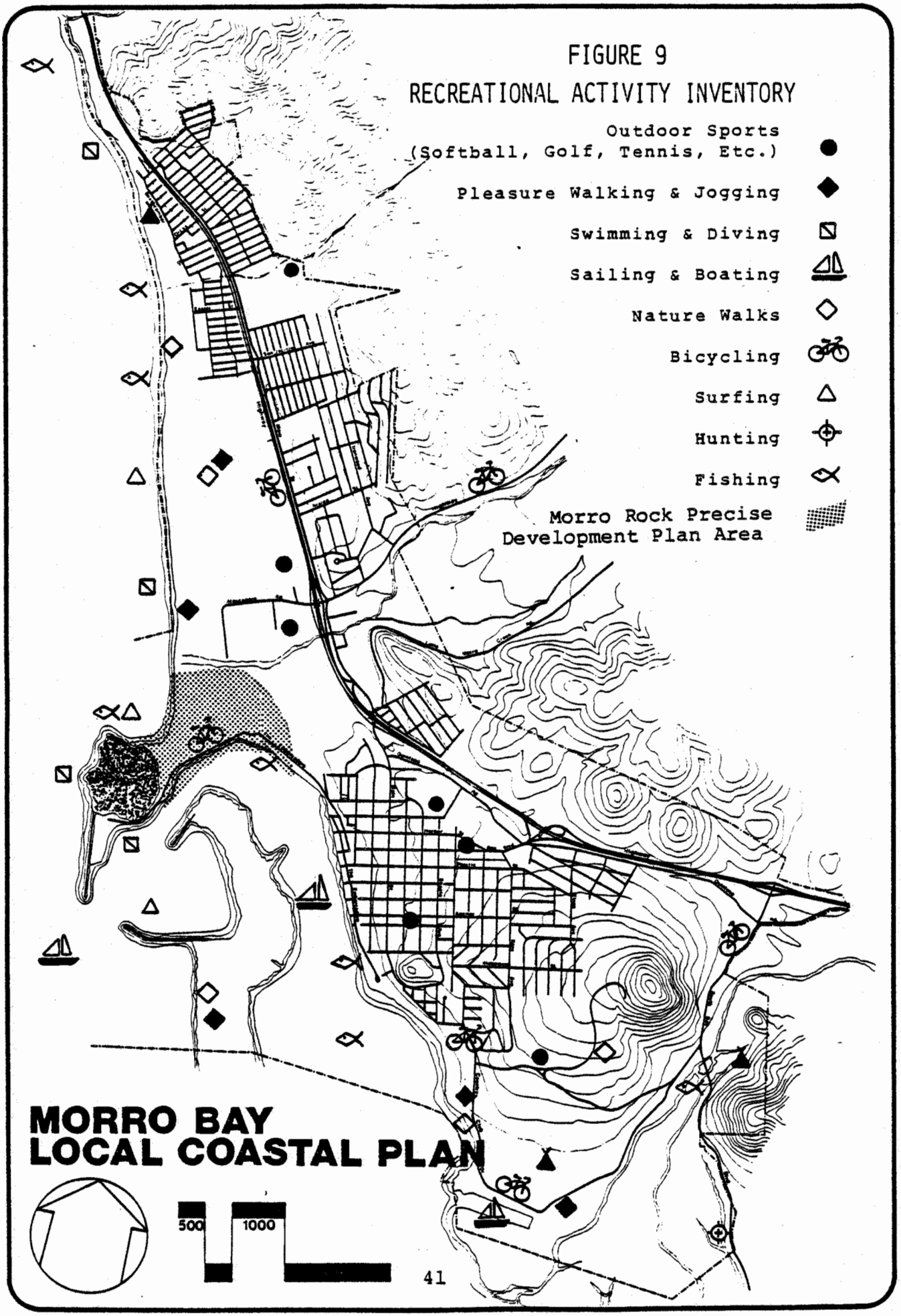


FIGURE 9
RECREATIONAL ACTIVITY INVENTORY
Outdoor Sports (Softball, Golf, Tennis, Etc.)
Pleasure Walking & Jogging
Swimming & Diving
Sailing & Boating
Nature Walks
Bicycling
Surfing
Hunting
Fishing
Morro Rock Precise Development Plan Area
MORRO BAY
LOCAL COASTAL PLAN
500
1000

(7) Opportunities to expand more formal access in Morro Bay's waterfront areas could be constrained by complications and legal settlements surrounding the City's Tidelands Grant Lands.

(8) Vertical access to the waterfront along the Embarcadero and Rock Park Tract areas is adequate, and is provided at all street-ends. Most of the developed areas are providing access to the City's residents and visitors. Among the City's project activities for access improvements, the Coastal Conservancy has given lower priority to sign improvements to these street-ends.

(9) The Coastal Conservancy and Coastal Commission have adopted standards and guidelines for public access ways improvements which must be adhered to by the City of Morro Bay in access projects if Conservancy funds are used, and in order to receive Commission approval, City coastal permit issuance would be ultimately dependent upon these standards and guidelines.

E. RECREATION ISSUES AND CONSTRAINTS

Morro Bay provides considerable acreage in public recreation use. Three state parks are within the City limits and the City has four public parks in addition to private recreational provisions. There are three issues and constraints with respect to provision of recreational opportunities for the public:

(1) The City is severely limited in funding to either provide additional public recreational opportunities or to conduct major improvements for existing facilities within its jurisdiction. The City, however, has placed priorities on land acquisition and improvements, and is participating in government funding programs.

(2) Opportunities to expand recreational opportunities in Morro Bay's waterfront areas could be further constrained by complications and legal settlements surrounding the City's Tidelands Grant Lands.

(3) Conflicts exist between the use of areas for recreational boating and commercial fishing. With regard to the siting of new developments, the Coastal Act provisions pertaining to priorities among uses dictate that some recreational activities must be subordinate to coastal-dependent uses. In addition, the bay has a limited boat carrying capacity due to the value of the tidelands as a bird sanctuary and sensitive habitat area.

F. SPECIFIC RESOURCES, ISSUES AND CONSTRAINTS BY PLANNING AREA

The access and recreational issues and constraints best relate to specific areas within the City. These specific areas are organized by planning area for clarity. The planning areas are shown on Figure 3 in Chapter I, "Introduction."

1. Area 1 - North Morro Bay

The specific areas in planning area 1 with access and recreational issues and constraints are the Chevron U.S.A. pier, Atascadero Beach State Park, Beachcomber Drive, and Hatteras Street. There are other vertical accesses in this area which are shown on Figure 8.

a. Chevron U.S.A. Pier: This privately-owned pier is at the extreme northern limits of the City and is now closed to public use. It offers potential for public access and pier-side fishing, however, it is also a potential site for offshore oil development and/or an oil spill control point. Because it is an energy dependent facility, recreational use takes second priority. Lateral access along the beach should be ensured across the Chevron lease if this is not precluded due to safety factors.

b. Atascadero Beach State Park: This long stretch of state-owned sandy beach contains a 104-space campground and offers full lateral access along 10,000 linear feet of ocean frontage.

c. Beachcomber Drive: This bluff-top road parallels the beach and forms the backdrop to Atascadero Beach campground. It provides bluff-top lateral access as well as vertical access to the State Beach for pedestrians. Yerba Buena Street connects Beachcomber Drive with State Highway One and serves as the main vehicular access to Atascadero Beach campground.

d. Hatteras Street: This street was once the southern entrance to the Atascadero Beach campground. The terminus of Hatteras Street is now barricaded and serves only pedestrians from the surrounding residential neighborhood. Strong potential exists to make a pedestrian connection between the beach through the Hatteras Street terminus to the City's Del Mar Park, some 2,000 feet inland via an abandoned pipeline corridor.

2. Area 2 - Atascadero Beach

a. Cloisters Parcel: This privately-owned, eight-acre beachfront parcel is located at the west end of San Jacinto Street. It was once the site of the old, long-removed Cloisters Hotel, and has been used historically and extensively for public access. The state is attempting to secure funding to buy the property as an extension of Atascadero State Beach.

b. VRM-American West Properties: This privately-owned, 87-acre, expanse of open land is sandwiched between Morro Bay High School

and Azure Street. It also historically has been used for lateral and vertical access. It contains a large area of sensitive sand dunes abutting the eastern edge of Atascadero State Beach. Slated for low/medium-density residential development in Morro Bay's Land Use Element, the area has been and continues to be the subject of land and road development proposals that could effect public access to the dunes and beach.

3. Area 3 - Del Mar

No issues or constraints have been identified.

4. Area 4 - Morro Highlands

No issues or constraints have been identified.

5. Area 5 - Morro Rock

a. State Highway 41 Terminus: The terminus of State Highway 41 abuts a large sandy beach known as Morro Rock City Beach, and provides access to the scenic dunes that flank the road.

b. Coleman Drive Area: The area is bounded by Morro Creek, the PG & E Morro Bay Thermal Power Plant, Morro Rock and the bay which offers extensive resources for public access.

Use of this area will be constrained by the private ownership of the Den Dulk property at the critical junction of Coleman Drive and the Embarcadero and by the unstable, ever advancing sand dunes. The sensitive environmental habitat of Morro Rock also is a secondary constraint because it will limit the types of land uses in this area.

c. Morro Rock: The landmark of Morro Bay, Morro Rock, is owned by the state, and access is available to the base of the rock via Coleman Drive.

6. Area 6 - Bay Front

a. Embarcadero Area: This heavily developed section of the City serves a mixture of fishing and tourist uses and contains a variety of public vertical and lateral accesses. In addition, some private buildings offer public access to the water's edge. There are eight underimproved, publicly owned street-ends which provide bayfront access. Stairways connecting the Embarcadero with the commercial areas above the bluffs that parallel the Embarcadero's eastern edge are present and offer unique opportunities for access in this most visited area of the City.

b. Tidelands Park: This largely vacant 1,200 foot stretch of waterfront at the southern end of the Embarcadero contains Morro Bay's only boat launch ramp. The Coastal Conservancy is assisting the City with funding for improvements. With additional improvements, this area could become a quality

waterfront park with major provisions for lateral access, fishing platforms, berths and side-ties for fishing fleet, etc.

7. Area 7 - Central Morro Bay

a. Rock Park Tract: This waterfront area has been developed with a mixture of land uses. Some of the long, narrow parcels stretching from the bulkheads and wharfs of the waterfront to Main Street have made provisions for limited vertical access, while others have posted no trespassing signs for both vertical and lateral access. This area has limited potential to provide lateral access along the bay.

b. Vacant: The 11-acre bluff top privately-owned property is one of the last remaining vacant waterfront parcels and has a Coastal Commission permit for residential development with a requirement to dedicate to the City three acres of bluff top for use as a passive recreational park and accessway. To the immediate south in the State Park, the Golden Tee Restaurant encroaches over the bluffs and blocks lateral access towards the State Park, but vertical access is provided. Lateral access is available along Country Club Drive.

8. Area 8 - State Park

a. Morro Bay State Park: Forming the southern boundary of the City, the 1,452-acre state park contains a variety of access and recreation opportunities. Whites Point, the Museum of Natural History, Windy Cove Beach, and Midway Marina offer substantial lateral and vertical access, while Fairbanks Point, just south of the Golden Tee resort, serves as a wildlife refuge which is restricted to access.

9. Area 9 - Harbor and Navigable Ways

a. North and South T-Piers: This heavily developed section of Morro Bay's waterfront offers vertical access to the waters of the bay via two large T-Piers, one of which has been closed to the public due to safety reasons until rehabilitation is completed. Lateral access is limited in some cases by waterfront developments that encroach over a revetment. The southern T-Pier is currently being restored with the assistance of the Coastal Conservancy.

b. Harbor: The harbor area offers a variety of public and private recreational uses in addition to the publicly-owned North and South T-Piers. Recreation uses include boating, bird and animal observation, swimming, fishing, and other water-related recreational activities. These recreational uses should be expanded as much as possible for increased public use while preserving wildlife habitat areas and maintaining the City's important commercial fishing and coastal-dependent industries.

10. Area 10 - Sand Spit

a. Sand Spit: Flanking the southern entrance to Morro Bay, the windblown northern edge of the sand spit is accessible from the City only by boat or swimming and is used extensively for nature walks and surfing. South of the part-City, part-privately owned portion of the spit located within the City limits is the State's Morro Bay Sand Spit Wild Area. This southern section is operated by the State as a limited access wild area and is part of Montana de Oro State Park.

G. RECREATION AND ACCESS POLICIES

1. General Access and Recreation Policies

The following general access and recreation policies apply to the area of the City which is between the mean high tide line and the first public road. These policies are in addition to those listed by planning areas.

Policy 1.01. For new developments adjacent to the bayfront or ocean, public access from the nearest public roadway to the shoreline and along the coast shall be provided except where (1) it is inconsistent with public safety, military security needs, or the protection of fragile coastal resources, (2) adequate access exists nearby, or (3) agriculture would be adversely affected. For new development on properties adjacent to the mean high tide line, lateral easement dedications shall be from the mean high-tideline to the first line of vegetation.

Policy 1.02. No unrelated development shall be permitted in publicly-owned recreational areas except energy conduits and pipelines and other necessary ancillary equipment and related fixtures to serve coastal-dependent industrial uses when no alternate route or location is feasible.

Policy 1.03. In implementing all proposals made in this plan for expanding opportunities for coastal access and recreation, purchase in fee (simple) shall be used only after all other less costly alternatives have been studied and rejected as infeasible. Other alternatives may include purchase of easements, recreation preserve contracts, and mandatory dedication in connection with development.

Policy 1.04. Consistent with the provisions of Coastal Act Section 30212, dedicated accessways shall not be required to be opened to public use until a public agency or private association agrees to accept responsibility for maintenance and liability of the accessway. Whenever feasible in view of the

availability of funds, the City shall acquire accessways in addition to those otherwise acquired as a result of mandatory conditions to development permit approvals.

Policy 1.05. Parking shall be provided in conjunction with new or improved vertical accessways whenever feasible and consistent with site constraints to ensure use of the accessway. The number of spaces shall be determined by the Planning Commission or Community Development Department and shall be based upon need, carrying capacity of the public recreation area to which access is provided and environmental constraints and safety conditions.

Policy 1.06. All accessways shall be properly signed and should conform to Coastal Conservancy/Coastal Commission access standards and guidelines.

Policy 1.07. Consistent with Coastal Act Section 30211, development shall not interfere with the public's right of access to the sea where acquired through use or legislative authorization. Such access shall be protected through permit conditions on permitted development, including easements dedications or continued accessway maintenance by a private or public association. Existing identified trails or other access points shall not be required to remain open, provided that they are consolidated or relocated to provide public access on the same site and provides the same or comparable access benefits as existed before closure and meets all other applicable access and recreation policies of this LUP.

Policy 1.07A. In reviewing all new development requests, provision shall be made for adequate off-street parking in order to serve the needs of the development. Once an approved parking management program for the City providing off-street parking resources has been developed and implemented as a part of the LUP, new development shall be allowed to satisfy parking requirements through participation in such a program. If the program includes an in-lieu fee system, the new development shall provide an in-lieu fee of an amount equal to the purchase of land and construction of the number of spaces needed to serve the development's needs.

2. Policies by Planning Area

The following policies are specific to access and recreation uses by planning area. The planning areas are shown on Figure 3 in Chapter I "Introduction." Figures 8 and 9 show the general location of access and recreation areas discussed in the

following policies. These policies implement the public access and recreation policies of the Coastal Act which require that maximum shoreline access shall be provided in new developments except where it is inconsistent with the protection of coastal resources.

Area 1 - North Morro Bay

Policy 1.Ø8. With the exception of the Chevron U.S.A. Pier which is a coastal-dependent industrial use, the City shall designate the sand area west of State Highway One between the mean high tide line and the first line of vegetation as open space/recreation use.

Policy 1.Ø9. As a condition to the approval of any development permit on the Chevron U.S.A. property, the City shall require clear dedication of a lateral access easement along the sand area and under the pier. The lateral accessway shall be a minimum of 25 feet of dry sandy beach at all times of the year, or shall include the entire sandy beach area if the width of the beach is less than 25 feet.

Policy 1.1Ø. As a condition to the approval of any development permit the City shall require State Department of Parks and Recreation to submit a master plan for the development of Atascadero State Beach, which shall include the following improvements:

a. The design and construction of two stairways to the state beach off Beachcomber Drive, one below the bluffs between the Beachcomber Drive terminus with Yerba Buena Street and another at a proper location between Unnamed Creek and the Orcas Street drainage.

b. The design and construction of a small parking area on the state-owned coastal bluff-top parcel just below Hatteras Street.

c. The repair of barrier rails to prevent bluff erosion and other maintenance improvements to the state park.

d. The redesign and construction of a new barricade at the Hatteras Street terminus to allow for pedestrian access to the state beach.

Policy 1.11. As a condition to the approval of any development permit, on the property owned by Texaco, Inc., the City shall require the following improvements:

a. Improved pedestrian and vehicular access from Main Street to Del Mar Park. A recommended

location for access is via an easement located south of Unnamed Creek.

b. Development, if needed, of additional parking along the west boundary of Del Mar Park; the number of which shall be determined by the Planning Commission and shall be based on park use and need for parking.

c. A setback buffer area shall be established for new developments adjacent to Unnamed Creek. The width of the buffer area will vary depending upon the specific impact of the proposed development, but in no event shall be less than a width of 50 feet along each bank of the creek.

Area 2 - Cloisters

Policy 1.12. As a condition to the approval of any development permit, the City shall require the State Department of Parks and Recreation to submit a master plan for the development of the recently acquired "Cloisters" park parcel, which shall include, but not be limited to the following improvements:

a. Improved vertical public access located on the south side of the park parcel located so as to preserve as much as feasible of the tide and submerged lands in their natural state.

b. Provision for off-street parking. Parking lot improvements to be sized as related to the scale of park development and public use to be accommodated.

c. Sand dune protection and stabilization program. Consistent with the protection and stabilization of the existing dunes on the parcel, the proposed park development may include provisions for overflow camping use between May and September of each year.

d. View corridors and visual protection consistent with the provisions of Coastal Act Section 30251 and Policy 12.01 of this LUP.

Policy 1.13. A precise development plan and an EIR is required for the development of the VRM parcel. The precise development plan shall include the following development standards concerning access, recreation improvements and visual resource protection:

a. The sand and dunes area between the mean high tide line and the easternmost line of dunes,

and the marshy lowland habitat areas shall be adequately identified and mapped. The sandy beach portion of the parcel shall be designated as open space/recreation. The dunes areas and marshy lowland habitat areas shall be designated as environmentally sensitive habitat. A buffer setback of no less than 50 feet (if fenced, 100 feet if not fenced) shall be established after mapping of the habitat boundaries has taken place. The mapping and proposed buffers shall be subject to review and comment by U.S. Fish and Wildlife and California Department of Fish and Game. Recreational use of this portion of the site shall be limited to passive recreational uses which do not conflict with the habitat values. Dedication of beach and dune area to the State is required for proper management. Prior to dedication of the beach and dune areas, the applicant shall ensure restoration, enhancement and protection of the dune and marsh habitat areas. The restoration-enhancement-protection program shall be submitted for review and comment by U.S. Fish and Wildlife and the California Department of Fish and Game, and suggested mitigation measures shall be incorporated into the program after review by the relevant resource protection agencies.

b. Any development shall be subordinate to the unique and sensitive visual character of the area and shall contain visual corridors and standards as defined in Policy 12.02B in the LUP. In addition, development on the parcel outside of defined visual corridors shall be limited to a height of 25 feet, as measured from the lowest possible first finished floor elevation. Design methodology shall include areas of clustered development, varying building heights, roof lines and setbacks, visible common open space areas and landscaping controls which ensure that tree species are selected for maximum heights which do not obscure views. The development plan shall preserve to the maximum extent feasible visual access benefits seen from Highway One through the dunes to Morro Rock and vicinity through careful design and siting of structures and site improvements.

c. Three vertical accessways to the beach shall be provided, one each on the north and south sides of the parcel, and an additional vertical accessway through the middle of the parcel across the dunes from the north-south collector

street. The accessways shall be of sufficient size to guarantee accommodation of existing and projected intensity and kinds of use, but in no case shall the accessways be less than 10 feet in width. Specific access requirements shall be designated during architectural and permit review and shall be based on historical and projected use (Refer to Policy 1.07, for general criteria related to prescriptive rights questions). Lateral accessways shall be provided according to the location of historically used portions of the site and projected future use by residents, and shall include the provision of continuous lateral access across the site. The northern vertical accessway shall be the primary accessway for parking resources at the beach and can be developed in conjunction with the Cloisters Park parcel vertical access improvement referred to in Policy 1.12. Access easements may be located in view corridors.

d. Public parking shall be developed and provided adjacent to the western termini of the northernmost vertical accessway, adjacent to the eastern termini of the middle vertical accessway, and adjacent to the eastern termini of the southernmost vertical accessway. The precise number of spaces shall be determined at the time of development review but in no case shall be less than 15 spaces each at the southernmost and middle access. A greater number of spaces may be required at the northernmost access.

e. A north-south public collector street connecting the Atascadero Beach Tract area as bordered by San Jacinto Street with the unimproved portion of Highway 41 west of Highway One shall be designated on the site and designed to include a parking-restricted, two-lane landscaped collector with provisions for an 8-foot wide, off-street, two-directional bicycle path on the seaward side of the street. The north-south collector shall be located on the eastern edge of the site.

f. Improvement of public access and parking shall be completed prior to occupancy of any constructed residential units. If the California Department of Parks and Recreation is not prepared to proceed with the implementation of Policy 1.12 at the time of application for development of the VRM parcel, then VRM shall provide a bond to the

Department. Said bond shall be of an amount sufficient to implement the northernmost accessway and parking improvements.

Policy 1.14. The City shall make every effort to have the California Department of Transportation design and construct one or more crossings of Highway One at grade in order to facilitate safe and convenient movement of residents across that man-made barrier.

Area 3 - Del Mar

No access and recreation policies are required.

Area 4 - Morro Highlands

No access and recreation policies are required.

Area 5 - Morro Rock

Policy 1.15. The area located west of the Embarcadero alignment projected north shall be designated as open space/recreation.

Policy 1.16. The dunes area north of Atascadero Road (State Highway 41) and west of the High School shall be designated as environmentally sensitive habitat. Portions of the area suitable for passive recreational use shall be designated open space/recreation.

Policy 1.17. Until the PG & E property is needed for coastal-dependent energy industrial uses, interim commercial/recreational fishing and boating uses and access uses shall be allowed as provided for in Policy 5.02. When PG & E property is needed for coastal-dependent energy industrial uses, a vertical (east-west) public access path for pedestrians and bicyclists no less than 10 feet in width shall be required as a condition of development, consistent with public safety needs and the need to protect the operations of the new facilities. The exact location of the accessway shall be determined during project review for development permit approval. A location paralleling the creek shall be allowed, provided the path does not encroach into environmentally sensitive habitat areas or buffer zones.

Policy 1.18. The City-owned property located south of State Highway 41-Atascadero Road shall be designated for coastal-related commercial and industrial uses for the commercial fishing and boating industries. The only allowable visitor-serving recreational use shall be overflow camping facilities. Until the

primary use is proposed for development, the interim uses shall be subject to short-term leases of five to ten years until such time as the property is required for its primary permitted use.

Policy 1.19 (Deleted per revisions of September, 1982.)

Area 6 - Bayfront

Policy 1.20 In reviewing development proposals along the bayfront, the City shall apply the following standards and make the necessary findings to assure consistency with LUP and Chapter 3 Coastal Act policies:

(1) Each application for new development or lease which would result in an increase in intensity of use, change of use, or expansion of an existing structure seaward or an increase in height shall include a physical provision for continuous lateral access along the bayfront portion of the parcel. Developments which require this access provision are defined as improvements which would result in a change in use, an increase of 10 percent or more of internal floor area of an existing structure or an additional improvement of 10 percent or less where an improvement of the structure had previously been undertaken, increase in height by more than 10 percent of an existing structure and/or any significant non-attached structure such as garages, fences, shoreline protective works or docks.

(2) Each applicant for development as defined in part (1) above shall be required to provide lateral access unless the applicant can demonstrate based on engineering analysis that all or a portion of such access is physically infeasible and there are no design alternatives capable of overcoming topographical or site constraints that jeopardize public safety and fragile coastal resources.

(3) If continuous lateral access across the bayward portion of the parcel is found not to be feasible due to topographical or site constraints as defined in part 2 above, the applicant shall contribute an in-lieu fee (equivalent to the cost of construction of an accessway along the bayward edge of the structure proposed) to the City. Fees shall be used to coordinate the bayfront lateral and vertical access program, and shall be used to link lateral access where feasible and to improve vertical access provisions.

(4) Applications for coastal-dependent development where provisions of continuous lateral access would

conflict with the day-to-day operations of the facility(s) shall be conditioned by the City to make maximum provisions for public viewing areas and/or walkways in suitable locations on the development site.

(5) Lateral access may be achieved in the following manner:

a. in the form of open or enclosed walkways a minimum of 8 feet wide across the bayward side of the proposed development;

b. exterior decking and/or boardwalks extending bayward a maximum of 12 feet which provide for public access along the bayfront;

c. designated breezeways and/or walkways within the structure provided such breezeways are located as close as possible to the bay and are designed to provide the most direct, convenient connection between adjacent existing or potential lateral accessways; exterior access is preferred over interior access.

Policy 1.21. The City shall require provisions of vertical access to the bayfront. Requirements for vertical accessways may be modified so as to provide adequate vertical access in the area (i.e., a minimum of one every 300 feet and/or every street stub) linking the vertical accessways with lateral access provisions along the bayward sides of structures where feasible.

The City shall pursue funding sources, and/or designate as part of its long term capital improvements program, the construction of public stairways within the existing public street rights-of way at Surf Street, Dunes Street, Driftwood Street, and Anchor Street.

Policy 1.22. The City shall develop a parking management district for the Bayfront planning area which is coordinated with other parking management districts proposed within the City. A parking management plan shall be developed prior to district formation. The plan shall include the feasibility of:

a. Parking fees or time limits on parking
b. Landscaping and small park areas
c. Redevelopment of existing parking areas to increase use
d. Provision of additional parking areas

e. Provision for recreational vehicle only parking areas
f. Provision of motorcycle/bicycle parking areas
g. Pedestrian access from parking areas and location of public service facilities
h. Street-end parking as per Policy 1.24.

Policy 1.23 (Deleted per revisions of September, 1982.)

Policy 1.24. The public restrooms now located at the Morro Bay Boulevard street-ends shall be relocated to a more suitable location prior to redevelopment of the street-end. A possible relocation would be to the Centennial Park or to a park area developed in conjunction with the parking management district.

Policy 1.25. New developments on bluff tops shall not exceed a height of 14 feet above the existing bluff top. In addition, new developments shall be designed in such a manner as to avoid alteration of bluff faces, and where feasible given physical constraints, shall be designed to step down bluff faces.

Policy 1.26. Lateral public access along the waterfront revetment shall be provided in all new developments consistent with Policy 1.20, with public safety needs and the need to protect public rights, rights of private property held by leaseholders, and natural resource areas from overuse.

Policies 1.27 and 1.28 (Deleted per revisions of September, 1982.)

Area 7 - Central Morro Bay

Policy 1.29. The City will take the following actions to enhance access on the fisherman's fuel dock property:

a. The City will initiate proceedings to remove the makeshift barrier between the existing coffee shop and bulk head in the area south of the existing Walton lateral access.

b. As a condition to any improvement or expansion of the fisherman's fuel dock, the City will require filing of a deed restriction and posting of access that would guarantee public access over the road leading from the City's easement to the fuel dock and land area.

Policy 1.30. The City shall develop a parking management district for the Central Morro Bay commercial business area. A parking management plan shall be developed prior to district formation.

Policy 1.31. The following conditions shall be required as part of a development permit on the Stocking Property (APN: 66-391-Ø5):

(1) The development shall include a public recreation area comprising approximately 3.18 acres (31% of the total site) located between the bayfront and any major site access road. The recreation area shall include a bicycle and pedestrian path along the southern perimeter of the property which is a minimum of 15 feet wide, a parking area with a minimum of 1Ø spaces, access stairs to the bay in the least environmentally sensitive location, viewing deck, restrooms and picnic area(s) including tables, benches and fire rings. The siting of recreational amenities shall be subject to review and comment of U.S. Fish and Game. Buffers to protect sensitive habitat shall be incorporated into project design, consistent with environmentally sensitive habitat policies contained in the LUP.

(2) A signing plan to advise the public that the site is available for public recreational use. The signs shall be lowscale and utilize natural materials.

(3) The applicant for property development shall record an irrevocable offer to Grant a Fee Interest to a public agency or to a private association with the City having right of first refusal, for the recreational area described in item (1) above. The City shall exercise its right of refusal within three years of the offer. If said right of refusal is not exercised within three years, it shall be made available to other public agencies or private associations approved by the Coastal Commission. Such Grant of Fee interest shall be free of prior liens or encumbrances.

Area 8 - Morro Bay State Park

Policy 1.32. As a condition to the approval of any permit application for developments within Morro Bay State Park, the City shall require the State Department of Parks and Recreation to develop a master plan for the Morro Bay State Park. The master plan shall be consistent with the provisions of Chapter 3 of the Coastal Act and shall include the following specific provisions:

a. Designation of the State Park lands as open space/recreation land uses.

b. Improvements to the existing circulation system including:

(1) Retention and improvement of the existing park entrance road through the park which connects South Bay Boulevard with Main Street.

(2) Provision of a bicycle and jogging trail adjacent to the park entrance road from Main Street to South Bay Boulevard.

(3) An improved, more clearly defined, three-way intersection at the South Bay Boulevard park entrance.

(4) Retention and improvement, without expansion, of the existing marina development at Midway Marina as a recreational boating facility.

c. An implementation plan for the utilization of reclaimed water for irrigation.

Policy 1.33. The City shall designate Fairbanks Point, Windy Cove, the Black Hill Natural Area, Chorro Creek and the Morro Bay estuary as environmentally sensitive habitat areas. These designations are reflected on the LUP land use map.

Policies 1.34 - 1.42 (Deleted per revisions of September, 1982.)

Area 10 - Morro Bay Sandspit

Policy 1.43. The privately-owned parcels on the sandspit shall be designated as environmentally sensitive habitat with passive recreational use allowed consistent with resource protection policies contained in the LUP and Coastal Act.

Policy 1.44. The City shall request that an appropriate state agency acquire the privately-owned parcels on the sandspit.

Policy 1.45. The City shall request that the state initiate a program to stabilize and revegetate the northern section of the sandspit in order to reduce sedimentation of the harbor occurring from windblown sand.

IV. VISITOR-SERVING FACILITIES

A. INTRODUCTION

Visitor-serving commercial establishments within the coastal zone, in conjunction with the attractive shoreline, provide numerous opportunities for public recreation and access. These opportunites for use and enjoyment of the coastal area should be enhanced through adequate provision for visitor-serving facilities.

Visitor-serving development includes hotels, motels, campgrounds, restaurants and recreational vehicle parks along with commercial/recreational developments such as shopping and amusement areas which provide services for visiting tourists. These visitor facilities, together with public parks and beaches, provide major opportunities for public access and recreation in the coastal area.

B. COASTAL ACT POLICIES

In order to insure that opportunities for all persons are provided for recreational use and enjoyment within the Coastal Zone, the Coastal Act of 1976 mandates comprehensive policies regarding visitor-serving uses. The major policies are as follows:

PRC Section 30212.5 Wherever appropriate and feasible, public facilities, including parking areas or facilities, shall be distributed throughout an area so as to mitigate against the impacts, social and otherwise, of overcrowding or overuse by the public of any single area.

PRC Section 30213 Lower-cost visitor and recreational facilities shall be protected, encouraged, and, where feasible, provided. Developments providing public recreational opportunities are preferred. Neither the commission nor any regional commission shall either (1) require that overnight room rentals be fixed at an amount certain for any privately owned and operated hotel, motel, or other similar visitor-serving facility located on either public or private lands; or (2) establish or approve any method for the identification of low or moderate income

	persons for the purpose of determining eligibility for overnight room rentals in any such facilities.
PRC Section 30220	Coastal areas suited for water-oriented recreational activities that cannot readily be provided at inland water areas shall be protected for such uses.
PRC Section 30221	Oceanfront land suitable for recreational use shall be protected for recreational use and development unless present and forseeable future demand for public or commercial recreational activities that could be accommodated on the property is already adequately provided for in the area.
PRC Section 30222	The use of private lands suitable for visitor-serving commercial recreational facilities designed to enhance public opportunities for coastal recreation shall have priority over private residential, general industrial, or general commercial development, but not over agriculture or coastal-dependent industry.
PRC Section 30223	Upland areas necessary to support coastal recreational uses shall be reserved for such uses, where feasible.
PRC Section 30250(c)	Visitor-serving facilities that cannot feasibly be located in existing developed areas shall be located in existing isolated developments or at selected points of attraction for visitors.

C. VISITOR-SERVING RESOURCES, ISSUES AND CONCERNS

The majority of the visitor-serving facilities are located along State Highway One, Morro Bay Boulevard, and between Harbor Street and Pacific Street along the Embarcadero and above the bluff line. The City's major industry is tourism, and as a result, emphasis is placed on the provision of those services required by tourists of all income categories. This is evidenced by the provision of campgrounds, RV parks, low cost hotels and resort motels, a variety of gift shops, take-out and sit down resort restaurants.

The following description summarizes the visitor-serving facilities in the City. Support information is contained in Appendix D.

1. Overnight Accommodations

Morro Bay offers a wide range of accommodations, most of which are affordable to families of low and moderate incomes. The City in 1980 had 33 motels containing about 750 rooms. Overnight rates ranged from $16.00 to $45.00 (in 1980 dollars) a night, double occupancy. In addition, there were seven travel trailer (RV) parks containing about 350 overnight spaces. Full hook-ups and services were available at all of the travel trailer parks. Overnight rates ranged from $6.50 to $8.00 (in 1980 dollars) per hook-up.

Both the Atascadero Beach State Park and Morro Bay State Park have overnight campgrounds; in 1980, Morro Bay State Park had 135 overnight campsites and Atascadero Beach State Park had 104 campsites. Overnight rates were $4.00 to $5.00 per site (in 1980 dollars) for eight persons.

The total of 1,191 overnight accommodations in 1980 could facilitate approximately 4,240 persons (1112 persons in campgrounds, 1,850 persons in motels and 1,280 in RV parks).

During the busy three-day weekends and summer months Morro Bay has a shortage of accommodations; however, during the winter months occupancy rates are low. The capability of providing additional accommodations, realizing the slow winter months and resulting economic hardships on the part of motel/RV park owners, is an identifiable problem. Overflow RV and camping accommodations for peak visitor periods is one practical solution currently under investigation by the City. Motels will be constructed as economic conditions allow as long as sufficient space exists.

2. Restaurants

In 1980 the City contained 24 restaurants, which offer a wide variety of different types of foods at various costs. These restaurants collectively could accommodate approximately 1,795 persons at one time. Many of the restaurants are located along the Embarcadero, which provides a scenic view of the bay, coastline and Morro Rock.

D. OTHER VISITOR-SERVING FACILITIES

The category of visitor-serving facilities is broad and contains land uses which are oriented to the services of visitors. These uses are distributed throughout the City but are particularly clustered at the State Highway One, State Highway 41 intersection and the Bayfront-Central Morro Bay Planning Areas near the harbor. Services in 1980 included service stations (there are 24), gift shops (about 16), grocery and convenience stores (about 14), liquor stores (about 4), and a range of services including ice cream parlors, a theater, bait and tackle shops, hardware

stores, clothing stores and many other services which could serve both the visitor and the resident.

E. EXISTING RESIDENTIAL AREAS

There are four major areas in Morro Bay which provide recreational and beach access opportunities for visitors and residents. Most of the recreational activities the City offers are free, including the use of the beaches, harborfront, and bay, for a variety of active (e.g. fishing) and passive (e.g. bird watching) recreational pursuits. The following are descriptions of each facility, plus the recreational and visitor-serving opportunities per facility. The four areas are:

(1) The Embarcadero/Morro Rock
(2) Morro Bay State Park
(3) Atascadero State Beach
(4) Montana de Oro State Beach

1. The Embarcadero/Morro Rock

The "Embarcadero" area of the City of Morro Bay is the hub of activity for visitors by providing a variety of recreational opportunities, coastal access areas and numerous visitor services. Within the span of waterfront development, visitors may experience interesting small retail store complexes, a variety of restaurants, commercial boating and fishing. Visitors can also stroll along pedestrian walkways which provide inactive recreation such as window shopping, conversing and sightseeing. The entire "Embarcadero" area provides visitors and residents direct exposure to the bay, Morro Rock and a working fishing harbor.

Morro Rock is a major landmark and provides a visual focus for the entire area. By providing access for autos, pedestrians and bicycles through a land causeway, visitors as well as residents can enjoy picnicking and other passive activites and view of the ocean, or a panorama of the bay and coastline.

2. Morro Bay State Park

Morro Bay State Park is the largest park facility within the Coastal Zone. The park encompasses approximately 2,102 acres with 39,515 linear feet of bay frontage. Within the park, there are 135 overnight campsites which could accommodate approximately 550-600 overnight guests. Also within the park are 50 picnic or day-use-only sites, as well as approximately 2 miles of nature trails for hiking and walking. Morro Bay State Park, sited in a beautiful wooded setting, provides a variety of visitor recreational opportunites, such as:

A. 18-hole golf course
B. State Museum of Natural History
C. Salt Marsh - Wildlife refuge area

D. Black Mountain natural area
E. Campgrounds
F. Boating facilities

Between 1976 and 1977, the Park had over 1.8 million visitors, an increase of about 350,000 people since the 1971 and 1972 visitor period. The State Department of Parks and Recreation anticipates a steady increase in use, principally because of its location halfway between San Francisco and Los Angeles. According to the Department, the peak period of visitor use is May through September. During this major peak period, campsites and day use facilities are usually at capacity.

3. Atascadero State Beach

Atascadero State Beach, located in the northern sector of the City of Morro Bay, has approximately 75 acres of public beach area. With its 104 campsites, Atascadero State Beach provides a major visitor-serving and recreational location. The park is accessible via the intersection of Yerba Buena Street and Highway One. Along the 9,950 feet of ocean frontage, visitors may enjoy camping, surfing, fishing, beach activities, picnicking, walking and jogging.

The number of visitors during the 1976 and 1977 season was about 222,000, an increase since the 1970 and 1971 season of about 100,000 visitors. It is reasonable to assume that this facility receives overflow from Morro Bay State Park during busy weekends. Visitor use has declined since 1976; its peak use was 529,438 in 1973. Assuming that the facilities will remain in their current state and condition, visitor count will probably remain the same or drop slightly to 200,000 in the future. According to the State, the peak period of use is June through September, with July being the peak month.

4. Montana de Oro State Park

A small portion of Montana de Oro State Park is within the City limits, and comprises the southernmost boundary of the City along the sandspit. No facilities are provided; the park's facilities are located in the park proper, about seven miles south. Use of the sand spit is limited to clamming and passive recreational uses. The sand spit is an important part of the scenic viewshed enjoyment of visitors, and its open space qualities are preserved as a result.

F. RESOURCES BY PLANNING AREA

The visitor-serving resources are identified specifically in the North Morro Bay planning area, the Bayfront planning area, the Del Mar planning area and the Morro Bay State Park planning area. The visitor services within the planning areas have been given in the previous discussion. The development potential is given as follows for these specific planning areas.

1. Planning Area 1 - North Morro Bay and
   Planning Area 8 - Morro Bay State Park

The state parks in these two planning areas are a very important part of the visitor's attraction to Morro Bay, and they should be improved and expanded consistent with the preservation of the habitat and scenic characteristics of the City. The following improvements and expansion are recommended:

1. Additional camping spaces at Morro Bay State Park
2. Facilities improvement at Atascadero State Beach
3. Provision of overflow RV spaces at both State Park facilities
4. Acquisition of the privately-owned parcels on the sand spit and adjacent to Montana de Oro State Park in order to ensure its open space preservation use (see Policy 1.44 in Shoreline Access and Recreation, Chapter III).

2. Planning Area 1 - North Morro Bay and
   Planning Area 2 - Del Mar

The north Main Street area is a commercial strip extending 1.5 miles from Atascadero Road (Highway 41) to Zanzibar Street, near the northern boundary of the City. This area, encompassing approximately 50 acres, includes 20 parcels of undeveloped land. These parcels comprise approximately 14 acres and range in size from 1/10 acre to 10 acres.

Although this area has potential for visitor-serving development, it does have some major problems. Overall single lot sizes are small with shallow depth. Approximately 80 percent are 1/4 acre or less. Another major problem is limited access. The freeway (Highway One), which handles most traffic through this area, has caused the commercial area to be somewhat isolated from most visitor traffic flow. Additionally, many of the existing commercial sites in this area are old and in need of maintenance. Therefore, visitor-serving commercial uses in this area should be clustered at the State Highway One-State Highway 41 intersection and should serve those travelers passing through the City.

The intersection west of State Highway One and State Highway 41 also offers the potential for increased visitor-serving uses. This area contains vacant acreage which could be developed into visitor services, particularly motels. When Embarcadero Road is connected to State Highway 41 this will become a secondary entrance to the City. Visitor services currently exist in this area.

3. Planning Area 6 - Bayfront

In terms of potential development and expansion of visitor-serving facilities, the City encourages the bluff area, bordered by Front Street and Main Street, which extends to both Olive and

Surf Streets. This area, currently providing zones for motel/hotel uses, visitor-serving commercial uses, eating and drinking establishments as well as recreational vehicle parks, encompasses an area of approximately 80 acres, with approximately nine acres currently undeveloped. These nine acres are composed of thirteen parcels ranging in size from 3.4 acres to 1/5 acre. Development of visitor-serving commercial facilities in the bluff district is encouraged because this area provides an important link between the downtown and Embarcadero.

G. VISITOR-SERVING POLICIES

1. General Policies

Although the City has visitor-serving commercial facilities for all income groups and a variety of recreational opportunities, it is necessary to ensure that adequate facilities are provided to meet future needs. The following general policies apply to maintenance of adequate visitor facilites which have no adverse effect on community scale, preservation of the environment or public services. See Chapter III for specific area recreation policies.

Policy 2.01. Lower-cost visitor and recreation facilities for persons and families of low or moderate income shall be protected, encouraged, and where feasible, provided. Developments providing public recreational opportunities are preferred.

Policy 2.02. Subject to the appropriate land use designation set forth herein, the use of private lands suitable for visitor-serving commercial recreational facilities designed to enhance public opportunities for coastal recreation shall have priority over private residential, general industrial, or general commercial development, but not over agriculture or coastal-dependent industry.

Policy 2.03. Consistent with LUP Policy 7.06A, the Embarcadero between Beach Street on the north, Main Street on the east, Olive Street on the South and the waterfront area on the west, shall be considered a mixed commercial fishing and visitor-serving recreational use area. With regard to the siting of new developments, priority shall be given for coastal-dependent uses located on the west side of the Embarcadero.

Policy 2.04. The City will continue to encourage, protect, and maintain a variety of recreational activities, such as art shows, parades, group events, etc., in appropriate locations of the City.

Policy 2.05. Future demands of the tourist industry shall be provided for when considering new development in Mixed Use Areas A and C and in the Embarcadero. In addition, the siting of new developments shall be consistent with the Coastal Act, specifically including Coastal Act Sections 30222 and 30255.

Policy 2.06. The removal or conversion of lower-cost visitor-serving uses and facilities shall be prohibited unless the use will be replaced by a facility offering comparable visitor-serving opportunities. Demolition of lower-cost visitor-serving facilities shall be prohibited unless the City finds that the facility is structurally unsound and the cost of rehabilitation would make the existing use uneconomical, as defined in Phase III of the Local Coastal Program.

Policy 2.07. New hotel/motel developments within the coastal zone shall, where feasible, provide a range of rooms and room prices in order to serve all income ranges. Similarly, lower cost restaurants, or restaurants which provide a wide range of prices are encouraged. Consistent with Coastal Act Section 30213, the City shall in no event (1) require that overnight room rental be fixed at an amount certain for any privately owned and operated hotel, motel, or other similar visitor-serving facility located on either public or private land; or (2) establish or approve any method for the identification of low or moderate income persons for the purpose of determining eligibility for overnight room rentals in any such facilities.

Policy 2.08. In reviewing visitor-serving development in the Embarcadero as defined in Policy 2.03, the City shall find that provision of off-street parking is sufficient to serve the development's peak demands as defined in Phase III of the Local Costal Program. Parking demands shall be satisfied by the provision of off-street facilities on the development site or within 300 feet. Once a parking management program for the Embarcadero has been developed which provides off-street parking resources, and such a program is implemented, applications for development shall be allowed to satisfy their peak parking demands through participation in the program. If the program includes an in-lieu fee system, the applicant shall provide the City an in-lieu fee of an amount equal to the purchase of land and construction of the number of spaces needed to serve the development's peak needs. The City shall use the fees to provide for parking support in the Embarcadero.

V. PUBLIC WORKS AND LOCATING AND PLANNING NEW DEVELOPMENT

A. INTRODUCTION

This chapter describes the City's public works characteristics, and those services relating to locating and planning development. These two topics are discussed together because, in the case of the City of Morro Bay, they interrelate; the City's management of its domestic water facilites and wastewater treatment will determine how future growth will be accommodated in the City. The Coastal Act give priority designations to coastal dependent industrial uses, agriculture and recreation and visitor-serving facilities for public services where existing or planned public works facilities can accommodate only a limited amount of new development.

While growth in Morro Bay has contributed to a fairly small average annual population increase over the past 20 year period, a renewed interest recently has been focused on sustaining the resources and infrastructure to support that population and the City's future potential.

In the past few years it was speculated that the City's reliance on a (presumed) limited and shallow groundwater basin had resulted in exceeding the (apparent) safe annual yield of the groundwater basins and water quality. These assumptions were later to be proven erroneous and without foundation. Studies completed by the City of Morro Bay, as part of its ongoing Water Management Plan, demonstrate through sound engineerng evaluation that "overdraft" of the basins has not occurred, water resources are available to meet present and future demand, and satisfactory groundwater quality exists. Water Management Plan attention has now been turned to enhancing the City's ability to supply water and improve facility locations while maximizing their utility. Future needs of Morro Bay have also been anticipated by a planned wastewater treatment plant expansion (completion date in 1983).

As a result of previous decisions regarding water supply facilities and uninformed evaluations, Morro Bay has had to endure a history of water and building permit rationing and de facto moratoriums on new water and sewer hook-ups.

The City of Morro Bay has recognized the attraction that coastal areas have for increased development and understands the dynamics between growth and the public services and facilities needed to support growth or used to induce it. In order to assure a proper level of urban services and growth consistent with the Coastal Act's emphasis on the protection, enhancement and restoration of

coastal resources, Morro Bay's Local Coastal Plan Work Program has taken the initiative to:

(1) Discuss and analyze Coastal Act Policies regarding public works facilities and new devleopment in the Coastal Zone;

(2) Inventory and describe existing and proposed water and sewage facilities, including importation and reclamation proposals;

(3) Determine current allocation of existing water and sewage services and project allocation of future water and sewage capacities among various types of uses in the Coastal Zone;

(4) Propose policies to ensure orderly growth of the community in keeping with available public services and works.

Given the City's normal urban service demands, and the special attention Morro Bay has been given by the State Coastal Commission through its precedental "Filer" decision (creating a de facto building moratorium in Morro Bay), the Public Works Chapter may be the most important part of Morro Bay's Local Coastal Program.

B. COASTAL ACCESS POLICIES

Recognizing the demands on the coastal area for public works-related developments, the Coastal Act contains numerous general and specific policies regarding public works. Although the Coastal Act emphasizes the protection, enhancement, and restoration of coastal resources, it also recognizes that public works development is necessary for the social and economic well-being of the state. Public Works facilities are defined in the Coastal Act as follows:

Sec. 30114. (a) "All production, storage, transmission, and recovery facilities for water, sewage, telephone, and other similar utilities owned or operated by any public agency or by any utility subject to the jurisdiction of the Public Utilities Commission, except for energy facilities."

The primary policy of the Coastal Act that guides public works development in the Coastal Zone is Section 30254 which appears below. The other sections of the Act relate to public works and environmental protection, preservation of agricultural land and location of new development.

Sec. 30240. (a) "Environmentally sensitive habitat areas shall be protected against any significant disruption of habitat values, and only uses dependent on such resources shall be allowed within such areas. (b) Development in areas adjacent to

environmentally sensitive habitat areas and parks and recreation areas shall be sited and designed to prevent impacts which would significantly degrade such areas, and shall be compatible with the continuance of such habitat areas.

Sec. 30241. "The maximum amount of prime agricultural land shall be maintained in agricultural production to assure the protection of the areas' agricultural economy, and conflicts shall be minimized between agricultural and urban land uses through all of the following:

(a) By establishing stable boundaries separating urban and rural areas, including, where necessary, clearly defined buffer areas to minimize conflicts between agricultural and urban land uses.

(b) By limiting conversions of agricultural lands around the periphery of urban areas to the lands where the viability of existing agricultural use is already severely limited by conflicts with urban uses and where the conversion of the lands would complete a logical and viable neighborhood and contribute to the establishment of a stable limit to urban development.

(c) By permitting the conversion of agricultural land surrounded by urban uses where the conversion of the land would be consistent with Section 30250.

(d) By developing available lands not suited for agriculture prior to the conversion of agricultural lands.

(e) By assuring that public service and facility expansions and nonagricultural development do not impair agricultural viability, either through increased assessment costs or degraded air and water quality.

(f) By assuring that all divisions of prime agricultural lands, except those conversions approved pursuant to subdivision (b), and all development adjacent to prime agricultural lands shall not diminish the productivity of prime agricultural lands.

Sec. 30254. "New or expanded public works facilities shall be designed and limited to accommodate needs generated by development or uses permitted consistent with the provisions of this division; provided, however, that it is the intent of the legislature that State Highway Route One in rural areas of the coastal zone remain a scenic two-lane road. Special districts shall not be formed or expanded except where assessment for, and provision of, the service would not induce new development inconsistent with this division. Where existing or planned public works facilities can accommodate only a limited amount of new development, services to coastal-dependent use, essential public services and basic industries vital to the economic health of the region, state or nation, public recreation, commercial

recreation, and visitor-serving land uses shall not be precluded by other development.

Sec. 30231. "The biological productivity and the quality of coastal waters, streams, wetlands, estuaries, and lakes appropriate to maintain optimum populations or marine organisms and for the protection of human health shall be maintained, and where feasible, restored through, among other means, minimizing adverse effects of wastewater discharges and entrainment, controlling runoff, preventing depletion of groundwater supplies and substantial interference with surface water flow, encouraging wastewater reclamation, maintaining natural vegetation buffer areas that protect riparian habitats, and minimizing alteration of natural streams."

Sec. 30236. "Channelizations, dams, or other substantial alterations of rivers and streams shall incorporate the best mitigation measures feasible, and be limited to (1) necessary water supply projects, (2) flood control projects where no other method for protecting existing structures in the flood plain is feasible and where such protection is necessary for public safety or to protect existing development, or (3) developments where the primary function is the improvement of fish and wildlife habitat.

(a) By establishing stable boundaries separating urban and rural areas, including, where necessary, clearly defined buffer areas to minimize conflicts between agricultural and urban land uses.

(b) By limiting conversion of agricutlural lands around the periphery of urban areas to the lands where the viability of existing agricultural use is already severely limited by conflicts with urban uses and where the conversion of the lands would complete a logical and viable neighborhood and contribute to the establishment of a stable limit to urban development.

(c) By developing available lands not suited for agriculture prior to the conversion of agricultural lands.

(d) By assuring that public service and facility expansion and nonagricultural development do not impair agricultural viability, either through increased assessment costs or degraded air and water quality.

(e) By assuring that all division of prime agricultural lands, except those conversions approved pursuant to subdivison (b) of this section, and all development adjacent to prime agricultural lands shall not diminish the productivity of such prime agricultural lands."

Sec. 30240. (b) "Development in areas adjacent to environmentally sensitive habitat areas and parks and recreation areas shall be sited and designed to prevent impacts which would

significantly degrade such areas, and shall be compatible with the continuance of such habitat areas."

Sec. 30250. "New residential, commercial, or industrial development except as otherwise provided in this division, shall be located within, contiguous with, or in close proximity to, existing developed areas able to accommodate it or, where such are not able to accommodate it, in other areas with adequate public services and where it will not have significant adverse effects, either individually or cumulatively, on coastal resources. In addition, land division, other than leases for agriculture uses, outside existing developed areas shall be permitted only where 50 percent of the usable parcels in the area have been developed and the created parcels would be no smaller than the average size of surrounding parcels.

(a) Where feasible, new hazardous industrial development shall be located away from existing developed areas.

(b) Visitor-serving facilities that cannot feasibly be located in existing developed areas shall be located in existing isolated developments or at selected points of attraction for visitors. (Amended by Cal. Stats. 1979, Ch. 1090)."

Sec. 30252. "The location and amount of new development should maintain and enhance public access to the coast by (1) facilitating the provision or extension of transit service, (2) providing commercial facilities within or adjoining residential development or in other areas that will minimize the use of coastal access roads, (3) providing nonautomobile circulation within the development, (4) providing adequate parking facilities or providing substitute means of serving the development with public transportation, (5) assuring the potential for public transit for high intensity uses such as high-rise office buildings, and by (6) assuring that the recreational needs of new residents will not overload nearby coastal recreation areas by correlating the amount of development with local park acquisition and development plans with the provision of onsite recreational facilities to serve the new development."

C. RESOURCE INVENTORY AND CONSTRAINTS

An important factor in determining the type, location and intensity of land uses within the community is the capability of the City's water and sewage systems to accommodate new growth. The Coastal Act requires that new development be closely correlated with service capacity. Therefore, to implement the Coastal Act, this section will inventory existing service capacity as well as identify the opportunities and constraints to expand and enhance these services.

1. Water Resources

a. Water Supply

Like many coastal communities, the City of Morro Bay is dependent upon groundwater for its primary water supply. This water is extracted from the adjacent Chorro and Morro Creek Basins (see Figure 20). The safe yield for these two basins was estimated in 1969 by the Department of Water Resources to be 1,700 acre-feet per year each. However, based upon recent engineering studies these figures proved to be too low.

The City also has an arrangement for water from Whale Rock Reservoir. This specific water is for emergency use, noting that the agreement with the Whale Rock Commission must be renewed each year. This water source has only been used once by the City during the 1972 statewide drought and is not considered to be significant in the long term water management forecast.

Currently, the City has eight (8) wells in the Chorro Basin and another eight (8) in the Morro Basin. Due to high salt content, however, two of the Morro Basin wells are for emergency use only.

With the exception of total dissolved solids and one March 1981 well number 11A iron concentration, the groundwater from the two basins meets all acceptable water quality standards. The only treatment the water receives is chlorination. The City's water distribution system generally needs an accelerated maintenance schedule to maintain its condition and correct any leaks and/or low pressure situations.

b. Water Demand

In response to droughts, water production in the two basins has fluctuated over the last ten years. Current groundwater production by the City totals 1,611 acre-feet per year. To accurately project future water demand, it is necessary to evaluate past and present water use. This is done by developing a water use factor from total water production and population. This factor, expressed in gallons per capita per day (gpcd), incorporates all water uses within the community into one comprehensive number.

As given in Table 4 (and shown in Figure 10), individual water use in the City has declined markedly over the last decade, also in response to drought, water conservation and rationing measures. Based on these trends, the City's consulting engineers have assumed a 166 gpcd figure (0.19 af/capita/year) for making future water demand projections. Using this figure, the consultants have estimated the City's future water demand for the year 2000 as 2,268 acre-feet a year (0.19 af/yr./person x 12,195 people; Brown and Caldwell, 1981).

FIGURE 20
MORRO, CHORRO AND LOS OSOS
HYDROLOGIC SUBAREAS

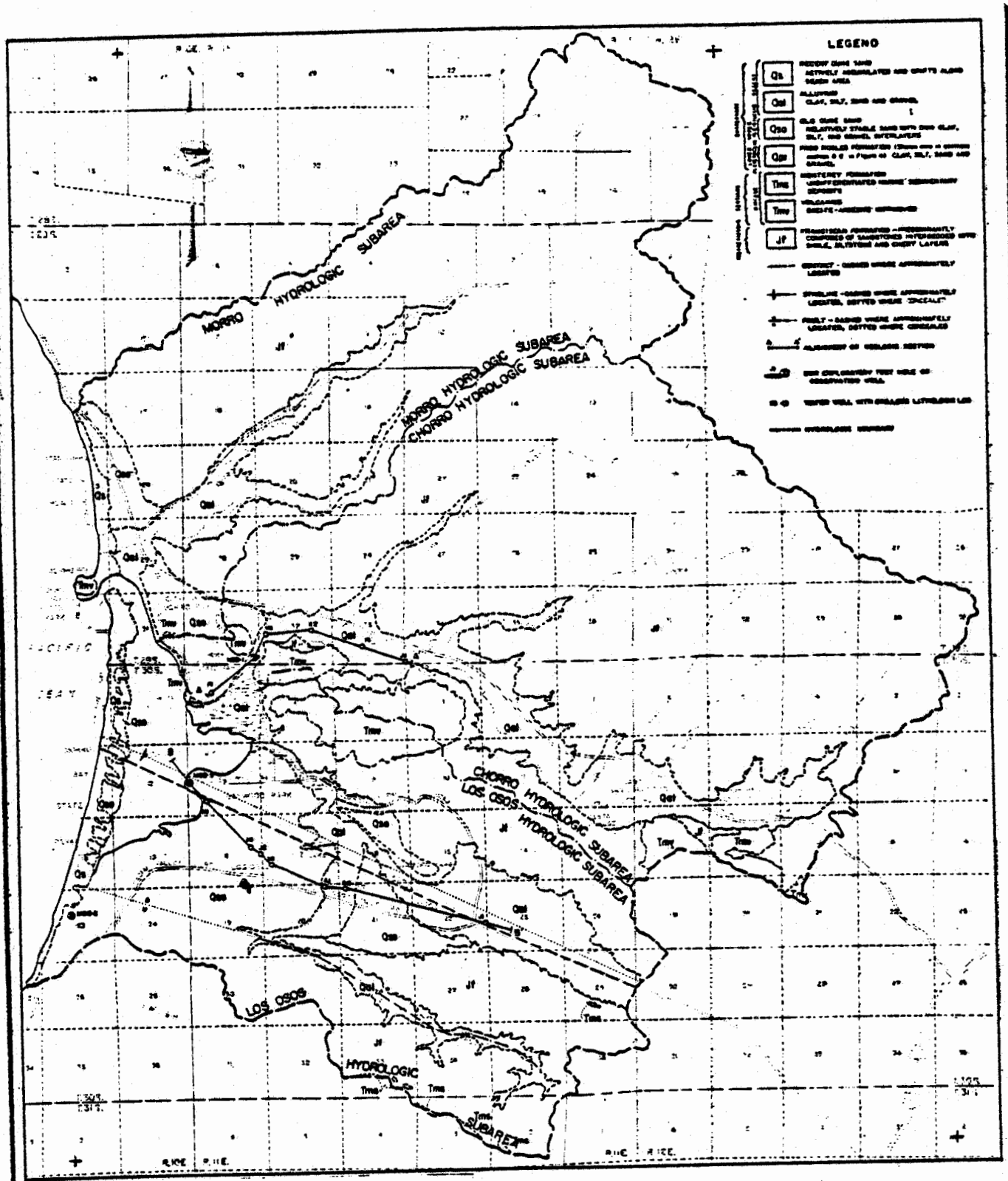


TABLE 4*
HISTORICAL URBAN WATER DEMAND

Year	Urban Population	Total water production million gallons[a]	Water use factor gcd[b]
1970	7,109	500.01	193
1971	7,450	499.55	184
1972	7,514	503.62	184
1973	7,725	464.21	165
1974	7,942	483.01	167
1975	8,165	491.50	165
1976	8,394	513.07	167
1977	8,561	406.78	130
1978	8,729	465.92	146
1979	8,896	525.94	162
1980	9,064	524.90	159

[a]From City of Morro Bay, groundwater production records

[b]From total production, divided by urban population

*Revised from Brown and Caldwell, 1981 to reflect recent population information

The City's build-out population is estimated to be 13,500 people. Build-out water demand is therefore, estimated to be 2,565 acre-feet a year (0.19 af/yr./person x 13,500 people).

Anticipating that the "safe yield" of the two groundwater basins would be exceeded, the City adopted a program in 1977 of controlling new growth through issuing a fixed number of water equivalencies necessary for the historic annual development rate. The equivalencies were established by multiplying the number of building permits issued for each specific land use by its average water consumption and then equated to residential units. 161 water equivalencies were set to allow an annual growth rate of three percent, a rate which would not exceed the safe yield of the two basins until 1982. At this time, the City expects that Whale Rock Reservoir would be available to augment the water supply.

The water equivalency program is dependent on the ability of the groundwater basins to produce 1,700 acre-feet per year. City water production records show however, that this level of production is not always achieved during drought condition due to mismanaged water facilities. Additionally, the program needed adjustment to meet the requirements of the Coastal Act in the protection of priority land uses.

The Coastal Act requires that when existing or planned public works facilities can accommodate only a limited amount of new development, certain land uses shall receive priority. These land uses are in order of priority:

(1) Commercial fishing/agriculture
(2) Coastal-dependent industries
(3) Recreation/Visitor-serving uses
(4) Commercial
(5) Industrial
(6) Residential development

City records show no water supplied to agricultural land uses within City limits. The limited agricultural production is provided water from wells outside City limits. Past City records indicate that on the average coastal-dependent (commercial fishig and recreational boating) uses account for approximately two percent of the total annual City water consumption while visitor serving uses account for another 20 percent.

The Chorro and Morro Basins also support notable agricultural operation outside the city limits. While the major activity is grazing on some adjacent hillsides, crop production is found in the bottomlands of the two creeks. Here, irrigated crops are a major consumer of groundwater resources (see the Agricultural Component for a more detailed discussion). Additional rural land uses also rely on the two groundwater basins for water.

Since there has been no monitoring of rural or agricultural water use, until recently, estimating their past and present

water demand is difficult. Using land use acreages, Brown and Caldwell (1981) estimates current agricultural extraction of groundwater from the two basins equals 1,7568 acre-feet per year with other rural land uses utilizing an additional 86 acre-feet. Table 5 gives the current groundwater production for the two basins for all land uses and the estimated year 2000 extractions. Figure 11 graphically shows the projected water demand.

TABLE 5

TOTAL PROJECTED WATER DEMAND
MORRO AND CHORRO BASINS

USES	DEMAND IN ACRE FEET PER YEAR 1979	1990	2000
City of Morro Bay	1,614	2,053	2,268
Rural Areas	86	107	118
Miscellaneous	486	486	486
Agriculture (outside city limits)	1,758	1,865	2,155
TOTAL	3,944	4,511	5,027

SOURCE: Brown and Caldwell, 1981.

c. Existing Water Problems

During nondrought years the City has no water problems that merit discussion other than repair and maintenance of the water distribution system. Absent implementation of a water management plan, the City's existing water production system will not be sufficient to serve existing customers. Recent droughts of the past decade have, however, displayed where improvements to the City's groundwater extraction system are needed. Deficiencies exist predominately as a result of well location. Well placement in close proximity to the seawater/groundwater interface and placement of wells too close to one another are the primary causes of problems during non-drought years. Many of the Morro Basin wells pump groundwater in close proximity to the seawater/groundwater interface. During drought periods, lowering of the water table forces these wells to draw water from the seawater/groundwater interface. This situation is not indicative of seawater intrusion since the seawater/groundwater boundary has not moved inland but is rather a phenomenon known as seawater upconing. In addition, many of the City's wells are located too close to one another. Not only does this placement result in an added expense in terms of pumping costs, it creates a problem during drought years due to mutual interference of wells. Wells too close to one another accents the decrease of pumping level and during drought years when water tables lower, a further decrease in well pumping rates from those of non-drought periods occurs.

FIGURE 10*
URBAN UNIT WATER USE FACTOR

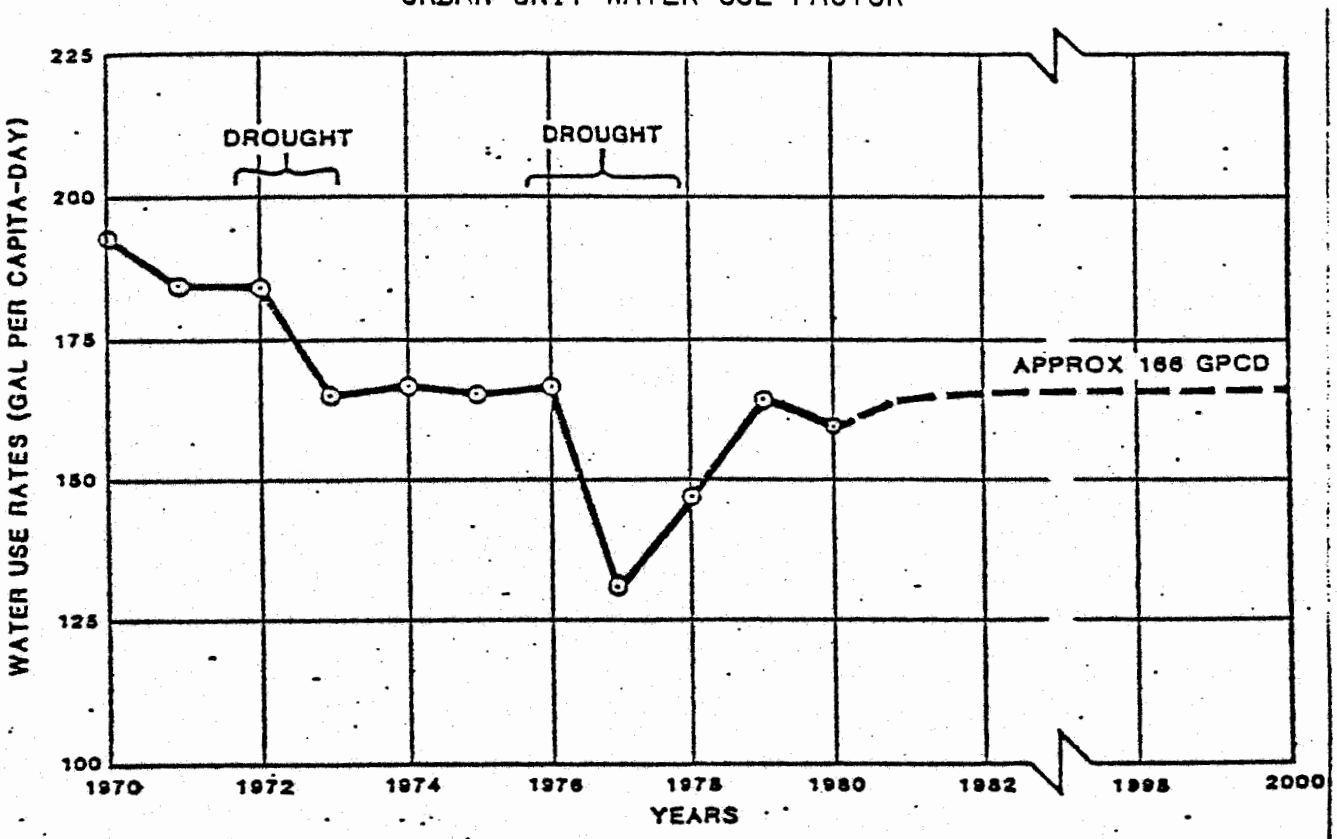
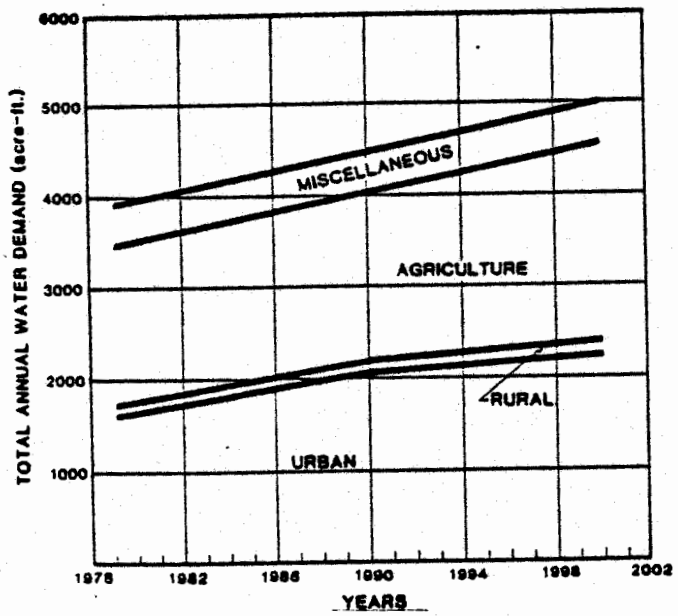


Fig. 4-2. Urban Unit Water Use Factor

*Revised from Brown and Caldwell, 1981 to reflect recent population information.

FIGURE 11

PROJECTED WATER DEMAND



Due to a temporary decline in water levels during the recent 1976-77 drought and the belief that the published value of safe yield at that time was being exceeded, the California Coastal Commission felt the Chorro and Morro Groundwater Basins were in a state of overdraft. In addition, increases in chloride concentrations led the California Coastal Commission to believe that seawater intrusion may be occurring. As a result the California Coastal Commission on December 14, 1977 imposed a de facto building moratorium on the City. Unfortunately, this action was found by engineering studies to be premature and unsupported by the ultimate data conclusions.

d. Water Management Plan

The City's ongoing water management activities involve annual infrastructure improvements (i.e., water line, well pump and storage tank replacement). Indeed, Morro Bay has always had a "Water Management Plan", but in more recent times it has renewed efforts to better manage the resources available. This is illustrated by the February, 1981, study which addresses the steps to be taken to meet the City's water demand through the year 2000 (City Consultant Engineers: Brown and Caldwell; incorporated herein by reference). As a companion and further refinement of the 1981 study, a California Department of Water Resources report was commissioned for completion in 1982. As can be noted, the subject of water management is a dynamic process and information is constantly being collected to adjust future planned program activities. It is the commitment of Morro Bay to continue to monitor all data which will lead to Water Management Plan refinements.

A summary of Brown and Caldwell's Preliminary Water Management Plan major conclusions are provided in the listing which follows:

1. Groundwater currently leaving the Chorro Creek Basin as subsurface outflow amounts to 2,090 acre-feet per year and groundwater currently leaving the Morro Creek Basin as subsurface outflow amounts to 3,400 acre-feet per year. With quantities of subsurface outflow as great as those shown for both basins, it is not possible for seawater intrusion to be occurring in either Chorro Creek or Morro Creek.

2. Past estimates of safe yield for the study area were conservatively low.

3. Due to limited available data, a determination of safe yield for the basins is not presently possible.

4. The long-term yield of the two groundwater basins under a normal year is at least 3,944 acre-feet per year. The total current subsurface outflow of groundwater from both basins is approximately 5,500 acre-feet per year. Therefore it is believed that the long-term yield is much greater than the 3,944 acre-feet per year now being produced. However, all

that can be stated with certainty, at present, is that the current long-term yield under normal year conditions is 3,944 acre-feet per year or greater.

5. In the past, the City of Morro Bay has experienced a deficiency in its ability to supply and distribute water, although water resources available have always been adequate.

6. Although incorrect, previous conclusions that Chorro Creek and Morro Creek Basins were in a state of overdraft may have been reasonable in light of conservatively low published estimates of safe yields.

7. The two groundwater basins within the study area are not now, and have not been, in a state of overdraft.

8. With proper management of available water resources, the long-term yield of the study area is adequate to meet the total water demand anticipated in the year 2000 under conditions of "normal year", "normal drought" and "extreme drought".

9. Groundwater quality is satisfactory for all current purposes in the basins.

10. Occurrence of high chloride water in wells located near the coast have coincided with heavy pumping in those wells and are the result of upconing of saline water from below the well mixing with fresh water in the vicinity of the well screen. This situation is not indicative of seawater intrusion into the groundwater basins, but is only a local condition reflective of well location and pumping patterns.

11. Higher than normal levels of chloride have been found in Chorro Creek Basin in City Well No. 12 located more than one mile inland from the coast, while wells between No. 12 and the coast did show increases in chloride. Chloride levels alone, therefore, do not reliably indicate either seawater intrusion or upconing of saline water.

12. The proposed wastewater reclamation scheme would make up to 770 acre-feet of groundwater available for municipal use each year.

13. Recharge basins used to percolate storm water and other excess surface water would increase the long-term yield of the groundwater basins.

14. The City of Morro Bay has little or no control over basin discharges, irrigation practices, and crop selection within the study area.

15. Existing, unused wells may allow movement of poor quality water into fresh groundwater aquifers.

16. Water quantity and water quality can be enhanced by following a planned operational scheme in pumping the city wells.

17. City Well Nos. 1 and 2 are located too near the coast, resulting in operational and water quality problems.

18. The Preliminary Water Management Plan must include wastewater reclamation, recharge of storm water and excess surface water, a planned operational scheme for pumping existing wells, abandonment of Well Nos. 1 and 2, location of additional wells inland and continued study and data collection.

Seawater Intrusion: In February 1972, the California Department of Water Resources (DWR) published Bulletin 63-6: Sea-Water Intrusion: Morro Bay Area San Luis Obispo County. The abstract to this document reads as follows:

ABSTRACT

Because the quality of groundwater has been degraded by the intrusion of seawater, several wells have been abandoned along the coastal margin of Morro, Chorro, and Los Osos Ground Water Basins in the Morro Bay area of San Luis Obispo County. Increases in chloride-ion content in groundwater have occurred primarily in response to the lowering of water levels to below sea level during periods of intensive pumpage. In localized areas, other probable sources of degradation are the natural intrusion resulting from a decline in recharge at dry periods, downward percolation of ocean water in tidal areas, and the dissolution of evaporites by downward percolating waters.

The onshore areal extent of sea water intrusion has been controlled by seaward underflow during periods of low pumpage. An undetermined amount of freshwater underflow is lost to the sea from the nondegraded aquifer systems underlying the Baywood Park-Los Osos community. Further investigation is necessary to evaluate the freshwater potential in that vicinity and in the offsore extensions of those aquifers.

DWR bases evidence of seawater intrusion on high chloride-ion and total dissolved solids (TDS) concentrations. Concentrations of these constituents for various Chorro Basin wells is shown in Table 6. Well locations are displayed in Figure 12. For comparison purposes, DWR states that in nondegraded portions of the aquifer system, TDS content is as high as 800 mg/l and choride-ion concentrations as high as 120 mg/l. These increases are most likely attributed to irrigation return waters that have percolated to the groundwater. Increases above natural background levels are attributed to fluctuations in rainfall and increased drawdown during periods of lesser freshwater outflow.

TABLE 6

AVERAGE TDS AND CHLORIDE-ION CONCENTRATIONS IN GROUND WATER FROM ALLUVIUM, SEAWARD CHORRO GROUND WATER BASIN, 1951–70

In milligrams per liter

Well	Date or year of sampling	Number of samples	TDS	Chloride ion
29S/11E–31D1	3–25–64	1	706	165
29S/11E–31R1	11–19–70	1	2,226	1,008
29S/11E–32F1	10–30–62	1	960	248
29S/11E–32M1	6–16–55	1	927	170
	9–30–58	1	1,108	157
	1959	3	993	127
	1960	4	319	—
	10–30–61	1	5,257	2,404
	10–23–62	1	1,328	350
	1963	2	1,125	262
	1964	2	1,438	405
	1965	2	1,017	244
	9–27–66	1	1,110	273
	1967	2	1,010	235
	11–19–68	1	835	—
	3–20–70	1	920	185
29S/11E–32M2	1– 4–60	1	791	126
	3– 7–63	1	840	135
29S/11E–32M3	1951	2	415	—
	1952	5	770	—
	1953	2	424	—
	6–11–54	1	1,410	372
	1959	3	4,854	2,220
	1960	6	2,304	—
29S/11E–32M4	1960	4	221	—
	3– 7–63	1	990	134

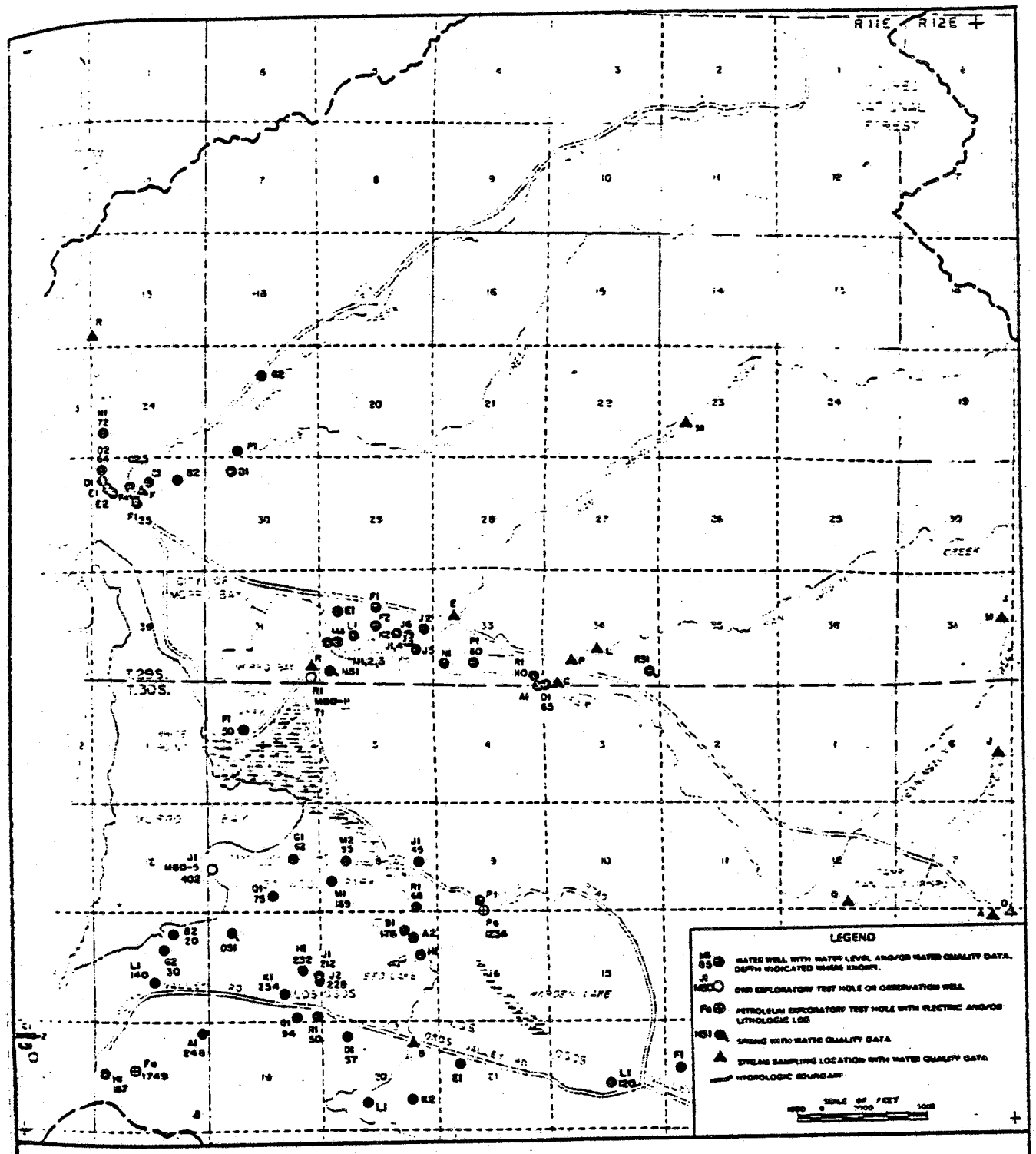


FIGURE 12 -SAMPLING LOCATION MAP

DEPARTMENT OF WATER RESOURCES, SOUTHERN DISTRICT, 1971

Concentrations of chloride-ion for various Morro Basin wells is shown in Figure 13. Background concentration for chloride is not discussed but can be assumed to be comparable to Chorro Basin (120 mg/l). Increases in chloride-ion above background concentrations are attributed generally to drawdown elevations below sea-level.

An important item is not discussed in this report and needs to be discussed in order to put statements of seawater intrusion into perspective. First, it is a fact that along coastal areas, groundwater is underlain by seawater. It is understandable that these wells do display high chloride-ion and TDS concentrations. This is merely a result of being in close proximity to an area where freshwater naturally overlies seawater. Chloride-ion and TDS concentrations wil increase due to insufficient rainfall. TDS concentrations will increase due to insufficient rainfall. Because of a lowered water table, there is not as much fresh water to draw from. Merely by pumping action, the well is forced to draw from saline water underlying freshwaer. This situation is not indicative to seawater intrusion into the groundwater basins, but is only a condition reflective of well location and pumping.

Table 6 does not convincingly portray a picture of a seawater intrusion situation. The drinking water standard for TDS is 500 mg/l. Natural background concentration for TDS is 800 mg/l. Even a natural water state of TDS exceeds the standard because Morro and Chorro Basin water is very hard. Substantial increases in TDS occur mostly during periods of less rainfall. The drinking water standard for chloride-ion is 250 mg/l. Most chloride-ion concentrations are within the realm of this standard. Well 29S/11E-31R1 displays the result of the only high chloride sample during a normal rainfall year with a chloride concentration of 1,008 mg/l. The result of only one well cannot be construed to imply seawater intrusion. Two samples from two different wells show chloride-ion in the 2,000-ths. Note these two samples were taken during a period of extremely low rainfall.

Only chloride-ion concentrations are used to substantiate seawater intrusion in the Morro Basin. Only one well (29S/10EE-25D2) displays dramatic increases in chlorides. This well is located extremely close to the ocean and is most likely drawing from seawater naturally underlying freshwater.

As a result of the recent Brown and Caldwell study, seawater intrusion was further investigated. As a part of the preliminary water management investigation, the extent of seawater intrusion was studied in order to assess necessary mitigation measures. A summary of Brown and Caldwell findings is discussed.

The understanding of seawater intrusion is an important part of water management. One of the methods used in the February, 1981, study to evaluate seawater intrusion is a hydrologic budget. A hydrologic budget is an assessment of the inflow and outflow of water to a basin and like any budget is a step toward managing a

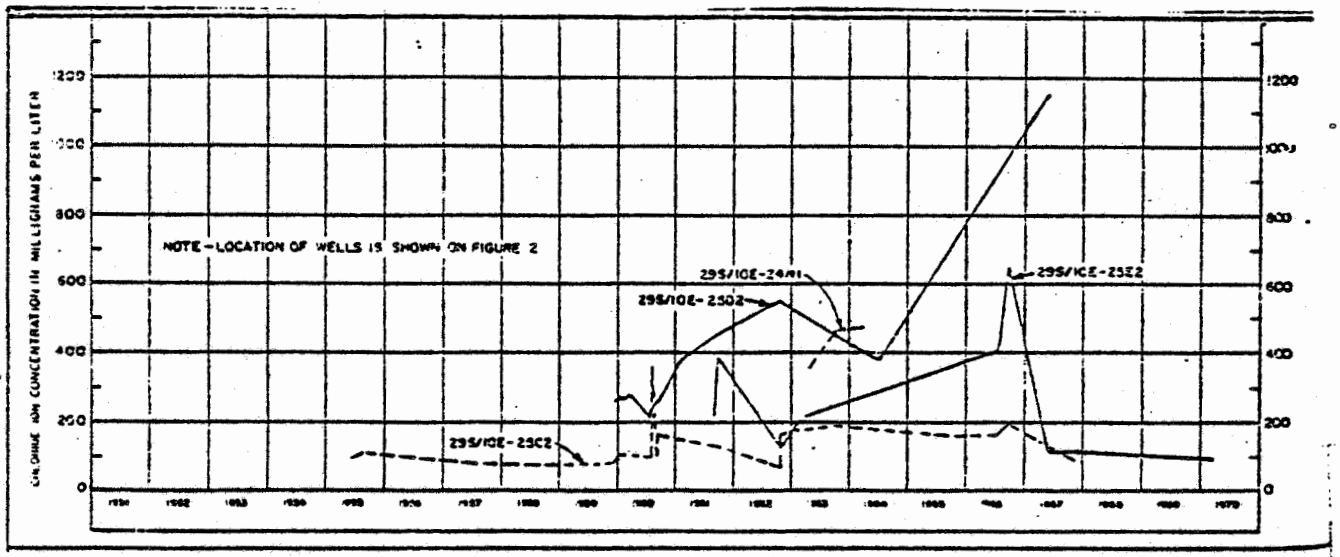


FIGURE 13- WATER LEVEL AND CHLORIDE ION CONCENTRATION TRENDS-MORRO GROUND WATER BASIN

DEPARTMENT OF WATER RESOURCES, SOUTHERN DISTRICT, 1971

resource. There have been some reports which suggested that Chorro Creek and Morro Creek Groundwater Basins have been intruded by seawater. If this were true, the hydrologic budgets for both basins would show a value at zero for subsurface outflow, and would require a positive amount to be added for seawater intrusion inflow to allow a balance between inflow and outflow. The Preliminary Water Management Plan, however, shows values for subsurface outflow of 2,090 acre-feet per year for Chorro Creek Basin and 3,400 acre-feet per year for Morro Creek Basin. Therefore, it must be concluded that seawater intrusion is not occurring nor has it occurred in the past. An additional withdrawal of about 5,500 acre-feet per year would be required before seawater intrusion would be a factor in the combined hydrologic budgets.

Another tool used to evaluate the possibility of seawater intrusion is water quality investigations. Based on water quality analysis, it appears that groundwater quality is good. Except for the total dissolved solids (TDS) the mineral constituent concentrations all fall within the acceptable range of criteria for drinking water.

Most of the TDS values in the Chorro Creek Basin and Morro Creek Basin are attributable to the total hardness of the water and all the wells show concentrations which categorize the groundwater as very hard. The hardness of the groundwater is attributed to natural geologic conditions within the basin and there is little that can be done to lessen these values except for importation of water that is not so hard, blending with imported water or dilution with storm waters by artificial recharge. During the past drought period, increases in chlorides occurred in the Chorro Basin. With the exception of one well on one date, ground water quality has always met standards set for chlorides. Increases in chloride concentrations that occurred during drought periods may be due to wastewater discharges in the eastern portion of the Chorro Basin and/or from highly mineralized surface waters of San Bernardo Creek infiltrating into the groundwater. In addition, increases beyond standards set for chlorides occurred on numerous occasions in the Morro Creek Basin during the past drought. These increases occurred in wells located near the coast during heavy pumping. These increases appear to be due to the upconing of saline water, not seawater intrusion. Upconing of seawater occurs as a result of seawater, naturally underlying a groundwater basin, being drawn up by a heavily pumped well in a groundwater basin where water levels have dropped. In an upconing situation, seawater does not move inland to occupy an area once occupied by fresh groundwater as occurs in a seawater intrusion situation.

Regardless of the degree of concentration of the mineral constituents in seawater, the ratios of certain minerals remain nearly the same. This is true regardless of whether the sample was taken in the open ocean, or in some landlocked embayment where the seawater composition may be altered by inflows from the land, affected by products of decomposition or evaporated to some

extent. Thus, when wells are intruded by seawater even though the concentrations of mineral constituents are lower than those found in seawater the ratios should remain the same.

Several methods have been used in the 1981 study to compare the composition of the groundwater produced in Chorro and Morro Basins with that of seawater. Table 7 shows the ratio of selected mineral constituents in groundwater in Chorro Creek Basin Wells and the ratio for seawater. The comparison indicates the relationship between the groundwater produced by the City's wells and seawater. Table 8 shows a similar relationship for the Morro Creek Basin wells. Also shown are the ratios for groundwater produced by wells in the Chorro Narrows. On only four dates have the ratios been higher than normal. Even though the TDS for wells in the Chorro Narrows consistently show high TDS values the ratio as shown does not clearly show a seawater-type composition.

There is a thick clay layer existing near the ground surface in the wide alluvial area just upstream of, and within, the Chorro Narrows. Mineral salts appear to have leached from the soil, or from surface water, and collected just above this fine-grained zone, moved downgradient to the well area and found entrance into the well through the gravel packs around the casings. Also, when water levels are drawn down following heavy pumping, poor quality water from fractures in the bedrock may be pulled into the well.

The available data shows that during the two normal droughts which occurred within the past ten years water levels were generally lower at the end of the drought period. Normal precipitation and recharge to the groundwater basins in the years following the normal droughts is more than adequate to replenish the lost storage and to allow the groundwater basins to regain their potential. Generally, this rejuvenation of the groundwater basins occurs within one year following such normal droughts.

Long-Term Yield: The capacity of the groundwater basins to supply water to meet anticipated demands must be established prior to consideration of management alternatives. Normally, the long-term yield of a groundwater basin is stated as its "safe yield" which can be defined as the amount of water which can be withdrawn from a groundwater basin, annually, without producing an undesired result. The key to establishing a value for safe yield is to acquire adequate data. In the case of the Chorro Creek and Morro Creek Basins, such data are not available. Therefore it is not possible to define the safe yield of either groundwater basin. However, based on available data, it is possible to estimate the yield that can be obtained from the aquifers in these groundwater basins under certain conditions. To avoid confusion, this estimate is described as "long-term yield," as opposed to safe yield. The long-term yield of both groundwater basins was estimated for certain specific conditions: (1) the "normal year"; (2) the "normal drought"; and (3) the

TABLE 7

Comparison of a Ratio of Selected Mineral Constituents in Groundwater in Chorro Basin Wells to Seawater

Date	Well number	R, percent[a]	TDS, mg/l
3/14/79	Morro Bay No. 8	38	648
3/14/79	Morro Bay No. 9	32	753
3/14/79	Morro Bay No. 9A	29	753
3/14/79	Morro Bay No. 10	37	700
3/14/79	Morro Bay No. 10A	31	823
10/31/79	Morro Bay No. 11A	38	763
3/14/79	Morro Bay No. 12	43	980
3/14/79	Morro Bay No. 16	34	770
6/16/55	29S/11E-32M1	49	927
12/12/56	29S/11E-32M1	41	880
11/22/57	29S/11E-32M1	84	1,717
9/30/58	29S/11E-32M1	50	1,108
7/28/59	29S/11E-32M1	36	1,035
9/9/59	29S/11E-32M1	33	-
11/24/59	29S/11E-32M1	49	1,075
12/22/59	29S/11E-32M1	35	868
8/2/60	20S/11E-32M1	50	1,025
10/30/61	29S/11E-32M1	196	5,257
10/23/62	29S/11E-32M1	94	1,328
2/7/63	20S/11E-32M1	68	1,090
9/23/63	29S/11E-32M1	70	1,160
7/14/64	29S/11E-32M1	76	1,352
10/7/64	29S/11E-32M1	96	1,523
8/3/65	29S/11E-32M1	62	1,113
10/4/65	29S/11E-32M1	72	920
9/25/66	29S/11E-32M1	74	1,110
5/25/67	29S/11E-32M1	58	938
11/2/67	29S/11E-32M1	71	1,082
11/19/68	29S/11E-32M1	126	2,087
12/8/69	29S/11E-32M1	50	956
3/20/70	29S/11E-32M1	48	920
10/22/70	29S/11E-32M1	57	1,147
3/7/63	29S/11E-32M2	42	842
8/2/60	29S/11E-32M3	180	5,402
3/7/63	29S/11E-32M4	43	990
3/20/70	29S/11E-32N1	243	570
	Seawater	473	34,300

$$^{a}R\ \text{percent} = \frac{(\text{mg/l } SO_4 \times 0.0208) + (\text{mg/l Cl} \times 0.0282)}{(\text{mg/l Ca} \times 0.0499) + (\text{mg/l Mg} \times 0.0822)} \times 100$$

TABLE 8

Comparison of a Ratio of Selected Mineral Constituents in Groundwater in Morro Basin Wells to Seawater

Date	Well number	R, percent[a]	TDS, mg/l
3/14/79	Morro Bay No. 3	62	770
3/14/79	Morro Bay No. 4	18	595
3/14/79	Morro Bay No. 13	47	718
3/14/79	Morro Bay No. 14	43	630
3/14/79	Morro Bay No. 15	42	630
	Seawater	473	34,300

$$^{a}R\ \text{percent} = \frac{(\text{mg/l } SO_4 \times 0.0208) + (\text{mg/l Cl} \times 0.0282)}{(\text{mg/l Ca} \times 0.0499) + (\text{mg/l Mg} \times 0.0822)} \times 100$$

"extreme drought." These terms are further defined in the following discussion.

Climatic Conditions for Estimating Long-Term Yield: In order to establish a basis for evaluating long-term yield over a normal climatic period, the "normal year" is defined, herein, as any year in which the precipitation equals or exceeds the 50-year mean, or any year followed by a year in which the precipitation either equals or exceeds the 50-year mean precipitation. This is due to the fact that the groundwater basins have demonstrated a rapid response to precipitations, in that water levels quickly rise back to their normal levels following one season of normal precipitation. Therefore, any seasonal depletion of storage during a normal years would be replaced by infiltration of precipitation during the subsequent wet season.

For the purpose of this discussion, a "normal drought" is a frequently occurring period of years during which precipitation is below the 50-year mean. A review of the 110-year record of precipitation at San Luis Obispo indicates that a two-year drought period is such a frequent occurrence. During the last ten years, two-year drought periods have occurred twice. The lowest annual rainfall on record is approximately seven inches. Occurrence of rainfall at this low level for two consecutive years has not occurred over the 110 year record. However, to be conservative, it is assumed that the normal drought consists of a two-year period with rainfall of seven inches per year.

Evaluation of the precipitation records at the City of San Luis Obispo indicates that the longest continuous period of annual precipitation below the 50-year mean is seven years. A seven-year period occurred between 1893 and 1900, and a similar seven-year period occurred between 1944 and 1951. The lowest average annual precipitation during any year of the most recent seven-year period was about 31 inches. Therefore, the extreme drought is herein defined as a seven-year period during which the average annual precipitation is 13 inches per year.

Past Estimates of Safe Yield: Although the available data have been sparse, estimates of safe yield for the Morro Creek Basin and Chorro Creek Basin have been made in the past. The California Department of Water Resources (DWR), in its Bulletin 18, May 1958, estimated that the safe yield for each basin was 1,500 acre-feet per year. In a memorandum report by DWR to the Central Coastal Regional Water Quality Control Board, dated October 1969, DWR revised these estimates to 1,700 acre-feet per year for each basin. Neither of these reports gave any indication of the basis for these estimates.

Comparing the current groundwater demand of 3,944 acre-feet per year and the estimated total safe yield of these two groundwater basins of 3,400 acre-feet per year, as reported by DWR, it is understandable that the California Coastal Commission could consider the basins to be overdrawn requiring a restriction on further development in the City of Morro Bay. Supporting that

decision was the assumption that seawater intrusion is a continual adverse condition affecting both the Chorro Creek and Morro Creek Basins. However, as the hydrologic budgets for both basins indicate, there is a positive subsurface outflow of freshwater from the basins amounting to 2,090 acre-feet per year for Chorro Creek Basins and 3,400 acre-feet per year for Morro Creek Basin. Therefore, it must be concluded that seawater intrusion is not occurring and has not occurred in the past.

Long-Term Yield, Normal Year: The current total water demand of 3,944 acre-feet per year is being met by the two groundwater basins from inflow sources only. This is evidenced by the fact that groundwater storage is not being depleted except on a seasonal basis. Therefore, the long-term yield under a normal year is at least 3,944 acre-feet per year. The total current subsurface outflow of groundwater from both basins amounts to approximately 5,500 acre-feet per year. Therefore, it is believed that the long-term yield is much greater than the 3,944 acre-feet per year now being produced. However, all that can be stated with certainty, at present, is that the current long-term yield under normal-year conditions is 3,944 acre-feet per year or greater.

Long-Term Yield, Normal Drought: As defined above, groundwater withdrawal during a normal year will not affect groundwater in storage, other than on a seasonal basis. Therefore, it can be assumed that at the start of any drought period the groundwater basins will be full and the groundwater in storage can be utilized during the drought to provide additional supplies. As described earlier the total quantity of recoverable groundwater from storage in Chorro Creek Basin is 7,000 acre-feet and the total quantity of recoverable groundwater from storage utilized only from the middle storage unit of Morro Basin is 3,200 acre-feet. The total available storage is 10,200 acre-feet for both basins.

Since a two-year drought period will be followed by a normal year, the groundwater basins would be fully recharged the year following the two-year drought. Therefore, during the two-year drought the recoverable groundwater in storage can be utilized for water supply purposes much the same as water that might be stored in a surface reservoir can be utilized. The total groundwater storage in both basins, of 10,200 acre-feet, utilized over a two-year period would provide 5,100 acre-feet per year of water supply for consumptive use.

In addition, there will be approximately 1,315 acre-feet per year of groundwater available from inflow sources, and consequently the total available storage would not need to be temporarily depleted. Also, other groundwater basin management elements discussed below will be implemented. These management schemes will also offset the need for temporary groundwater depletion. The year 2000 water demand is estimated to be 5,027 acre-feet per year. During a normal drought, however, 6,415 acre-feet of water per year is available for use.

Long-Term Yield, Extreme Drought Conditions: By similar analysis to that used for the normal drought, Brown and Caldwell determined that the lowest average annual precipitation during any 7 year period at San Luis Obispo was about 13 inches. This precipitation is approximately 61 percent of the 50 year mean precipitation at that station. Therefore, it is assumed that the current quantity of groundwater being supplied from inflow sources will be reduced under extreme drought conditions to 61 percent of that value, or 2,406 acre-feet per year.

The long-term yield under extreme drought conditions that can be expected without implementing any groundwater basin management techniques is the total increment of groundwater storage, 1,456 acre-feet per year, and the annual production available from inflow sources of 2,406 acre-feet per year. This amounts to 3,863 acre-feet per year from only these sources. It is obvious that this quantity has been sufficient to meet the past demands of water users, however, by the year 2000 when the projected demand will be 5,027 acre-feet per year, there will be an apparent maximum deficiency of 1,164 acre-feet per year. It is evident, therefore, that certain groundwater basin management elements must be implemented to provide an overall water resource management plan to meet the extreme drought conditions in the year 2000.

It is the intent of the City to adopt a water management plan. It is not the intent of the City to deplete water reserves because techniques to offset deficits are known and readily implementable through future water management activities. Groundwater depletion is only a problem if the situation is ignored and not addressed by management activities.

Alternate Additions of Water Source: In addition to utilization of groundwater storage during drought periods, the City of Morro Bay shall develop additional sources of water from some of these potential sources as a part of a water management plan:

(1) Implement the proposed wastewater reclamation program to provide an additional 770 acre-feet per year of water supply for agricultural and golf course purposes, thereby relieving the groundwater basin of this demand. Although not presently contemplated, the reclamation program could be expanded to provide additional quantities of reclaimed wastewater.

(2) Provide recharge facilities to collect storm water which normally flows out to sea, for recharge to groundwater basin. Such recharge programs would allow storage of additional quantities of water in the groundwater basin each year.

(3) During normal and wet years, there is surplus water available from Whale Rock Reservoir which in many years is lost by spillage over the dam. In a normal year, any surplus water could be purchased by the City of Morro Bay and

delivered directly to the City's distribution system. Alternately, the surplus water could be regularly delivered to recharge facilities for storage underground.

(4) The City of Morro Bay reports that the estimated leakage from its distribution system is approximately 15 percent of water supplied. The projected quantity of water to be supplied for urban purposes through the distribution system during build-out is 2,565 acre-feet per year. Through the City's system repair activities, it is reasonably expected that this loss can be reduced by two-thirds, resulting in a gain of ten percent. This would produce a gain of about 260 acre-feet of usable water.

(5) During the drought year of 1977, as a result of conservation efforts by the City of Morro Bay, the unit water use factor was reduced to 131 gallons per capita per day. If such conservation measures are reinstituted and applied on a regular basis, not just during drought periods, the total urban water demand during build-out can be reduced by approximately 630 acre-feet per year. This alternative is not anticipated to be carried out on a long-term basis.

(6) Modify locations of City wells to allow additional groundwater extraction.

(7) During the next 20 years, it is conceivable that additional imported water sources may become available to the City of Morro Bay. Such projects include the Nacimiento Water Project, the State Water Project, and construction of local storage facilities. Such imported sources, when available, may also be utilized to meet any further demand which may occur beyond the year 2000.

Ability of Water Management Plan to Meet Water Demands: The 1981 study informs that it is possible to meet water demands of the year 2000, population of 12,195 persons. Since water benefits derived from the various supplemental water sources is not quantified, however, it is difficult to assess the actual population beyond this figure that may be permitted. As a result of a preliminary evaluation of the various plan options, the City of Morro Bay is anticipated to be able to meet the 13,500 person build-out water demand even during extreme droughts (and even though the City is downstream of other water users.)

Compliance of Water Management Plan with Coastal Act: The implementation of these and other water management plan actions must be done in keeping with the provisions of the Coastal Act; specifically, consistent with those policies requiring protection of agriculture and environmentally sensitive habitat areas.

As part of the implementation process of the Final Water Management Plan, it will be necessary for the City to address environmental concerns in order to meet California Environmental Quality Act requirements. Among the items addressed will be:

(1) the need for an adequate water supply for coastal-dependent activities such as recreation, commercial fishing, oyster farming and fish and shellfish processing; (2) the need of wetlands to be seasonally flushed of accumulated salts from sediments will be addressed; (3) the need for riparian habitat for an adequate groundwater supply will be addressed; (4) the dependence of an anadromous fishery on riparian vegetation for cooling and groundwater to maintain pools when surface flowos cease; and (5) availability of sufficient water for agriculture.

2. Wastewater Resources

a. Wastewater Facilities

Wastewater treatment facilities are shared jointly by the unincorporated community of Cayucos and the City of Morro Bay, 40 to 60 percent, respectively. Each community operates its own individual wastewater collection system.

The Wastewater Treatment Plant provides secondary treatment to the effluent which is discharged through a 300-foot ocean outfall. The plant currently discharges an average of 1.6 million gallons per day (mgd). The City's wastewater collection system is at capacity in many portions of the community.

The total design capacity of the existing Wastewater Treatment Plant is 1.7 million gallons per day (mgd); therefore, Morro Bay's share (60 percent) is 1.02 mgd. When the treatment plant was designed in 1964, the capacity was based upon meeting the then current water quality standards. Since these standards are now much more stringent, the plant capacity was lowered in recent years to ensure adequate water quality. However, recent improvements to the plant have returned the plant's capacity to 1.7 mgd. Expansion of the plant to a 2.4 mgd capacity is planned for the near future. Morro Bay's share of the expanded plant (60 percent) would then be 1.44 mgd.

b. Wastewater Demand

In response to drought conditions and water conservation measures over the past decade, individual wastewater flow rates in the community have varied, as verified by the figures given in Table 9. In 1975, domestic and commercial wastewater use was an estimated 93 gallons per capita per day (gpcd). This is projected to increase to 110 gpcd by 1999. This table does not reflect current population projections. Table 10 gives current estimated flow rates.

As can be seen in Table 10, plant capacity will be exceeded in the year 2000 and if the plant was further expanded to 2.87 NGD as proposed, this plant expansion would not be sufficient to accomodate a build-out population.

TABLE 9

SUMMARY OF PROJECTED
WASTEWATER FLOWS
FOR MORRO BAY/CAYUCOS

CATEGORY	BASE UNITS 1975	1979	1989	1999
Gallons per capita per day	93	96	103	110
Average Day (Maximum Month) in MGD				
Domestic and Commercial	0.98	1.19	1.65	2.11
Industrial	0.02	0.02	0.03	0.03
Tourist	0.61	0.63	0.68	0.73
Total Average Day	1.61	1.84	2.36	2.87

SOURCE: John Carollo Engineers, 1978

TABLE 10

SUMMARY OF CURRENT PROJECTED WASTEWATER FLOW RATES
MORRO BAY AND CAYUCOS

CATEGORY	BASE UNITS 1980	1990	2000	BUILD-OUT
Population				
Morro Bay	9,064	11,040	12,195	13,500
Cayucos	2,305	2,775	3,246	5,642
Total	11,369	13,815	15,441	19,142
Domestic and Commercial Flow (gpcd)	96	103	110	120*
Average Day Flow, MGS				
Industrial	0.02	0.03	0.03	0.03*
Tourist	0.63	0.68	0.73	0.80*
TOTAL MGD	1.74	2.13	2.46	3.13

*Estimated by City of Morro Bay
SOURCE: City calculations

3. Locating and Planning New Development

The Coastal Act includes policies requiring growth to occur in an orderly, well-planned fashion. Specifically, the Act states that new development shall:

(1) be located in or near existing developed areas;
(2) protect coastal resources; and
(3) give priority to coastal-dependent uses

The Act also recognizes that the provision of public services is a significant factor in the location, pattern, timing and density of new development.

Future growth in Morro Bay will be determined by the ability to provide service and by what the community views as a desirable environment. Build-out of the community under the City's adopted Land Use Plan (1976) would allow a total population of over 16,000 while the current Zoning Ordinance would only provide a population of 15,400 people. These figures are higher than previous estimates because they reflect the trend in the community of a higher number of persons per household. Under the proposed LCP Land Use Plan, total build-out within the community would be approximately 13,500 people.

As discussed elsewhere in this Plan, future water facilities will be sufficient to meet future water demands. These facilities will not, however, be available until funding becomes available for construction and construction has been completed. Therefore, additional population is contingent upon provision of additional water facilities. In addition, anticipated wastewater treatment plant expansion will be capable of supporting a smaller population than build-out would allow. Thus, recognizing that future development in the community will be limited by the availability of public services, and to be consistent with the intent of the Coastal Act, it is necessary for the City to set priorities and guidelines for future growth.

Future growth will be controlled through development permit approval as determined by the availability of public services based upon the type of land use and the priority of use as defined by the Coastal Act. This can be implemented through a Water Equivalency Ordinance, or similar ordinance, that would provide only the amount of equivalencies to support a growth rate in keeping with present and anticipated service levels. The ordinance could allow the number of equivalencies to be set at an annual 1.7 percent growth rate which would provide for a permanent population of 12,195 people in the year 2000. Provisions of additional service capacity could allow the ordinance to be amended to allow for a higher average annual rate of growth.

To ensure the protection of Morro Bay's economic viability, specific land uses must be given priority in the allocation of

public services. The Water Equivalency Ordinance should be amended to reflect the following priorities:

(1) Commercial fishing/agriculture
(2) Coastal dependent industries
(3) Recreation/visitor-serving uses
(4) Commercial
(5) Industrial
(6) Residential Development
    (a) Infill areas
    (b) Areas contiguous to existing development
    (c) Others

These land uses will be allocated a number of equivalencies consistent to their existing levels of demand. Those equivalencies not utilized in one year may be transferred to other uses in the subsequent year.

D. PUBLIC WORKS AND LOCATING AND PLANNING NEW DEVELOPMENT: GENERAL POLICIES

Policy 3.01. The City of Morro Bay shall approve future growth in conjunction with water and sewage treatment availability. Development shall be approved for actual construction and/or implementation only if the City finds that sewer and water services are available to serve the proposed use. The City shall allocate water and sewer services to development within the Coastal Zone based on Coastal Development Permit No. 4-81-309 as approved by the Coastal Commission. The amount of water and sewer services to be allocated to new development shall be limited to the amounts of recovered water due to the water pipe replacement program approved in Permit No. 4-81-309; except that additional wastewater treatment service may be provided based on plant capacity. If the City develops additional sources of water and/or improves its water management so that additional water is demonstrably recovered, the City may submit a revised water allocation program as a subsequent amendment for Coastal Commission review and approval. Until a water management program which provides additional water for allocation is approved and amended into the LUP, the allocation program for future developments shall be as described in the findings and exhibits adopted by the Coastal Commission for Permit 4-81-309 which specifically includes the "Water Recovery Allocation Model and percentage allocation system".

Methods of obtaining additional water resources shall protect the biological productivity of coastal water.

Policy 3.02. In any system the City of Morro Bay uses for water allocation, the City shall insure the following uses receive priority for available water and wastewater treatment facilities:

Commercial Fishing
Coastal-Dependent Land Uses
Coastal-Related Land Uses
Essential Public Services and Basic Industries
Public Recreation
Commercial Recreation
Visitor-Serving Land Uses
Residential and other Commercial and Industrial Land Uses

Residential land uses shall be allocated water based on the following order of varying residential parcels:

(1) presently subdivided parcels within existing developed areas
(2) presently subdivided parcels contiguous to developed areas or unsubdivided parcels within existing developed areas
(3) unsubdivivded parcels contiguous to developed areas
(4) unsubdivided parcels isolated from either presently developed or subdivided areas

Policy 3.03. The City may develop a specific, comprehensive, long-range water plan which will implement water management policies that will provide water service consistent with sound resource planning. New water and sewer services to previously unsubdivided areas shall not be approved until a Water Management Plan has been developed, adopted, and submitted for Coastal Commission review and approval as a subsequent amendment to the LUP.

Policy 3.04. Chapter 3 Coastal Act Policies shall be the basis for reviewing the adequacy of any Water Management Plan. A Water Management Plan shall ensure at a minimum, the following:

1. An adequate water supply for coastal-dependent activities such as commercial fishing, oyster farming, fish and shellfish processing, recreational boating and fishing and industrial energy development.

2. Continued protection of the Morro Bay wetland areas with assurances that the wetlands shall continue to be seasonally flushed of accumulated salts from sediments.

3. An adequate groundsurface water supply to protect the biological productivity of coastal waters including riparian stream corridors upon which the anadromous fishery depends for viability.

4. Sufficient water for agricultural operations in the Morro and Chorro Valleys.

Once a Water Management Plan has been incorporated into the LUP, the approved elements of the plan shall be implemented with each project approval accompanied by findings that the resources listed above have been protected consistent with Chapter 3 policies contained in the Coastal Act. Upon implementation of the Water Management Plan, new subdivision in previously undeveloped areas may be permitted.

Policy 3.05. The City of Morro Bay shall adopt a five-year Capital Improvement Program which specifies maintenance, improvements, and extensions of water and sanitary sewer facilities, including recommendations of the Water Management Plan.

Policy 3.06. The City will continue a program of providing wastewater treatment facilities to accommodate the ultimate build-out popultiaon of 12,195, determined to be the build-out figure in Coastal Development Permit No. 406-81, which permitted further expansion of the wastewater treatment facilities to 2.4 mgd.

Policy 3.07. Water-saving devices shall be required in new developments. These devices may include, but are not limited to the following:

(1) faucets with faucet aerators to help reduce the flow of water to 2 gallons per minute, or less;

(2) water restrictions on shower heads to restrict water to 3 gallons per minute, or less;

(3) water conservation toilets to restrict each flush to 3 gallons or less.

Efforts to conserve or reduce water consumption through the implementation of water-saving techniques shall be recognized by the City when determining priority of water use allotments.

VI. ARCHAEOLOGY

A. INTRODUCTION

This chapter describes the methods to insure protection of archaeologic resources within the City limits. The City may contain additional archaeologic resources in areas where development has not yet occurred or in already developed areas in the City. Most resources are not readily seen until grading and construction occurs. Many of the City's known sites have been discovered as a result of construction.

B. GOVERNMENTAL POLICIES

There are several state policies regarding the preservation of, or interference with Native American Heritage. Except for the California Environmental Quality Act and the Coastal Act, none of the state policies refer to privately owned land. The policies are briefly described as follows:

1. The California Coastal Act of 1976.

The California Coastal Plan of 1976 recognized the need to provide protection for archaeological resources, noting that "archaeological sites resulting from . . . thousands of years of human settlement along the coast are among the most fragile nonrenewable resources in the coastal zone" and that knowledge of prehistoric cultures "can be gained only from the detailed study of archaeological remains, the only source for more than 95 percent of California's cultural history."

This common concern for the protection of archaeological resources was reflected in the California Coastal Act of 1976 through Public Resources Code, Section 30244 which provides that, "Where development would adversely impact archaeological or paleontological resources as identified by the State Historic Preservation Officer, reasonable mitigation measures shall be required."

2. The California Environmental Quality Act (CEQA) of 1970

The California Environmental Quality Act (CEQA) requires environmental effects of significant projects and undertakings be avoided or mitigated. (Public Resources Code, Sections 21000, et seq.). This statute currently establishes one of the more important mechanisms by which many Native American heritage resources on both public and private land are identified and protected in California.

The mitigation requirements of CEQA apply only when it is determined that a proposed project may have a significant effect upon the environment. The criteria used in determining a "significant effect" includes the elimination of "important examples of the major periods of California history or prehistory" (State EIR Guidelines, California Administrative Code, Title lc, Division 6, Chapter 3). However, the guidelines do not include native American heritage, Indian cemeteries and cultural remains as specific topics of environmental concern. The guidelines additionally fail to list an agency of special expertise in that subject which might be consulted. To resolve these problems, the American Heritage Commission has begun working with the Resources Agency and the Office of Planning and Research in revising the EIR guidelines.

3. Public Resources Code

Section 5097.9 of the California Public Resources Code stipulates that it is contrary to the free expression and exercise of Native American religion to interfere with or cause severe or irreparable damage to any Native American cemetary, place of worship, religious or ceremonial sites or sacred shrine.

Section 5097.5 of the California Public Resources Code makes it a misdemeanor for a person to knowingly and willfully excavate upon, or remove, destroy, injure or deface any historic or prehistoric ruins, burial grounds, archaeological or vertebrate paleontological site situated on public lands, except with expressed permission of the public agency having jurisdiction over such lands. As used in this section, (Public Lands) means lands owned by, or under the jurisdiction of the State, or any City, County, district, authority or public corporations, or any agencies thereof.

Section 622 1/2 of the California Penal Code makes it a misdemeanor to disfigure, deface or destroy any object of archaeological or historical interest or value, whether situated on public lands or within any public park or place.

4. Health and Safety Code

Several statutes regulate exhumations, dissections, mutilations, removal, interment, collection by unauthorized agencies and individuals of historic and archaeological Native American remains.

Section 7052 of the California Health and Safety Code makes it a felony to mutilate, disinter or remove from the place in interment any human remains. This felony is punishable by up to 5 years in prison.

Section 8101 of the California Health and Safety Code requires up to six months in jail and/or $500 fine for obliterating or disturbing a grave. Other sections of the Health and Safety Code

relate to Historic remains regarding death certificates, disposition permits, markers or location records and burial places (H & S 7054, 7500, 10375, 7114, 7052 and Government Code 27491). These laws require that the coroner's office be contacted in the event that human remains are uncovered.

As indicated above, these various policies do not apply to archaeological resources on private lands; nor do they provide adequate protection of archaeological resources from developments on publicly held lands.

C. ISSUES AND CONCERNS

One of the basic issues raised in protecting archaeological resources is the conflict between the need to inventory existing and potential sites and the preservation of those sites once their location becomes public knowledge. Archaeologists avoid revealing site locations because of the temptation for many people to search for artifacts once a site is publicly known.

A second protection issue is that the location of known sites does not reflect the potential importance of portions of the coast that have not yet been surveyed (in fact, the majority of the coast.) This is an important issue when defining the types of projects that should require a preliminary survey of archaeolgoical resources, because most known sites have been discovered as a result of development activity and public access.

In general, urbanization and uncontrolled public access appear to be the principal sources of destruction of archaeological sites. The direct threats posed by urbanization include: grading activities (both agricultural and construction related); residential and industrial construction; construction of roads and highways; water projects (eroding and burying sites); pipeline projects; off-road vehicles; recreational developments; natural forces (water and wind); and unauthorized collection of artifacts. One of the most significant indirect threats to the integrity of archaeological sites is public access. Vandalism has always been a source of site destruction and its probability increases with enhanced access to areas of archaeological significance. Any increase in temporary or permanent population in the vicinity of a site increases its vulnerability to disturbance. Construction of public roads that provide access to areas of archaeological significance or publication of known site locations can also increase vandalism.

Single-family residential devleopment on individual building lots presents an important dilemma in determining the necessary scope of archaeological review. Under the California Environmental Quality Act (CEQA), single-family residences and residential projects of less than four units are exempt from environmental review unless archaeological resources are known to be on the property. Thus, the information necessary to locate structures to preserve archaeological resources may not be available or

used. Proposed development on large lots will have some flexibility to enable clustering structures on the least damaging portions of a site.

D. ARCHAEOLOGY POLICIES

Policy 4.01. Where necessary significant archaeological and historic resources shall be preserved to the greatest extent possible both on public and privately held lands.

Policy 4.02. The City shall establish and maintain an inventory of archaeological site records. A sensitivity map shall be developed based on available information on file with the California Archaeological Site Survey Office. This information shall be treated as confidential to protect the archaeological resources. Until the mapping has been completed, an archaeological reconnaissance performed by a qualified archaeologist and/or a review of record sites shall be required of all projects applying for a coastal permit.

Policy 4.03. An archaeological reconnaissance performed by a qualified archaeologist shall be required as part of the permit review process for projects with areas identified as having potential archaeolgocial sites. An archaeological reconnaissance will be required for all projects requiring an Environmental Impact Report under CEQA.

Policy 4.04. Where archaeological resources are found as a result of a preliminary site survey before construction, the City shall require a mitigation plan to protect the site.

Policy 4.05. Where archaeological resources are discovered during construction of new development, or through other non-permit activites (such as repair and maintenance of public works projects) all activities shall cease until a qualified archaeologist knowledgeable in Chumash culture can determine the significance of the resource and designate alternative mitigation measures. Development that impacts archaeological resources shall be required to mitigate impacts in one of the following manners:

a. Removal of artifacts
b. Dedication of impacted area as permanent open space
c. Coverage of archaeological site by at least 24 inches of sterile sand.

Policy 4.Ø6. Any archaeological sites of state-wide signficance shall be nominated for inclusion in the Registry of California Historic Landmarks. Those of national significance shall be nominated for inclusion in the National Registry of Historic Place and the National Historic Landmark Program.

Policy 4.Ø7. All available measures, including purchases, tax relief, purchase of development rights, etc. shall be explored to avoid development on significant archaeological sites. Where sites containing significant archaeological resources are already in public ownership including ownership of the City, the City shall encourage the retention of the site in public ownership and the protection of the archaeological resources. The transfer of City-owned properties containing significant archaeological resources shall be accompanied by a deed restriction containing provisions protecting the archaeological resources on the site.

Policy 4.Ø8. Activities other than development which could damage or destroy archaeological resources including, but not limited to, off-road vehicle activity and unauthorized collecting of artifacts, shall be prohibited unless specifically permitted by the permit issuing agency with provisions for adequately protecting any archaeological resources.

VII. ENERGY/INDUSTRIAL DEVELOPMENT

A. INTRODUCTION

A number of energy facilities are located in the City of Morro Bay and its surroundings, and recent signs indicate that the City will feel the pressure of more energy development in the near future.

As part of its Local Coastal Program, Morro Bay is required to address energy and other coastal-dependent industrial developments that may have a signficant impact on the community. Existing facilities in Morro Bay which must be addressed include:

(1) Chevron Estero Bay tanker-terminal;
(2) Texaco fuel storage tanks;
(3) U.S. Navy marine terminal and storage tanks;
(4) Pacific Gas and Electric Fossil fuel thermal power plant, marine terminal and associated facilities.

In addition to these existing energy-related facilities, there is the potential that new energy developments may be located in the area; these include:

(1) Estero Bay super tanker port;
(2) Expansion of the PG & E power plant;
(3) Support facilities for Outer Continental Shelf (OCS) oil and gas development;
(4) New power plants.

B. COASTAL ACT POLICIES

The Coastal Act contains general and specific policies regarding energy. Although the Coastal Act emphasizes the protection, enhancement, and restoration of coastal resources, it also recognizes that energy-related development is necessary for the social and economic well-being of the state. An "energy facility" is defined by Section 30107 of the Act as "any public or private processing, producing, generating, storing, transmitting, or recovering facility for electricity, natural gas, petroleum, coal, or other source of energy."

Energy development in the coastal zone is permitted based on Section 30001.2 of the Coastal Act, which reads as follows:

Sec. 30001.2. The legislature finds and declares that, notwithstanding the fact electrical generating facilities, refineries, and coastal-dependent developments, including ports

and commercial fishing facilities, off-shore petroleum and gas development, and liquefied natural gas facilities, may have significant adverse effects on coastal resources or coastal access, it may be necessary to locate such developments in the coastal zone in order to ensure that inland as well as coastal resources are preserved and that orderly economic development proceeds within the state.

The Coastal Act policies addressing industrial development distinguish between coastal-dependent and other types of development. Energy developments are classified as a type of industrial development. According to the Act, coastal-dependent development or use is one which requires a site on or adjacent to the sea. Examples of coastal-dependent energy facilities include: separation and treatment facilities which support offshore petroleum development (for separation of water and gas from oil), marine terminals, and liquefied natural gas terminals.

Under Section 30255 of the Act, both industrial and non-industrial coastal-dependent development are given priority over other developments on or near the shoreline. In addition, the following Section of the Act establishes criteria and allowances for overriding considerations regarding conflicting policies for siting coastal-dependent industrial facilities.

Sec. 30260. "Coastal-dependent industrial facilities shall be encouraged to locate or expand within existing sites and shall be permitted reasonable long-term growth where consistent with this division. However, where new or expanded coastal-dependent industrial facilities cannot feasibly be accommodated consistent with other policies of this division, they may nonetheless be permitted in accordance with this Section and Sections 30261 and 30262 if (1) alternative locations are infeasible or more environmentally damaging; (2) to do otherwise would adversely affect the public welfare, and (3) adverse environmental effects are mitigated to the maximum extent feasible."

This Section of the Act allows special consideration for industrial development that may not be consistent with other Coastal Act policies, yet may be necessary to provide for the public welfare.

The following Coastal Act policies relate to oil and gas development:

Sec. 30261. "(a) Multicompany use of existing and new tanker facilities shall be encouraged to the maximum extent feasible and legally permissable, except where to do so would result in increased tanker operations and associated onshore development incompatible with the land use and environmental goals for the area. New tank terminals outside of existing terminal areas shall be situated so as to avoid risk to environmentally sensitive areas and shall use a monobuoy system, unless an alternative type of system can be shown to be environmentally preferable for a specific site. Tanker facilities shall be

designed to (1) minimize the total volume of oil spilled, (2) minimize the risk of collision from movement of other vessels, (3) have ready access to the most effective feasible containment and recovery equipment for oilspills, and (4) have onshore deballasting facilities to receive any fouled ballast water from tankers where operationally or legally required.

(b) Because of the unique problems involved in the importation, transportation, and handling of liquefied natural gas, the location of terminal facilities therefore shall be determined solely and exclusively as provided in Chapter 10 (commencing with Section 55500) of Division 2 of the Public Utilities Code and the provisions of this division shall not apply unless expressly provided in such Chapter 10."

The following Coastal Act policies pertain to siting thermal power generating plants.

Sec. 30264. "Notwithstanding any other provisions of this division, except subdivisions (b) and (c) of Section 30413, new or expanded thermal electric generating plants may be constructed in the Coastal Zone if the proposed coastal site has been determined by the State Energy Resources Conservation and Development Commission to have greater relative merit pursuant to the provisions of Section 25516.1 than available alternative sites and related facilities for an applicant's service area which have been determined pursuant to the provisions of Section 25516."

This Section establishes special consideration to coastal dependent energy development if other Coastal Act policies cannot be complied with and recognizes that the State Energy Resources Conservation and Development Commission (ERCDC) may decide to select sites in the coastal zone upon a showing that these sites have greater relative merit than available alternatives. This siting authority is limited within the coastal zone to areas not designated by the State Coastal Commission under Section 30413(b), which reads as follows:

Sec. 30413(b). "The Commission shall, prior to January 1, 1978, and after one or more public hearings, designate those speciific locations within the coastal zone where the location of a facility as defined in Section 25110 would prevent the achievement of the objectives of this division; provided, however, that specific locations that are presently used for such facilities and reasonable expansion thereof shall not be so designated. Each such designation shall include a description of the boundaries of such locations, the objectives of this division which would be so affected, and detailed findings concerning the significant adverse impacts that would result from development of a facility in the designated area. The Commission shall consider the conclusions, if any, reached by the State Energy Resources Conservation and Development Commission in its most recently promulgated comprehensive report issued pursuant to Section 25309. The Commission shall transmit a copy of its report

prepared pursuant to this subdivision to the State Energy Resources Conservation and Development Commission."

Though refineries are not necessarily coastal-dependent developments, their location in coastal metropolitan areas may put them in the coastal zone. The following Section of the Act establishes criteria for locating refineries in coastal areas.

Sec. 30263. "New or expanded refineries or petrochemical faciliites not otherwise consistent with the provisions of this division shall be permitted if: (1) alternative locations are not feasible or are more environmentally damaging; (2) adverse environmental effects are mitigated to the maximum extent feasible; (3) it is found that not permitting such development would adversely affect the public welfare; (4) the facility is not located in a highly scenic or seismically hazardous area, on any of the Channel Islands, or within or contiguous to environmentally sensitive areas; and (5) the facility is sited so as to provide a sufficient buffer area to minimize adverse impacts on surrounding property."

The following provisions of the Act deal with the potential effect that new energy development may have on the coastal zone--air and water pollution that may result from oil and gas development, and the need to separate potentially hazardous industrial development from existing developed areas (see also Sec. 30233, Chapter XI):

Sec. 30232. "Protection against the spillage of crude oil, gas, petroleum products, or hazardous substances, shall be provided in relation to any development or transportation of such materials. Effective containment and cleanup facilities and procedures shall be provided for accidental spills that do occur."

Sec. 30250(b)..."where feasible, new hazardous industrial development shall be located away from existing developed areas."

Sec. 30253(3) "New development shall be consistent with requirements imposed by an air pollution control district or the State Air Resources Control Board as to each particular development."

C. GOVERNMENT REGULATION OF ENERGY DEVELOPMENT

Because energy facilities are generally considered to be of "greater than local significance, they are regulated by a large number of federal, state and local regulations, of which the California Coastal Act is but one. Local jurisdiction over energy-related development has been pre-empted by state and federal agencies over the last 20 years.

However, under Section 30519 of the Coastal Act, the permit authority over energy-related developments that the Coastal Commission now enjoys delegates to the City of Morro Bay upon

certification of the City's Local Coastal Program. For those future energy projects not identified within the Local Coastal Program at the time of certification, an amendment to the Program may be requested if the purpose of the energy-related development proposal is to meet the needs of an area larger than the City.

Having discussed the existing basic responsibilities of the Coastal Commission as well as the future responsibilities for regulating energy-related development that will be shared or assumed by the City, it is now necessary to look into how specific types of energy-related facilities are regulated by a variety of government agencies.

1. Power Plant Siting

The State Energy Conservation and Development Commission is the sole permitting agency for siting thermal power plants exceeding 50 megawatts in the State. For every power plant proposed, three alternative sites must be evaluated, one of which must be in the coastal zone.

The construction or operation of new power plants and expansion or alterations to existing plants is, however, covered by Coastal Act Policy. The Coastal Act recognizes that power generating and other facilities which may be incompatible with coastal resource protection goals are necessary for the social and economic well-being of the state and nation. Section 30001.2 of the Act provides the basis for allowing this type of development in the coastal zone. This study will be discussed further under Pacific Gas and Electric's fossil fuel power plant.

2. Marine Terminals

The City of Morro Bay has jurisdiction over those portions of a marine terminal that are on land (i.e. pipelines, storage tanks and other associated facilities). Those portions of a marine terminal which are seaward of the mean high tide line are regulated by the Coast Guard and the State Lands Commission.

3. Pipelines

Technical performance standards for all oil and gas pipelines are governed by Federal regulations administered through the California Public Utilities Commission.

However, after certification of the LCP, pipelines will be reviewed for conformance with the Land Use Plan policies. But permits shall not be required for pipelines exempted from coastal development permits under Section 30610(d) of the California Coastal Act of 1976 as defined by the Interpretive Guidelines on Exclusions from Permit Requirements adopted by the State Coastal Commission on September 5, 1978.

4. Electrical Transmission Lines

The California Public Utilities Commission and the California Energy Commission are the agencies responsible for review and approval of all electrical transmission lines. This includes all technical, safety and environmental concerns. However, the Coastal Act does provide the City permit authority over proposed lines within the City. An exception to this permit authority is electrical transmission lines proposed as part of a new power plant with a capacity greater than 50 megawatts (Section 30264 of the Coastal Act).

5. Outer Continental Shelf (OCS) Oil and Gas Development

Oil and gas development offshore is governed by State or Federal regulations, depending on whether the development is within the State's three mile limit.

Within the three mile limit, the State Lands Commission and the California Coastal Commission have jurisdiction over energy developments. Outside the three mile limit, the United States Department of the Interior through the Bureau of Land Management has the responsibility to oversee and regulate energy development.

Onshore facilities to support offshore energy developments fall within the jurisdiction of the City and Coastal Commission approval and may pre-empt the City's permit powers.

The City's permit powers and discretion for onshore energy developments on State Tidelands have been granted to the City. The State however has the use of these lands without local approval.

D. EXISTING INDUSTRIAL AND ENERGY-RELATED DEVELOPMENTS

The Section inventories the existing industrial and energy-related activities and facilities within the coastal zone, as well as proposed plans to expand or modify these facilities. Figure 14 shows the location of these facilities. It must be realized that due to the dynamics of the energy situation, projecting energy demands and the necessary facilities over a long period is extremely difficult. Currently, none of the facilities discussed here are projecting expansion and when such expansions would be proposed, they will require an amendment to the Coastal Plan.

1. Chevron U.S.A. Estero Marine Terminal

Chevron U.S.A. has a tank farm and tanker facility at Estero Bay, located at the extreme northern end of the City near Toro Creek. This is a multi-company used coastal dependent industrial facility.

FIGURE 14
MORRO BAY ENERGY-RELATED FACILITIES

1. Chevron U.S.A. Marine Terminals and Pipelines
2. Chevron U.S.A. Pier
3. Chevron U.S.A. Oil Storage Tanks
4. Texaco Oil Storage
5. Navy Marine Terminal and Pipeline
6. Navy Jet Fuel Oil Storage Tanks
7. Former Texaco Marine Terminal and Abandoned Pipeline
8. PG&E Marine Terminal and Pipeline
9. PG&E Morro Bay Power Plant
10. PG&E Oil Storage Tanks and Pipelin
11. Chevron U.S.A. Pipeline from San Ardo and San Joaquin Valley

Existing facilities at Chevron's installation consist of two offshore marine terminals, a 1,200 foot long pier, pipelines, pump stations, sixteen (16) fuel storage tanks and accessory buildings. Although the majority of these facilities are located just outside the City limits, the pier and pipelines from the pump station cross the corporate boundaries of the City of Morro Bay. The areas west of the mean high tide are leased from the State Lands Commission.

The marine terminal facilities handle California crude oil produced in the lower San Joaquin Valley and the San Ardo oil fields in southern Monterey County. This facility is a crude oil storage and loading terminal. It does not process or refine the crude oils. Crude oil is transported to this terminal via pipeline and stored in hilltop tanks. The crude oil is then loaded onto ships which moor at one of the two marine terminals. Generally, three ships a week utilize the terminal loading facilities. One terminal can handle tankers of up to 30,000 deadweight tons (dwt) and the other up to 70,000 dwt. The average loading time is 12 to 24 hours.

Although this facility is owned and operated by Chevron, it is used as an exchange facility by several of the major oil companies, such as Mobil Oil Company and Texaco, Inc., in keeping with the Coastal Act Policy. These other oil companies are charged a fee for the handling costs incurred by Chevron.

Approximately 90,000 barrels a day are transferred through the pipelines to the storage tanks. Steam is used to heat the oil to facilitate movement through the pipeline. Tanks are sited on the hilltop in order to utilize gravity flow. Most of the total crude oil imported to this facility is provided by San Joaquin Valley fields. Crude oil is shipped primarily to ports in Los Angeles, San Francisco and Washington.

The pipelines which carry the fuel from the onshore storage facility to the ships are submerged beneath the tideline. The loading activities are performed underwater. The loading ship moors offshore in one of the designated mooring areas. The ships must mechanically manuever a submerged hose (250 foot length) to connect to the ships storage area. All pipeline and loading controls are operated and controlled by the onshore terminal; once the hose is connected to the ship, the oil flow is released. Total control for the oil flow is maintained by the onshore terminal.

The pier structure, and particularly the old pipelines that travel along the top of it, are not presently utilized for loading operations because the loading pipelines are now beneath the water. The decaying pier is now used only for transporting crews to tankers, and Chevron has considered removing the pier or rehabilitating it for sport fishing and other public uses.

Chevron has a Spill Prevention Control and Countermeasure Plan (SPCC) for the Estero Hill plant tankage. This SPCC plan covers

the hill storage facilities only. This plan is augmented by the Port San Luis and Estero Bay Oil Spill Cooperative which was formed in June, 1975, and involves a mutual agreement between Chevron, Union and PG & E. Membership by the U.S. Navy in the cooperative is pending. The cooperative has an oil spill contingency plan for loading lines and onshore facilities. Chevron U.S.A. also has the maintenance contract from the Coast Guard for oil offshore spillage clean up. The company belongs to the Clean Sea Association of Santa Barbara which handles oil spillage operations. Clean Sea stores a boat and storage truck tank at the Estero Marine Terminal (for the transportation of spill waste) for the immediate use in the event of a small spill incident.

Although there are no pending proposals to expand Chevron's Estero Bay facilities, two major expansions have been proposed in the past consisting of a deep water monobuoy for super tankers, and a proposal to use the facilities for transport of petroleum from the Elk Hills Naval Reserve. In addition, Chevron has indicated that their facilities may be needed for OCS leases and for other coastal-dependent uses.

In February, 1975, Standard Oil Company of California proposed to add a deep-water berth and expanded onshore facilities at its (Chevron, U.S.A.) existing marine terminal at Estero Bay. These plans were suspended due to economic considerations in April, 1975.

In the mid-1970's, the U.S. Navy proposed the use of Chevron's Estero Bay terminal as a site to deliver crude oil from the Elk Hills Naval Reserve.

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The Naval Petroleum Reserves Production Act of 1976 authorized the development of specified national petroleum reserves. The Act directs the Secretary of the Navy to ship at least 350,000 B/D from the Elk Hills Reserve in the San Joaquin Valley to unspecified marketing terminals. Three pipeline routes were considered: (1) Port Hueneme; (2) via Coalinga to Estero Bay; and (3) Avila Beach. Adverse impacts on air quality due to loading of crude at marine terminals eliminated these routes from further consideration.

It is not anticipated that Standard Oil will reconsider the Estero Bay site for a deepwater port within the time frame of the Local Coastal Program. However, if future plans are considered

for a deepwater port or other expansion, an amendment to the Local Coastal Program would be required.

2. Texaco, Inc. Storage Tanks

Texaco, Inc. has a small amount of tankage and storage facilities located on North Main Street west of Del Mar School. A number of additional storage tanks are located in the hills adjacent to Chevron's storage tank area. These tanks, owned by Texaco, Inc. are located entirely outside the city limits, and as such they will be addressed in the County's Local Coastal Program.

At one time, Texaco did have a marine terminal for loading and unloading fuel for storage in the tanks, but decommissioned the terminal and pipeline in 1978. There have been no proposals to expand these facilities.

With removal of the marine terminal, expansion of this remaining facility seems unlikely. However, Chevron U.S.A. may utilize the Texaco, Inc. storage tanks in any expansion of its own facilities.

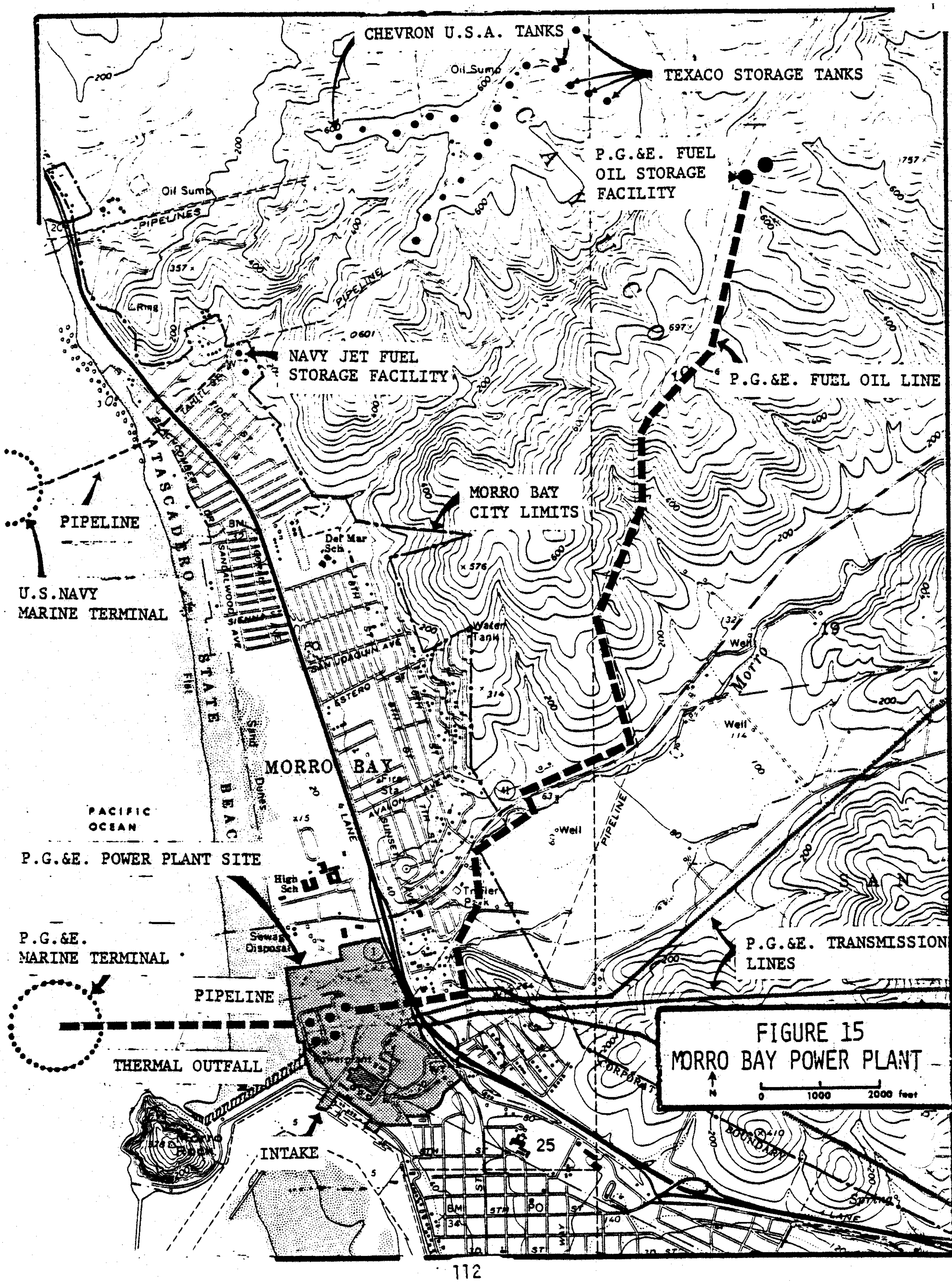
3. U.S. Navy Jet Fuel Marine Terminal

Another facility in Estero Bay within the corporate boundary of the City is the U.S. Navy jet fuel mooring facility and its associated storage tanks and pipelines located at Atascadero State Beach and the adjacent hillsides. Vessels unload jet fuel at the single five point mooring sporadically due to fluctuations in demand. Two storage tanks are located in the hillsides adjacent to residential areas in the City. An additional tank is used for water storage. The jet fuel is unloaded from the vessels and stored in the tanks where it is shipped through a 96-mile pipeline to Lemore Air Force Base. The fuel is then transported through the pipeline by an electrical pump.

Past proposals to expand the Navy's facilities have been limited to their proposed use of Chevron, U.S.A.'s facilities (see discussion under Chevron's Estero Marine Terminal), and no proposals have been made to expand the Navy's fuel storage facilities in their current setting. Due to the proximity of the Navy's fuel storage tanks to residential development, expansion of tankage on the 10-acre site would be unlikely. However, moving the existing tanks upland from the abutting residential areas could conceivably allow expansion of the tankage. Expansion or increased use of the marine terminal could pose air and water quality concerns and would require environmental determination and amendment of the Local Coastal Plan.

4. Morro Bay Power Plant

The Pacific Gas and Electric Company Power Plant has an existing plant within the City limits. Figure 15 shows the location of the plant and its support facilities. The power plant was constructed in two segments of two units each, one in the early


CHEVRON U.S.A. TANKS
TEXACO STORAGE TANKS
P.G.&E. FUEL OIL STORAGE FACILITY
NAVY JET FUEL STORAGE FACILITY
P.G.&E. FUEL OIL LINE
PIPELINE
U.S.NAVY MARINE TERMINAL
MORRO BAY CITY LIMITS
MORRO BAY
PACIFIC OCEAN
P.G.&E. POWER PLANT SITE
P.G.&E. MARINE TERMINAL
PIPELINE
THERMAL OUTFALL
INTAKE
P.G.&E. TRANSMISSION LINES
FIGURE 15
MORRO BAY POWER PLANT
0 1000 2000 feet

1950's and one in the early 1960's. The first two units are 163,000 KW each and the second two are 338,000 KW each, for a total generating capacity of 1,002,000 KW net into the PG & E transmission system. This system extends from the vicinity of the Gaviota Pass in Santa Barbara County in the south, to the Oregon Border in the north. It also connects with neighboring utilities in Oregon, Nevada and Southern California.

The plant generates electricity from steam produced in boilers which consume about 34,000 equivalent barrels of fuel oil and/or natural gas per day at full turbine-generator capacity.

When steam is exhausted from the turbine, it must be condensed back into water in order for it to be re-used in the boilers. To provide sufficient water to accomplish this cooling, two pumps on each unit circulate the 50-55 degree Fahrenheit ocean water through the condensing heat exchanger for the associated unit where it turns the steam to water and increases its temperataure up to approximately 75 degrees Fahrenheit. The No. One and Two unit pumps move 49,000 gallons per minute each, and the No. 3 and 4 unit pumps move 73,000 gallons per minute each, for a total of nearly 490,000 gallons per minute from the Morro Bay Harbor to Estero Bay at the base of Morro Rock.

One of the features of the plant is its ability to convert seawater to distilled water for use in its boilers which require distilled water of the highest purity. The Morro Bay Plant was the first plant in the United Staes capable of producing large quantities of distilled water from seawater. At maximum capacity under design conditions, the plant can produce over 250,000 gallons per day of distilled water.

Pacific Gas and Electric Company maintains an offshore terminal for unloading fuel oil to operate the plant. It is located 4500 feet offshore and was expanded from a five to seven point mooring in 1974. The maximum size vessel that can moor at this facility is 50,000 DWT. Due to the fluctuation of ship availability and fuel demand, tanker deliveries are irregular and may vary from 15 to 30 tankers per year. The terminal includes five 165,000 barrel fuel oil storage tanks on the plant site. As a part of the marine terminal expansion in 1974, two 500,000 barrel storage tanks were installed north of Highway 41, about three miles from the plant site.

Long-range expansion plans for this facility include the construction of two additional steam turbine generators to the existing four generators. This addition would involve the construction of two additional exhaust stacks plus additional facilities for cooling the ocean water. One additional generator would cause the discharge water to rise above allowable levels. This would require additional cooling towers to bring the water back to an allowable temperature for discharge.

The power plant site covers 114 acres with 36.3 acres available for expansion onsite and an additional 50 acres available

adjacent to the plant. According to a California Energy Commission report entitled "Feasibility of Expansion of Existing Coastal Zone Power Plants", the power plant site is the minimal adequate for expansion of small facilities whose location would not further affect the unique view corridor of Morro Rock and the associated high use visitor-serving area. The Energy Commission report indicates that conversion is unfeasible due to a variety factors. The study does conclude that expansion is feasible for a small scale facility utilizing either steam turbine, the existing generating system, combined cycle or combustion turbine.

A combustion turbine power plant operates much like a steam turbine power plant except that the medium which flows past the turbine blades, causing them to turn, is the gaseous product of a combustion process. The turbine drives both the electric generator and also a compressor whose function is to compress input air to a relatively high pressure before it is mixed with gas or liquid fuel in the combustion chamber. The exhaust gases are released to the air after passing through the turbine. The efficiency of combustion turbine power plants (20 to 30 percent) is lower than that of steam turbine power plants, so operating costs tend to be high.

Gas turbines have some environmental advantages compared with steam turbine power plants. Since they do not employ a steam cycle, they do not cause heat addition to water. Exhaust heat may be vented from a short stack into the air, and being relatively small plants, they require little ground space. One major impact associated with these facilities is the large noise levels generated.

Combustion or gas turbine plants are generally utilized as peak load facilities to meet a load demand level occurring only at certain times.

A combined cycle plant combines the best features of gas turbines and steam power plants. The combined cycle plant uses the hot exhaust gas from a gas turbine to provide heat to a boiler for a conventional steam generator-turbine. The gas turbine and the steam turbine drive separate electric generators. The efficiency of this device is about 40 percent. Combined cycle plants are generally utilized as base load facilities.

Another possibility for the power plant would be repowering. The Energy Commission (1979) identified the potential increase of efficiency for this plant as 15 percent (from 40 to 55 percent efficiency). Repowering of the existing facility would represent the process of converting the steam-turbine oil fired units into a more efficient combined cycle system by the addition of gas turbine generator units. Existing boiler units are replaced by waste heat recovery steam generators. The resulting repowered combined cycle plant, utilizing the existing steam-turbine generator unit provides a very substantial increase in the plant generating capacity and an improved plant generating efficiency. Repowering also serves to extend the operating life expectancy of

the plant when compared to the prior existing steam generating unit.

The advantages of facility repowering are numerous. Repowering capacity can be added in a relatively short period of time, and can be added at a low cost. Repowering can be completed at existing plants with little environmental impact, but will require the conversion to clean burning fuels. The repowered plant will be competitively efficient with other types of more modern generating facilites and suitable for intermediate load operation. The new capacity can be added at existing stations, with minimum impacts to surrounding communities. The primary disadvantage to repowering is the utilization of older equipment which may be approaching the end of its practical physical life. Another potential for more efficient use of fuel at the power plant would be co-generation. Co-generation combines industrial use of steam with the production of electricity. One potential for the Morro Bay power plant is use of co-generation with aquaculture. The excess heat could be used to heat water to allow for the cultivation of warm water species.

It should be noted that determination of the feasibility of converting the power plant to alternate systems or repowering requires extensive onsite evaluations.

Expansion of the power plant in areas not designated inappropriate for power plant siting by the Coastal Commission (see following discussion) is controlled by the California Energy Commission. As such, the City of Morro Bay has no jurisdiction over plant expansion.

Expansion of the offshore marine terminal is also a possibility. Tankers of less than 70,000 dwt are decreasing while on the west coast those in the 70,000 to 99,000 DWT class are increasing. These larger tankers would probably require fewer deliveries, and due to the newer and better equipment, reduce the possibility of oil spillage. PG & E has recently received a permit to allow expansion of the Moss Landing Marine Terminal to handle tankers of up to 90,000 DWT. For PG & E to expand it facilities in Estero Bay, it would require an environmental determintion, amendment of the Local Coastal Plan and Coastal Commission review.

E. PROPOSED OR POTENTIAL INDUSTRIAL AND ENERGY-RELATED DEVELOPMENTS

1. Power Plant Siting Study Considerations

The Coastal Act requires the Coastal Commission to designate specific areas of the coastal zone that are not suitable for siting power plants. After these designations are adopted, the governing entity (the State Energy Commission) cannot approve a power plant located in a designated area. Figure 16 identifies those areas designated as inappropriate for power plant siting

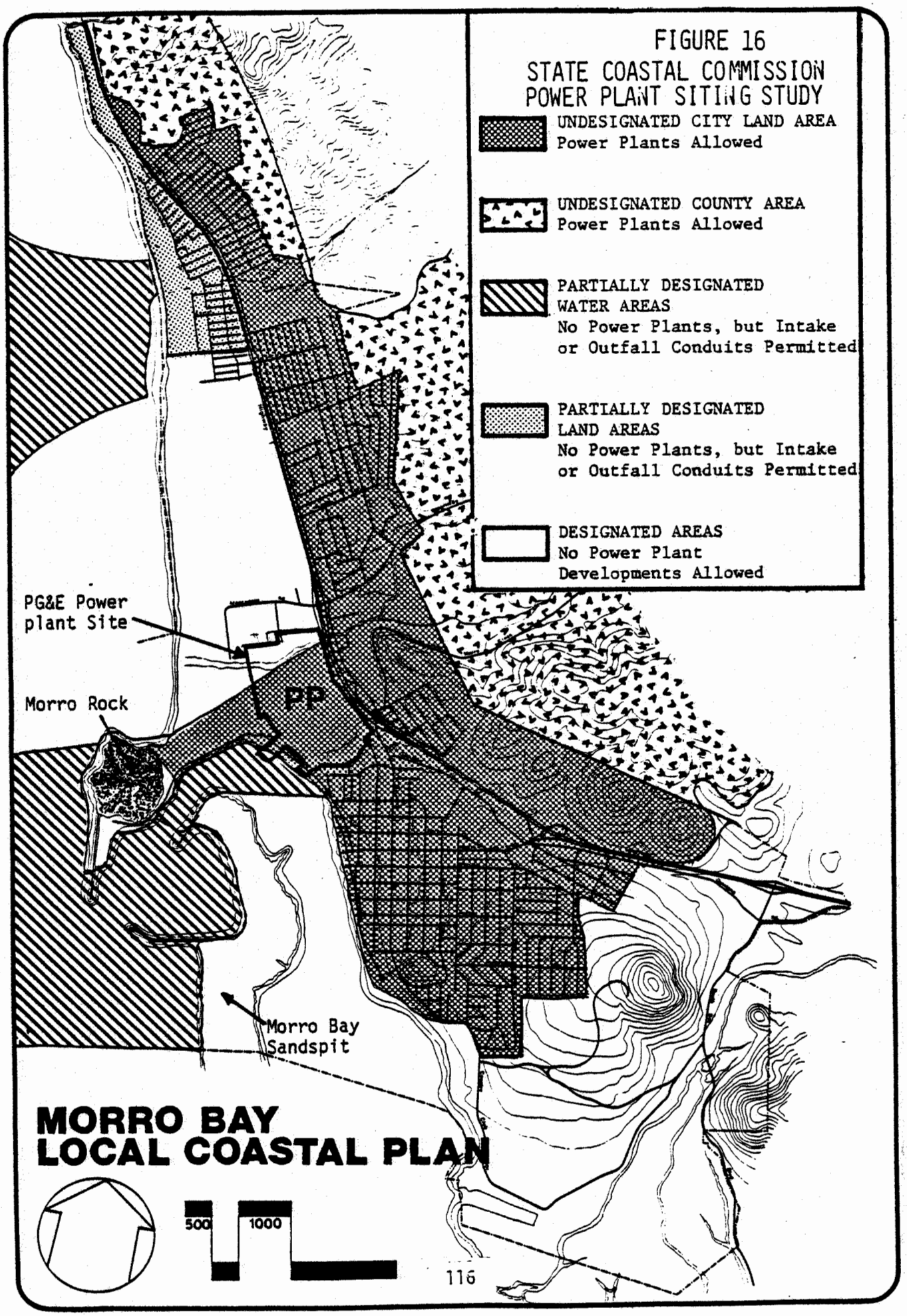


FIGURE 16
STATE COASTAL COMMISSION
POWER PLANT SITING STUDY
UNDESIGNATED CITY LAND AREA
Power Plants Allowed
UNDESIGNATED COUNTY AREA
Power Plants Allowed
PARTIALLY DESIGNATED
WATER AREAS
No Power Plants, but Intake
or Outfall Conduits Permitted
PARTIALLY DESIGNATED
LAND AREAS
No Power Plants, but Intake
or Outfall Conduits Permitted
DESIGNATED AREAS
No Power Plant
Developments Allowed
PG&E Power
plant Site
Morro Rock
PP
Morro Bay
Sandspit
MORRO BAY
LOCAL COASTAL PLAN
500
1000

within Morro Bay. In those areas of the City that the Commission does not designate, a power plant may be built or expanded without Coastal Commission approval.

A "partial designation" may be given to areas where power plant siting is deemed unsuitable but underground facilities such as cooling water conduits are permitted.

Areas not recommended for designation may nonetheless contain valuable coastal resources and the City and the Coastal Commission can participate in the Energy Commission's power plant siting proceedings. This participation could include proposing modification to the proposed site and plant that would mitigate any potential adverse effects on coastal resources. The Energy Commission must implement any recommendations made by the Coastal Commission unless those recommendations are found to cause more environmental damage or are not feasible.

As indicated by Figure 16, the area within the community not designated by the power plant siting study is the land immediately west of the PG & E power plant. This area covers about 50 acres and consists of portions of Atascadero State Beach, state tidelands and private holdings (Den Dulk). This area was left nondesignated in the siting study to allow potential expansion of the power plant. However, based on the scale of expansion identified as being feasible by the Energy Commission for the power plant, sufficient acreage is available onsite. The study indicated acreage requirements for small scale plant expansion would not exceed ten acres (utilizing a once-through water cooling system). Even for large scale power plant expansion utilizing steam turbine, combined cycle or combustion turbine, land requirements would not exceed 33 acres, the amount available onsite.

The Morro Bay power plant site does have some constraints in terms of expansion. While cooling water is readily available, air quality standards may be a limiting factor. Environmental determination and an EIR would be required before expansion could occur.

The Coastal Act requires the Commission to "every two years revise and update the designations." These biennial revisions give the Commission an opportunity to examine the designations as more coastal resource data becomes available and may help to implement this City's Local Coastal Plan. This biennial revision also affords the City of Morro Bay the opportunity to recommend areas for designation. Specifically, the recommendations would address the need to designate the developed portions of the community as unsuitable for power plant siting, and would continue to stress expansion of the existing facilities in the existing PG & E owned properties.

2. Outer Continental Shelf (OCS) Oil and Gas Development

Increased demand for domestic fuel supplies has spurred the federal government to encourage oil industry development of Outer Continental Shelf oil and gas development. Currently, the Bureau of Land Management (BLM) has initiated proceedings towards a proposed lease sale for five basins off California's coast. The sale, known as Lease Sale #53, would include tracts totalling over 1,000 square miles off the San Luis Obispo County shoreline, as shown on Figure 17. In addition to Lease Sale #53, the BLM is initiating proceedings for other sales off California's central coast. Precise locations of the sales were not available at the time of writing of this chapter.

The tracts being proposed in 1980-81 for leasing off the County's coast are in what is known as the Santa Maria Basin. This is believed to be an offshore extension of oil bearing rock strata stretching from Point Conception north to Morro Bay. This basin, while comprising nearly half of the tracts in the total lease sale (115 out of 243), is estimated to contain over 70 percent of the recoverable oil and 404 billion cubic feet of gas.

While this estimate from the United States Geologic Survey (U.S.G.S.) is considered to be the most likely find, actual recoverable resources are possibly much higher or lower, though the likelihood of there being found no commercially recoverable oil or gas is quite small.

The process of recovering oil and gas from the Outer Continental Shelf requires considerable industrial activity on land as well as at sea. Offshore platforms must be constructed. Food, fuel and drilling supplies must be assembled and shipped to the offshore work site. The workers from these activities need housing as well as community facilities and services. Estimating onshore impacts depends on whether or not recoverable resources are discovered, and if so, in what quantity. Until exploration is completed, the scale of onshore support requirements cannot be accurately predicted.

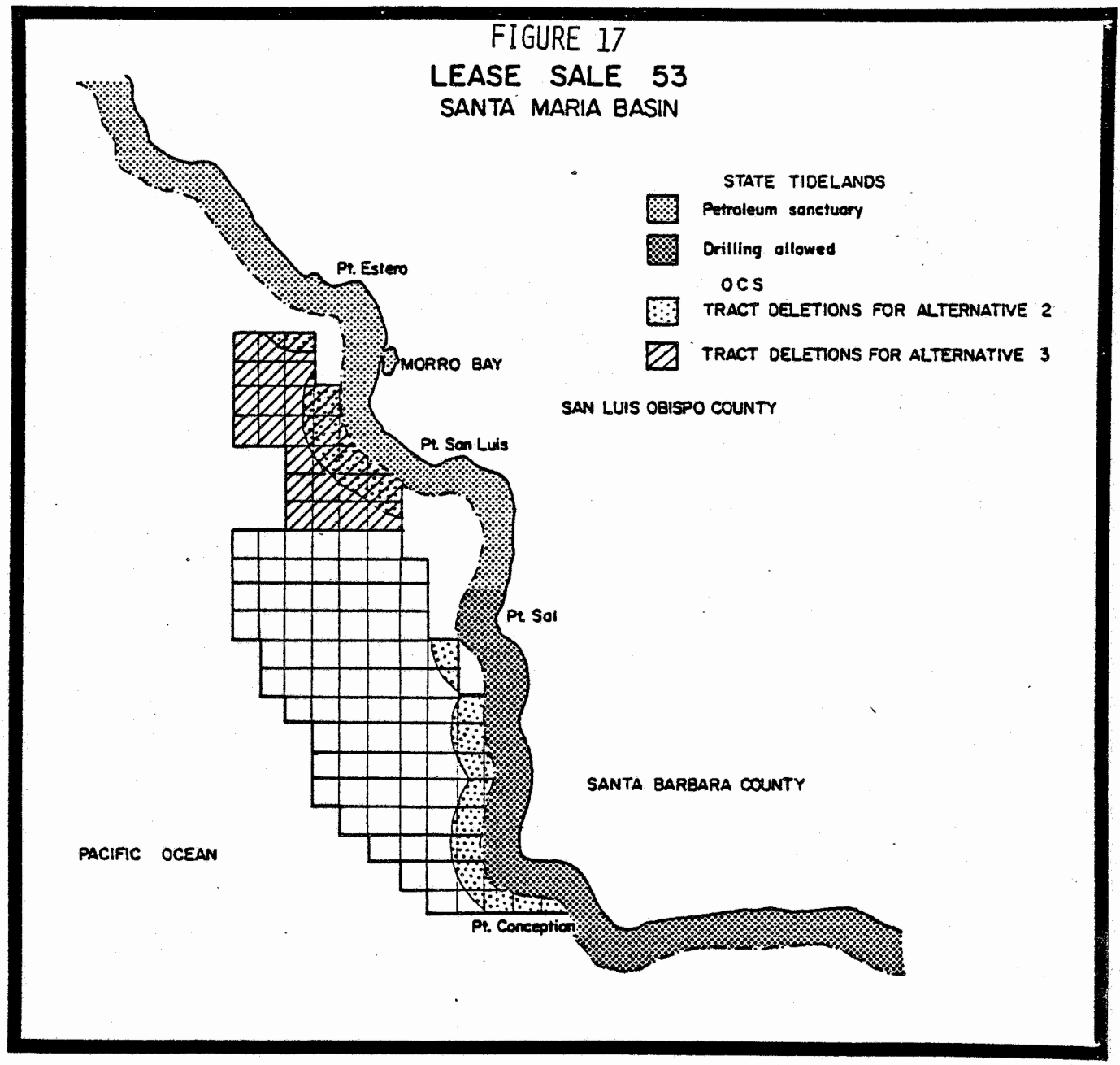
To meet the requirements of the National Environmental Protection Act of 1969, BLM was required to prepare an Environmental Impact Statement (EIS) before leasing can occur. In the EIS for Lease Sale #53, the Bureau stated "There would be three (3) major onshore operations required in Humboldt Bay, San Francisco Bay and Morro Bay. The level of onshore facilities identified for Morro Bay ". . . could occupy approximately six (6) hectares (15 acres)" and would be used ". . . to store pipes and offshore drilling materials". Examination of service bases from other lease sales show that 15 acres may be the minimal size necessary for a base and, in fact, the area required could be considerably larger.

While identification of the City of Morro Bay as a service base site in the EIS does not preempt the City's authority to approve or deny such development, it does point out the desirability of

FIGURE 17

LEASE SALE 53

SANTA MARIA BASIN



*Note: State Lands Commission states that the petroleum sanctuary shown is a State Oil and Gas Sanctuary set up by the State Legislature (PRC§6871.2). Oil and gas exploration and/or production are prohibited except when drilling on an adjoining federal lease threatens to drain state resources.

the harbor for such uses. The siting of service bases for OCS development is left to the oil companies.• The oil industry prefers to locate services bases as close to their offshore operations as possible, due to the high cost of transportation. Consequently, final decisions on location may not be made until after the lease sale.

Besides proximity to offshore development, industry evaluates locations on the following factors:

(1) good truck and/or rail access;
(2) port facilities;
(3) available labor;
(4) skilled machine shop facilities;
(5) housing, medical and municipal facilities;
(6) environmental concern.

Since there is a shortage of suitable wharfage space, moorings and areas for expansion of commercial fishing industry, competition between commercial fishing and OCS related development will probably occur. From the oil industry's point of view, protected harbors which serve the commercial fishing industry are more desirable than pleasure boat marinas or cargo ports. However, construction and drilling boats associated with service bases are generally 180 to 220 feet in length and have a displacement of 15 to 20 feet. Presently, Morro Bay Harbor could not accommodate this type of craft unless there is a total overhaul of the harbor with a tremendous amount of dredging.

Wharfage requirement for a service base most likely would require a minimum of 200 feet of waterfront property. The only area for this would be the land between P.G. & E. and Morro Rock in the Coleman Park area. But this area is critical to the City's plans to develop facilities to meet the needs of the commercial fishing industry and to improve the land area as a quality waterfront park and recreation area.

Other impacts that would result from locating OCS support facilities in the City of Morro Bay include:

(1) Displacement of commercial fishing industry: Due to the similarities in the requirements of commercial fishing boats and of those service vessels, and because the oil industry can afford to pay more for the services required by their boats than can the fishing industry, commercial fishing would tend to be displaced if a competitive situation arose.

(2) Displacement of labor force: Some portion of the previously employed labor force might be attracted to the new industries due to higher wages, perhaps resulting in the decline of traditional industries.

(3) Creation of new jobs: Employment for local and imported labor, generating local cash flow, induced and indirect employment, would be generated.

(4) Increased demand for housing: Housing demand from the OCS labor force would have a significant impact on the community's limited housing supply.

(5) Environmental impacts: Resulting oil spills and dredging may have significant impact on Morro Bay's wetlands.

Beyond the impacts that would be posed by the location of an onshore support base in Morro Bay, the development of tracts in the Outer Continental Shelf would have the following additional impacts on the community:

(1) Air Quality: San Luis Obispo County is an air quality attainment district and meets its air quality standards. OCS development is a problematic source of hydrocarbon emissions and may cause the County's air quality to exceed standards. Further information regarding impacts and mitigation measures which would reduce impacts is needed.

(2) Oil Spills: An oil spill in Morro Bay would have a devastating effect on the wetland and associated wildlife species, including rare and endangered bird species. An oil spill on the beaches may severely reduce tourism, vital to the City's well-being.

(3) Visual Impacts: The siting of oil platforms offshore may impact coastal views. These visual concerns must be balanced, however, with the nation's increased need for domestic fuel supplies.

Personnel employed in commercial fishing and support industries may be recruited by the oil industry. This could lead to a decline in the industry. Other than these, however, personnel for OCS development will most likely be recruited from other areas due to the requirement for skilled help. While the percentage of new personnel (non-local to those hired who are local) ranged from 31 percent to 85 percent (Department of the Interior, 1978), it must be noted that the lower numbers come from areas, unlike San Luis Obispo County, with an already established oil industry.

With the existing limit of new residential development in the community due to the water moratorium, housing for OCS support personnel may not be available. Typically, employment is greatest during the development phase of OCS because facility construction requires a large labor force.

Later, when oil and gas production becomes the primary activity, employment typically declines rapidly. The primary concern for the community would be the City's ability to accommodate housing,

public services, and other secondary impacts of service base development.

Environmental impacts stemming from service base (and other facilities) development would be of the same nature as any other comparably scaled development, except for those stemming from harbor expansion or oil spills. Coastal wetlands and associated wildlife are extremely sensitive to dredging, the resulting increased turbidity and sedimentation and oil from spills. The preliminary draft EIS indicated damage to a wetland from an oil spill may last for up to ten (10) years.

Alternatives to locating a service base in Morro Bay would either be the Chevron Estero Bay tanker-terminal, Port San Luis or the proposed service base at Gaviota. The proposed base at Gaviota could potentially accommodate the heavy industry requirements of OCS while smaller scaled facilities could be sited at a location within the County.

To conclude, accurate identification of specific onshore OCS-related facilities and their potential impacts on the community is not possible until the exploration phase is over. Short of this, projections of recoverable resources and facility requirements can be made. These projections or scenarios are currently being developed by the County through a Coastal Energy Impact Program (CEIP) grant. Identification of potential offshore development and onshore facility requirements will allow proper planning for impacts stemming for OCS development in the event Lease Sale #53 and other subsequent sales occur and commercial development begins.

F. POLICIES ON ENERGY-RELATED DEVELOPMENT

1. General Policies

Policy 5.01. The City shall designate the existing PG & E parcel and the Chevron pier parcel as coastal- dependent industrial uses. Any proposals for energy dependent industrial uses within zones designated for general industrial development will require an amendment to the land use plan consistent with Section 30515 of the Coastal Act. Power plant expansion on PG & E owned property shall have priority over other coastal dependent industrial uses. Power plant expansion shall be limited to small facilities whose location would not further affect the views of Morro Rock from State Highway One and high use visitor-serving areas, consistent with Policy 12.11.

Policy 5.02. Interim uses shall be allowed in areas designated coastal- dependent industrial uses until the existing owners have an approved coastal-dependent industrial development. Interim uses shall be

limited to projects which have relocatable (not permanent) structures, are subordinate to the character of the visual setting, and are limited to the following uses:

(1) Visitor access, paths, lookout points, etc.
(2) RV parks
(3) Parking
(4) Picnic areas
(5) Campgrounds
(6) Restrooms and service facilities
(7) Playgrounds
(8) Temporary boat storage
(9) Temporary boat repair area
(10) Ancillary uses for the above
(11) Other uses serving visitors or commercial fishing which do not require permanent structures

Policy 5.03. The Morro Bay Wastewater Treatment facilities shall be protected in their present location since an important operational element, the outfall line, is coastal-dependent.

Policy 5.04. In the areas designated for industrial land uses, coastal-dependent uses shall have priority over non-coastal-dependent uses.

Policy 5.05. In areas designated for coastal dependent industrial uses, any proposed service bases or proposed additions or modifications of the existing marine terminals and associated facilities (including storage tanks) and oil separation, treatment and processing facilities shall be subject to review and approval of the following:

a. Phasing plan for the staging of development indicating the anticipated time table, and site plans for project initiation, expansion possibilities, completion, consolidation possibilities and decommissioning.

b. Oil spill contingency plan indicating the location and type of cleanup equipment, designation of responsibilities for monitoring, cleanup, waste disposal and reporting of incidents and provisions for periodic drills by the operator as requested by the County, to test the effectiveness of the cleanup and containment equipment and personnel.

c. Submission of the advantages and disadvantages of the proposed expansion and possible alternatives in terms of air quality, oil spill probability, frequency of vessel trips and loading/unloading time.

d. Submission of an examination of the effects the expansion has on the related transportation processing system.

e. Upgrading of the existing facilities in terms of reducing overall air pollutant emissions, assuring the adequacy of screening from public view including the use of decorative walls, fences, and landscaping, etc.

f. Preparation of an Environmental Impact Report.

g. Availability of adequate water, wastewater services and other public services either provided by the City or applicant.

Policy 5.06. The routing of any new pipelines or transmission lines shall utilize whenever possible existing pipeline or transmission line corridors.

Policy 5.07. Except for those pipelines and transmission lines exempted from coastal development permits under Section 30610 (d) and (f) of the Coastal Act as defined by the State Coastal Zone Conservation Commission's interpretive guidelines adopted September 5, 1978, the City shall review and approve all proposed plans for the expansion of transmission lines and pipelines in and through City boundaries.

Policy 5.08. The City will require that new pipelines and transmission lines are installed with suitable mitigation measures such as erosion control, revegetation, and other measures necessary to protect all scenic resources and habitat values.

Policy 5.09. The City shall participate in the biennial review of power plant locations by the Coastal Commission and make recommendation where amendments, alterations, or conditions are needed.

Policy 5.10. The City shall request CEIP or other available state or federal funding to assist in the evaluation of OCS development with respect to socioeconomic and environmental concerns at such time as private industry proposes specific OCS-related development within or adjacent to the city limits.

Policy 5.11. Due to the presence of sensitive wetlands and endangered species habitat and the City's status as a Bird Sanctuary, the City will advocate that the Coastal Commission change the recommendation of its Power Plant Siting Study to designate all areas

within the City limits except the site presently occupied by the PG & E Power Plant, as unsuitable for power plant siting, and designate the City's primary coastal-dependent permitted use as commercial fishing and recreation.

Policy 5.12. Due to limited available space, constraints of the harbor, the sensitivity of the Morro Bay Estuary, the needs of the commercial fishing industry, and the needs of tourism and recreation near the bay, Morro Bay opposes the development of a major OCS onshore support base and other competing support facilities within the City limits.

Policy 5.13. The City wishes to go on record as opposing the leasing of OCS lease tract #53.

Policy 5.14. In the event the Federal or State government mandates that minor OCS support facilities must be accommodated here, such facilities may be allowed as a conditional use in the City provided that:

a. The facilities shall not interfere with public shoreline access or access to Morro Rock.

b. The development shall financially participate in the programs to stabilize the dunes between Morro Rock, the PG & E power plant, and Morro Creek. Any Coastal Conservancy funding expended on dunes stabilization should be reimbursed commensurate wth the benefit received.

c. The development shall involve construction of waterfront facilities that can be shared or used by the commercial fishing industry.

d. Any storage areas shall be inconspicuously located and extensively screened from public view with heavy landscaping.

e. All heavy equipment or large quantities of bulky supplies shall be stored and transported from other existing service bases or the proposed Gaviota supply base.

f. Development will be required to fully assess and mitigate the effects of a partial crew base on Morro Bay's economy and housing supply.

g. Any such development shall procure and furnish any water supplies needed for their operation and maintenance and for the maintenance of their personnel without impinging on Morro Bay's available supply and without cost to the City.

h. Any such development shall likewise procure and furnish any sewer capacity needed for their operation and maintenance and for the maintenance of their personnel without impinging on Morro Bay's existing capacity and without cost to the City.

i. Any such development shall agree to reimburse the City for the cost of police, fire, public works and other City services made necessary by reason of the development.

2. Specific Planning Area Policies

The following policies apply to specific industrial land use areas within the North Morro Bay, Del Mar and Bayfront Planning Areas.

Area 1 - North Morro Bay

Policy 5.15. In addition to the requirements set forth in the applicable general policies, any proposals to improve, upgrade, or expand Chevron, U.S.A.'s facilities shall be conditioned to allow for public access provided that access will not endanger the public or interfere with industrial operations.

Policy 5.16. At such time as Chevron U.S.A. no longer requires the existing property for petroleum operations, the City requests that a State or County agency or the City be offered the right of first refusal to acquire the pier and pier property for recreational purposes.

Policy 5.18. Should it become necessary for the U.S. Navy to expand its jet fuel storage operations in Morro Bay, existing tankage and new facilites shall be located if possible at or adjacent to either the Chevron, U.S.A. site or at a site in the hills behind the City of Morro Bay, subject to appropriate measures to mitigate impacts to view and other resources.

Area 2 - Del Mar

Policy 5.19. Any proposals to reactivate or improve Texaco, Inc. facilities shall be limited to those uses which are compatible with existing surrounding residential development and which do not represent a physical expanding of the previously existing operations such as office space.

Area 3 - Bayfront

Policy 5.20. Any expansion of the PG & E power plant shall give priority to the options that would best utilize

available on-site space. Additionally, no dunes areas should be disrupted unless there is no other less environmentally damaging alternative. PG & E shall contribute to the dunes stabililzation program and reimburse their pro rata share of any Coastal Conservancy (or City) expenditure for dune stabilization in this area.

Policy 5.21. As a condition of any expansion of the PG & E power plant, the City will require substantial landscaping and screening to mitigate the visual impacts of existing and future facilites; with particular emphasis on screening the facilities located between the power plant and Highway One.

Policy 5.22. The City shall insist that the present operation and any further expansion of the PG & E Plant conform to the standards of the Federal and State pollution control requirements and emission levels be maintained.

VIII. COASTAL AGRICULTURE

A. INTRODUCTION

The Chorro and Morro Valleys, within and adjacent to the City, have either in the past or are presently supporting some agricultural activity. The City however contains a relatively small area devoted to this interim use. The City has no local coastal planning authority over lands outside its corporate limits, but does have strong interest in resource protection and land use planning for this area. Doubling the agricultural land use projected by the City water management study[1] would only result in a 7% increase in water demand, but other coastal resources may be adversely affected by activities in the unincorporated County area (i.e., soils erosion, contamination of streams and ground water supplies with fertilizers and pesticides, etc.). Decisions and policies regarding agricultural lands outside the City limits but within the coastal zone will be addressed by the County of San Luis Obispo's Local Coastal Program.

The Chorro Valley runs southeast of the City towards the City of San Luis Obispo. Flanked by the chain of volcanic plugs known as the Morros to the south and by the San Bernardo Mountains to the north, the valley floor is traversed by Chorro Creek which empties into the Morro Bay estuary below Morro Bay State Park. The elevation of the valley floor ranges from sea level to 200 feet and averages a half mile in width. The San Bernardo Creek and San Luisito Creek tributaries also contain lowlands which are cultivated.

Morro Valley, traversed by Morro Creek which empties to the sea just north of Morro Rock, runs a northeast course inland towards the Atascadero area. The Coastal Zone Boundary cuts across the valley about 4.5 miles away from the City. Lying between the San Bernardo and Morro y Cayucos Mountains, the Morro and Little Morro Creek bottomlands at the confluence of the two creeks are about a half mile wide. The elevation of the valley floor within the coastal zone ranges from 50 to 350 feet, and the adjacent hills rise abruptly into steep rolling slopes.

The City cannot readily attest to the condition of the lands in its regional environs, because site specific evaluations have not been made of its agricultural capabilities. It would be presumptuous and misleading for anyone to assume conditions which favor long-term agricultural use in this area at least on any comprehensive basis.

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[1] Brown and Caldwell Consulting Engineers, 1981.

B. COASTAL ACT POLICIES

The Coastal Act contains a comprehensive set of policies advocating the preservation of agricultural lands. These policies are to be used to guide the development and implementation of local government's coastal programs. One of the Coastal Act's most specific policies revolves around the preservation of "prime" agricultural lands. Agricultural lands defined as "prime" under the Coastal Act are those which meet one or more of the following criteria:

"(1) All land which qualifies as Class I or II in the Soil Conservation Service land use capability classifications."

Soils maps as prepared by the Soil Conservation Service of the U.S. Department of Agriculture are the result of reconnaissance types of surveys. A soil type of less than 5 acres is not included on the map. The mapping is done on a scale of 1" = 2000'. Thus the soils maps are not refined micro-surveys of a particular property. This becomes very significant when these maps are used for categorizing a small area. The mapping is done largely by the examination of aerial photos. Field checks and laboratory analysis is minimal. This practice works reasonably well in areas with substantially the same soil in considerable volume. In small land areas with mixed soil types, the method breaks down. Frequently phases of the soil type are not identified and even errors made in classifying the particular soil type. The Storie index assigned to a soil type is on the basis of the best rating and does not consider the micro variability.

The Land Use Capability classification of the Soil Conservation Service is also painted with broad strokes. Productivity may vary widely among soils within one capability class. There are eight classes and four sub-classes. Class I soils have few limitations that restrict their use. Class II soils permit some limitations such as slight to moderate salinity or alkalinity, wetness that can be corrected by drainage, and so forth. Class III soils have somewhat more severe cropping limitations. Soils with a high susceptibility to erosion is an example. Class IV soils simply have more of the same types of limitations for farming. Capability classes V to VIII are considered to be not suitable for cultivation.

From the practical application of this rating system, a field may have a small portion in Class I with the balance Class III. In this case the entire area would be treated as Class III since the farming practices would be dictated by the bulk area.

"(2) Land which qualifies for a rating of 80 through 100 in the Storie Index Rating."

The Storie Index is a composite of four factors. Factor A is the character of the physical profile. There are nine groups of

these and numerous sub-groups. Each of these sub-groups, in nearly all cases, has a range in the percentage rating. Judgement must be exercised to determine which percentage should be applied for a specific parcel of land. Factor B is the rating on the basis of the surface texture of the soil. Here there are five major classifications with numerous sub-groups. And again there is a range in the rating. For example, coarse sandy loam may range in this rating from 70 to 90 percent. Factor C is the rating of the land on slope. There are ten slope classes ranging from 'nearly level' to 'steep'. All but one of these classes has a range in the percentage rating. Land with a slope of 3 to 8 percent has a range of 95 to 100 percent if called 'gently sloping' but the range is 85 to 100 percent if called 'undulating'. Such a difference does not show on the generalized soil map or in the generalized Storie Index for a soil type or series. Thus part of a property may have a very different rating from another part even though the soil map classifies the land in one category. Finally there is Factor X which relates to those soil conditions affecting productivity other than A, B, or C. There are six major items with numerous sub-groups that each have ranges in the percentage ratings. Some of these ranges are quite wide. For example, under "alkali, slightly affected", the range is 60 to 95 percent.

The ratings selected for each of the four Factors is multiplied to arrive at the Storie Index. This multiplicative process can have a severe effect on the index. Thus a soil could be 100 percent for three factors but if the fourth factor is 60 percent, then the Storie Index would be 60. At best the Storie Index can only be considered as an approximate guide to productivity.

"(3) Land which supports livestock used for the production of food and fiber and which has an annual carrying equivalent to at least one aminal unit per acre as defined by the U.S. Department of Agriculture (U.S.D.A.)."

*"(4) Land planted with fruit-or-nut bearing trees, vines, bushes, or crops which have a non-bearing period of less than five years and which will normally return during the commercial bearing period on an annual basis from the production of unprocessed agricultural plant production not less than $200 an acre."

*"(5) Land which has returned from the production of unprocessed agricultural plant products an annual gross value of not less than $200 per acre for three of the previous five years."

*NOTE: AB321, Hannigan (two year bill) includes deletion of the $200 gross value criteria as a definition of prime agricultural land.

Of all the crops grown in San Luis Obispo County, according to the 1980 report of the Agricultural Commissioner, only wheat, barley and safflower failed to yield an average of $200 per acre.

This has been the normal pattern for recent years. Thus this criterion effectively states that if you have grown any other crop, the land is 'prime agricultural land'.

The criterion could certainly be said to ignore economic reality. For most row crops an investment of from $500 to $5000 per are in operating costs is incurred before anything is harvested. On a commercial vegetable farm the depreciation cost for machinery and irrigation equipment amounts to $200 per are. The inference is that this criterion was interjected to retain a particular scenic character of the land without the acquisition of a scenic easement. It perpetuates subsistence farming. Furthermore, this criterion can be evaded by simply not farming the land for three years.

Sec. 30241. "The maximum amount of prime agricultural land shall be maintained in agricultural production to assure the protection of the areas of agricultural economy, and conflicts shall be minimized between agricultural and urban land uses through all of the following:

(a) By establishing stable boundaries separating urban and rural areas, including, where necessary, clearly defined buffer areas to minimize conflicts between agricultural and urban land uses.

(b) By limiting conversions of agricultural lands around the periphery of urban aras to the lands where the viability of existing agricultural use is already severely limited by conflicts with urban uses and where the conversion of the lands would complete a logical and a viable neighborhood and contribute to the establishment of a stable limit to urban development.

(c) By permitting the conversion of agricultural land surrounded by urban uses where the conversion of the land would be consistent with Section 30250.

(d) By developing available lands not suited for agriculture prior to the conversion of agricultural lands.

(e) By assuring that public serivce and facility expansions and nonagricultural development do not impair agricultural viability, either through increased assessment costs or degraded air and water quality.

(f) By assuring that all divisions of prime agricultural lands, except those conversions approved pursuant to subdivision (b), and all development adjacent to prime agricultural lands shall not diminish the productivity of prime agricultural lands."

Sec. 30242. "All other lands suitable for agricultural use shall not be converted to non-agricultural uses unless (1) continued or renewed agricultural use is not feasible, or (2) such conversion would preserve prime agricultural land or concentrate development consistent with Section 30250. Any such permitted conversion shall be compatible with continued agricultural use on surrounding lands."

Sec. 30250(a). "New residential, commercial, or industrial development, except as otherwise provided in this division, shall be located within, contiguous with, or in close proximity to , existing developed areas able to accommodate it, or where such areas are not able to accommodate it, in other areas with adequate public services and where it will not have significant adverse effects, either individually or cumulatively, on coastal resources. In addition, land divisions, other than leases for agricultural uses, outside existing developed areas shall be permitted only where 50 percent of the usable parcels in the area have been developed and the created parcels would be no smaller than the average size of surrounding parcels."

C. INTERIM AGRICULTURAL AREAS/URBAN RESERVE DESCRIPTION, ANALYSIS AND ISSUES

1. North Morro Highlands

Discussion related to this portion of the community and its environs centers on an analysis of the properties known as, the Nagano (80 acres), the Cabrillo (35 acres), and the Cabrillo - VRM (110 acres). Approximately 43 acres of the Cabrillo - VRM property is within the current city limits, the remainder and other adjacent properties are in the unincorporated County territory. These properties were selected for discussion because specific site analyses have been performed,[1] and due to their adjacency. (See Figure 19). A summary of the site analysis is as follows:

-Based on an individual analysis, none of the properties has been found to have a Storie Index of 80 percent of more (see discussion of Storie Index rating system in preceeding chapter section), and would not qualify under this criterion as "prime agricultural land."

-The Cabrillo and Cabrillo - V.R.M. properties are Land Use Capability Class III or worse even when irrigated.

-The Nagano property is a marginal Class II when irrigated.

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[1]Report by Dr. C.W. Vrooman, B.S.A., M.S.A., PH.D., A.S.A., and Dr. C. Dean Piper, Head, Soil Science Department, California State Polytechnic University, San Luis Obispo.

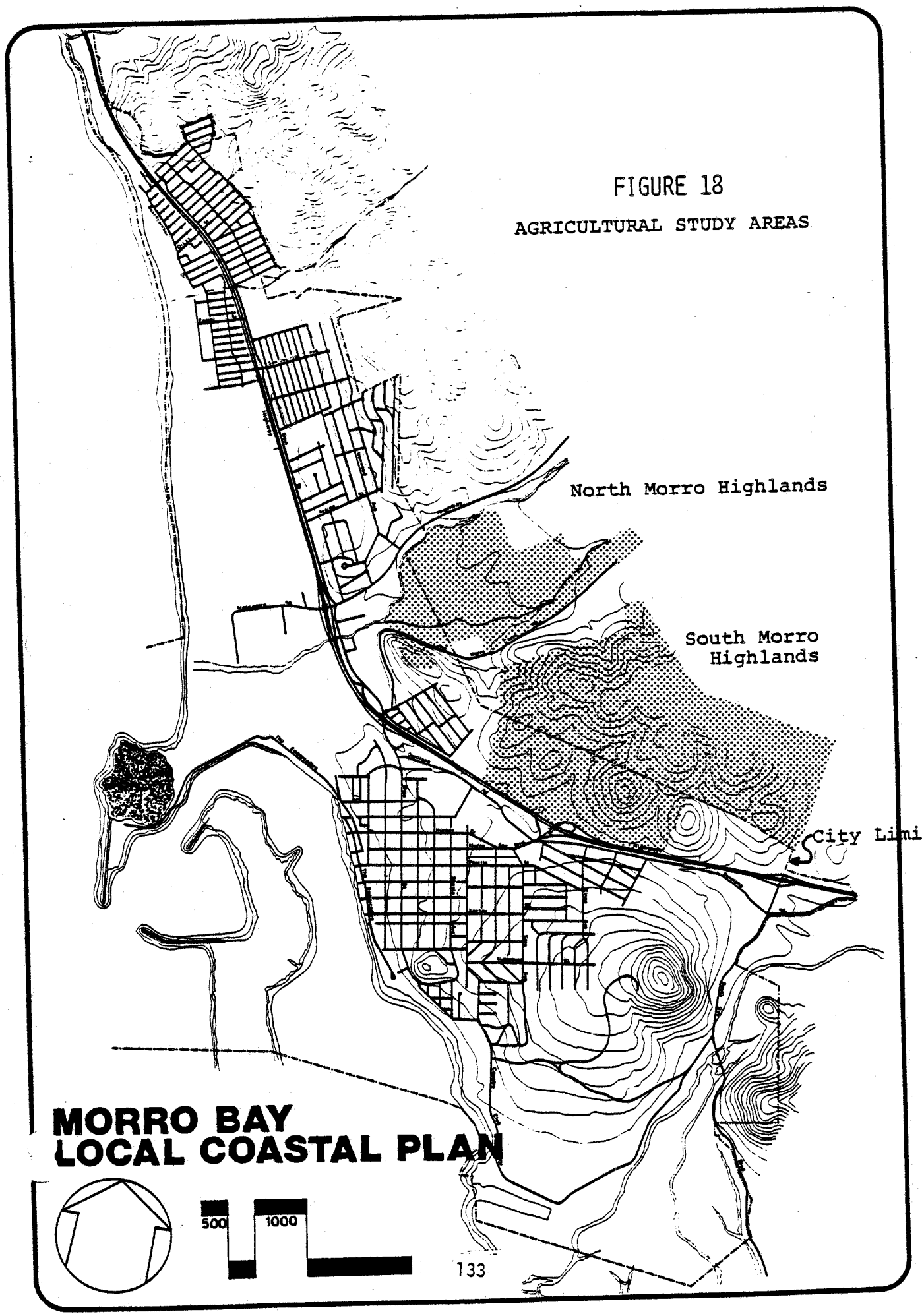
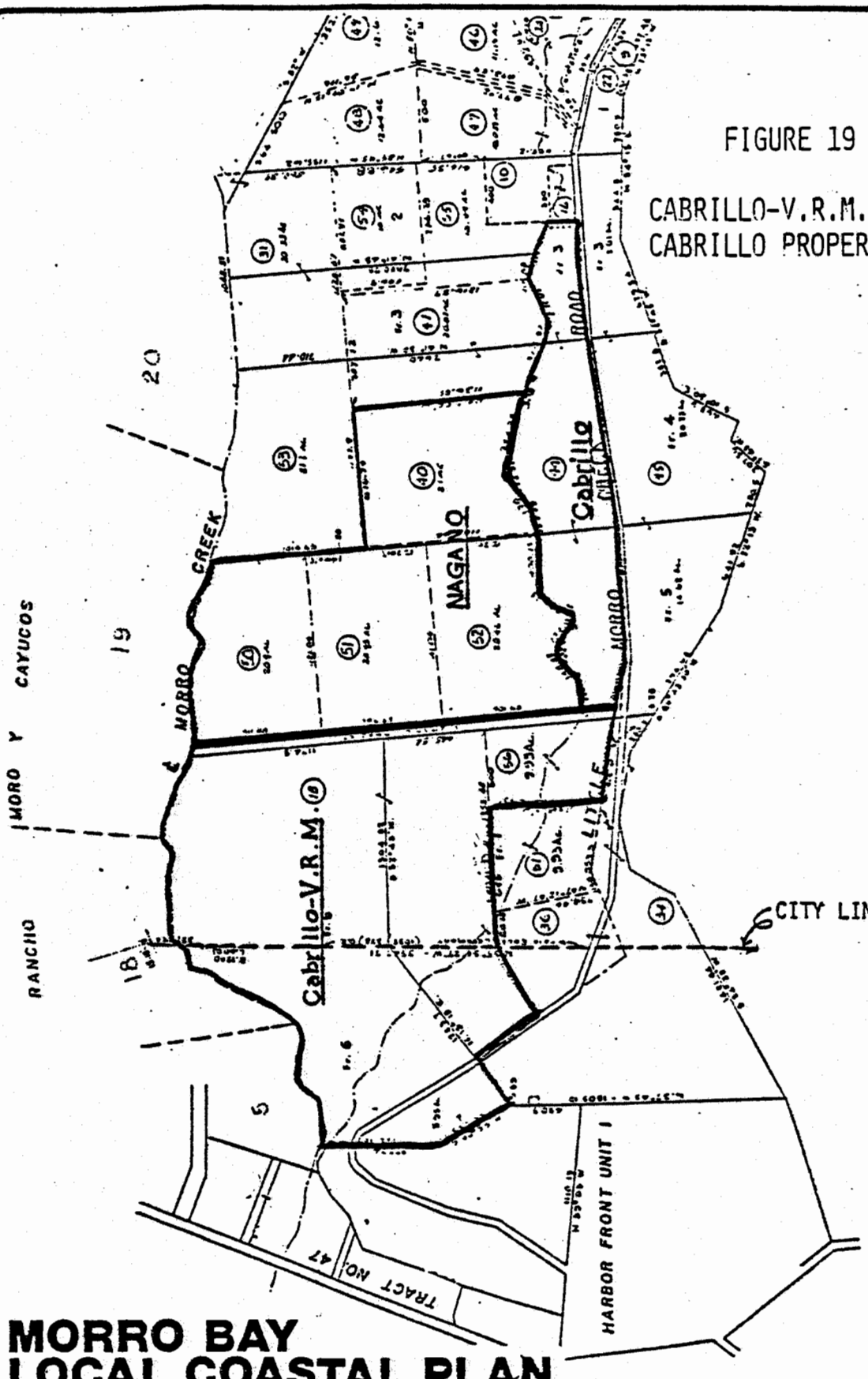


FIGURE 18

AGRICULTURAL STUDY AREAS

MORRO BAY LOCAL COASTAL PLAN


MORRO BAY
LOCAL COASTAL PLAN
FIGURE 19
CABRILLO-V.R.M., NAGANO & CABRILLO PROPERTIES
CITY LIMITS
Cabrillo-V.R.M.
NAGANO
Cabrillo
MORRO CREEK
MORRO ROAD
HARBOR FRONT UNIT I
TRACT NO. 47
RANCHO MORRO Y CAYUCOS
18
19
20
5

-All the properties are Class III or worse when not irrigated.

-While all of the properties have produced more than $200 of unprocessed agricultural product in three of the past five years, neither singly nor in combination do they create a viable commercial agricultural unit.

-None of the properties has a grazing capacity of one animal unit per acre.

-There are no fruit or nut orchards on any of the properties.

Related to the Land Use Capability classification it is noted that Cropley clay has a slope range of 0 to 2 percent in order to achieve a Class II rating when irrigated. The area soil map indicates that the southerly slough area on the Cabrillo - V.R.M. property is Cropley clay. Obviously this area has slopes in excess of 2 percent. While the bottom of the slough is level and meets the slope requirements, it is totally waterlogged by winter rains and is not cultivated. The fact is that most of this slough area is not suitable for cultivation and is not cultivated. In reality it is waste land for all practical purposes and not Class II or III that slavish adherence to the generalized soil map would indicate.

The Land Use Capability rating for the Lodo soil is Class VIII-e. The slough areas fall into Class IV or lower as does the area southerly of Little Morro Creek. The gravelly soils are Class III at best. The overall rating for the bottomlanad of the property is Class III land use capability when irrigated.

The Storie Index for the Cabrillo - V.R.M. property is highly variable. The maximum rating for the very best of the soil, called Salinas silty clay loam, is 77 percent. Some 10 acres westerly of Little Morro Creek Road is Lodo clay with a Storie Index of 4 percent. Two portions mapped as Cropley clay have an index of 60 percent maximum for 8 to 10 acres. About 10 to 15 acres of the mapped Salinas silty clay loam have an erosion pavement and are gravelly. A northerly drainage slough does not appear on the soil map. It actually has cattails growing in two spots. The 3 or 4 acres betweeen Little Morro Creek Road and the creek itself have slopes far in excess of the maximum allowed for Salinas silty clay loam. The overall Storie Index for the property is certainly below 50 percent and none of the property achieves an Index of 80 percent.

Much of the Cabrillo - V.R.M. land is heavily infested with garden centipedes. This pest reduces the yield of most crops and makes some totally uneconomic. This must be considered in assessing the land for viable agriculture.

The Nagano property is the best soil of any of the three ownerships. It has the least proportion of waste land of the three subjects. Outside of the creek areas, little of the Nagano

land has slopes in excess of 5 percent which could drop the rating to Class III even when irrigated.

The results of a micro-study illustrate the limitations of the use of the S.C.S. soil surveys for land use planning decisions. The micro-survey of this property was undertaken as it was the most likely area to meet the Storie Index and Land Use Capability criteria for 'prime agricultural land'. It fails on the Storie Index and barely gets by on Capability when waste land is ignored. If the S.C.S. designation had not been investigated, the Storie Index would have been 90 percent and the Land Use Capability considered Class I when irrigated. The micro-soil analysis revealed the following:

1. The Storie Index for the property is from 40 to 50 percent.

2. The soil is not a Merimel silty clay loam as shown on the S.C.S. soil map. It is a Capay silty clay.

3. In some areas the salts level is sufficiently high as to reduce the yield of some crops by as much as 20 percent.

4. Under irrigation the best possible rating of the usable cropland is Class II.

For the Cabrillo property the soil is mapped as Salinas silty clay loam. Under optimum conditions for this soil the highest Storie Index is 77 percent. In actuality this soil is anything but optimum for the series by reason of slopes and stoniness. Thus the Storie Index is substantially below the top rating of 77 percent.

By reason of the limitations on cropping resulting from the character of the soil and its topography the Land Use Capability Rating is Class III.

Next must be considered the viability of a row crop operation on these properties. None of the properties either singly or in combination create an economically viable commercial agricultural unit. First, the total cultivated acreage is too small. To utilize economically the machinery required for a commercial vegetable operation requires 350 acres of double cropped land according to a University of California Study. While it is not necessary that the 350 acres be contiguous, it is necessary that the land is in reasonably close proximity. Thus an Arroyo Grande operator could not efficiently add this acreage to his unit.

Single cropping of vegetable land is a very short run enterprise. Plant diseases and pests quickly concentrate to soon make such an operation uneconomic. Thus the present use of the land for sugar peas is a very short lived operation. These operations may be likened to the 'cut and burn' agriculture of tropical regions. It is a case of mine the soil and move on. The tenant farmers that are raising this crop have little permanence. This crop may

last little longer than the flower seed crops in the Los Osos Valley.

A second feature of the subject properties, either singly or in combination, affecting the economic viability, is the size and shape of fields. The land is cut up by drainageways and sloughs which results in increased operating costs. More land is used for headlands and internal access roads. Point rows and the costs of distributing water through the irrigation system are increased by reason of the shape of the fields. These added costs are insidious. Every operation from plowing through harvest requires 2 to 5 percent more labor time and machine time. The amount of waste land is increased by as much as 10 percent.

In a commercial vegetable crop operation, some 93 percent of the gross receipts are eaten up by operating costs. Only some 7 percent is available for a return to capital and the operator's labor and management. For example, a 320-acre truck crop operation in the Arroyo Grande valley budgets a $1,300,000 gross receipts. But the operating expenses are $1,200,000 leaving only $100,000 for return to capital and the operator. Obviously interest on capital alone eats up this surplus. (Unpublished data California Polytechnic University, S.L.O.). How does this operation continue to exist? Mostly by living off capital - not meeting depreciation, deferring maintenance, and increasing indebtedness. The operator is gambling on the "big year" to pull out of the hole.

The foregoing example from Arroyo Grande is in an area where the ancillary services such as packing sheds, machinery repair and parts houses, suppliers of all sorts, and a labor pool are close by. None of these necessary adjuncts exist in the Morro Bay area. Thus costs are higher by the reason of added freight costs on materials but worse yet is the additional down time of a machine that breaks. Modern agriculture requires a community of ancillary services to be commercially viable. This is particularly true for intensive types of operations.

2. South Morro Highlands (Williams Property)

This 525-acre parcel comprises an expanse of open rolling hillsides situated between the bottomlands of the Morro and Chorro Valleys. The parcel is somewhat rectangular, measuring approximately 7200 feet east/west along the highway, and is about 4400 feet deep. It is an area of rolling hills and broad valleys with slopes ranging from up to 2.1 (two units horizontally to one unit vertically--a 50% grade). The highest elevation on the site is at 462 feet on top of a hill in the north-central area. The lowest elevation is at 80 feet in the drainage near the southeastern property corner.

A drainage divide, running north-south, cuts the site centrally. West of the divide the drainage runs westerly to the Little Morro Creek area, and east of the line, the drainage flow is easterly and southerly to Chorro Creek. Three separate easements for

overhead power transmission lines cross the site. A buried large diameter water line crosses the property in the central area. This line delivers water from Whale Rock Reservoir to the City of San Luis Obispo and other facilites. This property is also bisected by the City limits, and approximately 155 acres fall within the City limits forming the open backdrop that abuts the eastern flank of State Highway One.

A site specific agricultural and geotechnic study[1] of this property has revealed the following:

-No Class I or II soils exist on the site. Soils range from Class III to Class VII with associated limitations for use.

-No land qualifying for a rating of 80 through 100 in the Storie Index Rating exists. The Soil Conservation Service cross references to Storie Index shows a low rating of 9 to the highest rating of 65.

-No land exists capable of supporting one animal unit per year. 8-10 acres of the subject property are required for this purpose.

-No land exists which is planted with fruit or nut bearing trees, vines, bushes, crops, or other plant products; therefore a gross value of $200 per acre has not been yielded in any known period of time.

Much of the land is quite steep with rock outcroppings frequently occurring. The soil is, for the most part, of a clay nature and overlays rock which occurs at a shallow depth; i.e., gopher mounds often consist of mixtures of soil and bedrock. Virtually no trees exist on the rangeland area and there is evidence that some erosion has occurred in some locations in the past, even to the extent that riprap had to be laid down at some spots.

The land is presently used for cattle grazing during at least a portion of the year. There are a few springs which have obviously supplied stockwater but no irrigation potential seems to exist. There are no irrigation wells and prospects for finding any major quantities are dim.

The vegetation consists of annual grasses such as ryegrass and wild oats in association with some broadleaf weeds including mustards and purple starthistle. This vegetation is dependent upon rainfall for the water necessary for growth and would normally provide some green feed during January through April with some dried feed necessary. Since 8 - 10 acres of this type of land would normally be required to support one animal unit for one year (Animal Unit Year - AUY) the maximum anticipated carrying capacity would be 63 cows in a cow-calf operation where one animal unit is taken to be one cow with calf at side.

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[1]Howard Rhoads, Consulting Agronomist and R.T. Wooley, CEG. (1981)

Due to the factors cited, including shallowness of the soil, the lack of water except for rain, the steepness of slope, and potential for erosion, there is little possibility that this land will ever move into a "prime agricultural land" category.

The southern two-thirds of the site is geologically feasible for general development. Engineering problems will be normal but solutions to mitigate conditions of expansive soils, bedrock at shallow depth, and potential instability may require higher than normal costs. The instability problems in the soil overburden of the northern one-third of the property are severe and will require further site-intensive investigation. Development of individual water wells on site may not be possible, and individual subsurface waste disposal units will not be satisfactory. Seismic hazards will be limited to low and low-moderate shaking with no expected group rupture, liquefaction, or seismic settlement.

3. Agricultural Issues

Observers have historically noted the steady attrition of intensive agriculture in much of this area of the central coast, with the land lying fallow or put to other uses. Quite often the casual observer attributes this change to the pressure of other uses, rather than the correct cause. In this coastal area the commercial farm operation has become uneconomimc before the changes in land uses have occurred. No logical reason exists for a successful and economically viable farm operation to cease and sell the land in small parcels. The asset, land, does not become less valuable over time and if the operation is economically viable, the return is competitive with other investments of capital and labor.

Some may depict change in land uses as a short term fluctuation in the economy or other local factors. This evaluation avoids a more complex analysis of the criteria for a successful agricultural area. At a minimum, the conditions which would permit viable agricultural operations would include: "prime" lands; larger operating units (necessitated by mechanized production methods); available labor force; agricultural processing facilities in close proximity; transportation servies; agricultural equipment/machinery sales and service in close proximity. None of these conditions exist in Morro Bay or its environs.

Some critics from inside the agricultural industry view the major problem of the past 60 years or more to be too much production, not too little. It is well known that farmers have been subsidized not to grow crops. In this County the agricultural output is many times that of the prior decades. This evidence can be found in the reports of the County Agricultural Commissioner. The Land Use Element of the current County General Plan indicates that the acres of irrigated cropland in the County increased 25 percent from 1968 to 1977. The non-irrigated

cropland increased 26 percent during the same period of time. While the gross acreage of urban and suburban land increased by just over 15,000 acres from 1968 to 1977, the cropland, irrigated and dry farm, increased 83,000 acres. The 1980 report of the Agricultural Commissioner indicates that the value of agricultural production in the County increased from $59,470,000 in 1971 to $159,933,000 in 1980. Even when the effect of price rise is removed from this comparison, it is apparent that production has increased much more rapidly than population.

4. Urban Reserve Area and Rural Boundary Considerations

The issues surrounding the location of urban/rural boundaries in the Morro Bay area have historically been complex and conflicting. The semantics of different agencies' definitions of "urban reserve", "urban service lines", "sphere of influence", etc., that are used to describe boundaries between urban and rural areas further confuse the issues.

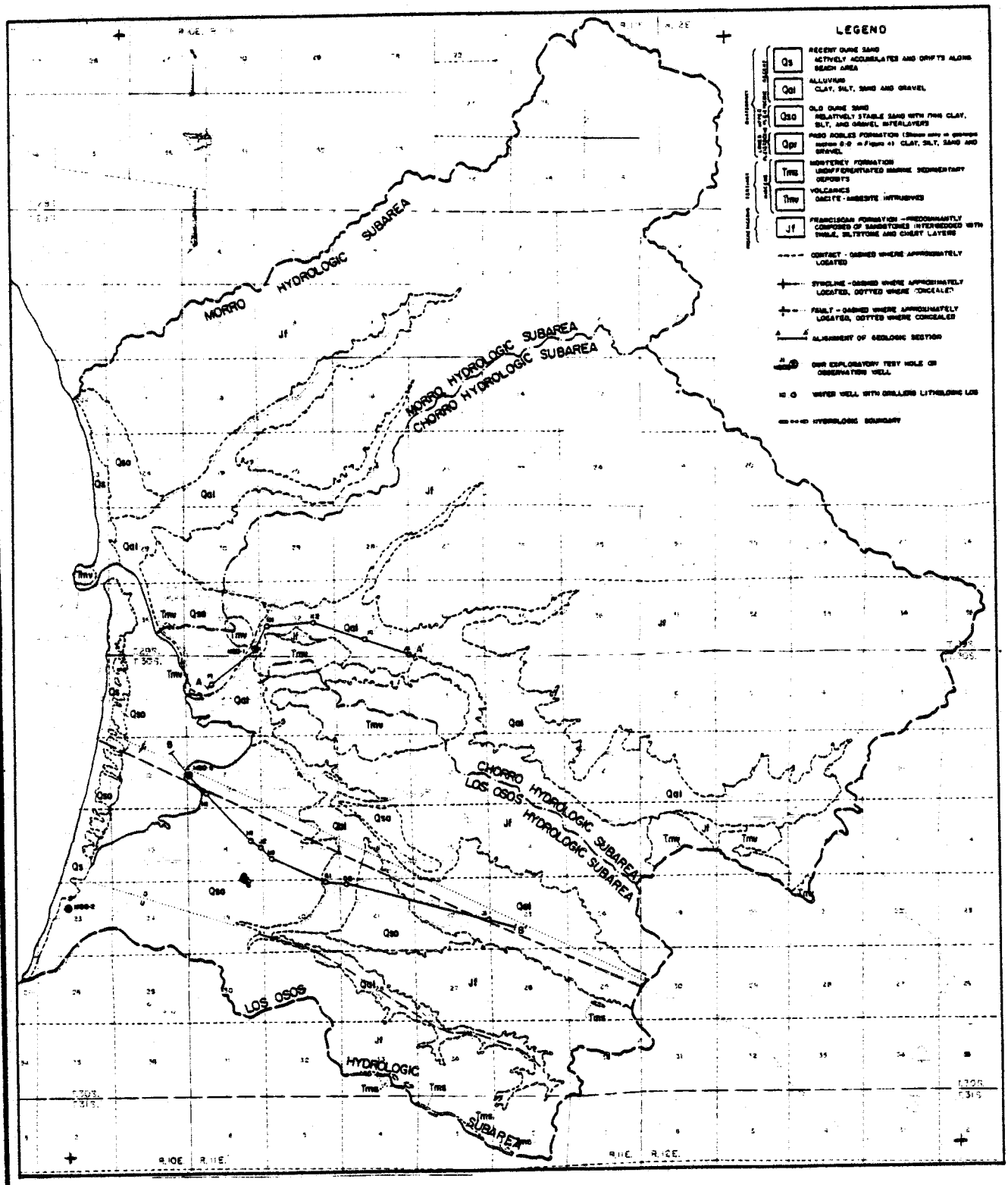
(a) Morro, Chorro and Los Osos Watersheds

The State Legislature in their action to define the coastal zone boundary for some 1,100 miles of California coastline, generally drew the line 1,000 yards inland or to the first public roadway. In five specific areas the coastal boundary was extended further inland to define a larger resource management/protection area; and such is the situation in the Morro Bay and South Bay area. Considerations for the Morro and Chorro watersheds directly interrelate with the City's planning issues and efforts. It is also noted that the Los Osos watershed is the tributary to the southern portion of the bay and wetland area, which indirectly relates to a resource which the City administers. Establishment of the coastal zone boundary would further confirm that logical planning and management areas are not restricted arbitrarily to a political boundary. Figure 20 shows the location of the watersheds.

Morro Bay's primary interest lies with land use and facilities planning for the Morro and Chorro watershed, since policies for these areas directly affect City resources. Beyond the natural environmental factors which tie this area together, there are found to be social and economic interdependencies. Morro Bay serves as one employment base, most of the high school pupils from the watershed areas attend school in Morro Bay, and City recreation services are presently extended to watershed residents. Most of the watershed is even linked by the Morro Bay telephone prefix.

While cities have not traditionally been involved in rural planning, it is incumbent upon Morro Bay to abandon convention and assert itself in the planning for these two critical watershed areas. Population in the unincorporated rural areas of the county are anticipated to increase at 3.1 percent per year (much faster than Morro Bay's historic growth rate), thereby placing additional direct and indirect demands on the City of

FIGURE 20
MORRO, CHORRO AND LOS OSOS
HYDROLOGIC SUBAREAS



Morro Bay. Therefore, the Morro and Chorro watersheds, extending some seven miles outward from the present City limits, would form the distant most logical and functional planning area for the City of Morro Bay although not directly addressed in this Land Use Plan.

(b) Groundwater/Basin Management

As discussed in Chapter V, "Public Works and Locating and Planning New Development", Morro Bay's ongoing water management activities involve several system improvement options which relate to the fringe areas. In order to respond to current and future obligations for municipal water services, and the priorities of the Coastal Act, the City will be required to implement certain management activities which may or may not occur within its corporate boundaries. An example of these activities might include well pump relocation for more efficient production and groundwater recharge using surplus stream flow, run-off, and other water sources.

Beyond municipal water production, the City has a vital interest in protection and enhancement of the larger Morro and Chorro groundwater basins. Previous efforts to develop a multi-jurisdiction basin management program/study for the Morro watershed have not succeeded, but it is apparent that there is an interrelationship between water and basin management, and environmental considerations for erosion and sedimentation control.

(c) County Planning Activities

San Luis Obispo County in a separate, but corollary effort has been developing an updated General Plan Land Use Element and a Local Coastal Program Land Use Plan for what is titled as their "Estero" Planning Area. The need exists to coordinate the activities among agencies for the purpose of developing compatible land use policies, thereby allowing the projection and planning for future urban and rural service needs.

D. AGRICULTURAL POLICIES

Notwithstanding the foregoing discussion of agricultural suitability of specific sites, the City has attempted to meet the Coastal Act through the following policies. By necessity, the City policies listed in this section addresses more than the coastal zone area contained within the corporate limits of Morro Bay.

Policy 6.01 The City, and the City/County through cooperative review and permitting arrangements, shall maintain the maximum amount of "prime" agricultural land (as defined in Section 30113 of the Coastal Act and as identified through consultation with the U.S.D.A. Soils Conservation Service) in agricultural

production to assure the protection of the areas' agricultural economy. The City shall join with the County in a cooperative planning management to assure that conflicts shall be minimized between City and County agricultural and urban land uses through all of the following:

(a) By joint planning efforts to establish stable boundaries separating urban and rural areas, including, where necessary, clearly defined buffer areas to minimize conflicts between agricultural and urban land uses.

(b) By limiting conversions of agricultural lands around the periphery of the City to the lands where the viability of existing agricultural use is already severely limited by conflicts with urban uses and where the conversion of the lands would complete a logical and viable neighborhood and contribute to the establishment of a stable limit to urban development.

(c) By permitting the conversion of agricultural lands surrounded by urban uses where the conversion of the land would be consistent with PRC Section 30250.

(d) By developing available lands not suited for agriculture prior to the conversion of agricultural lands.

(e) By assuring that public service and facility expansions and nonagricultural development do not impair agricultural viability, either through increased assessment costs or degraded air and water quality.

(f) By assuring that all divisions of prime agricultural lands, except those conversions approved pursuant to subdivison (b), and all development adjacent to prime agricultural lands shall not diminish the productivity of prime agricultural lands.

Policy 6.02 The City shall implement the following standards, or implement the standards in cooperation with the County in a City/County review process:

(a) Notification for the purposes of comment of any division of land, permit activity, or grading in the Morro and Chorro watershed (as contained in the Coastal Zone boundary) to the City for review and recommendation.

(b) City/County use of "Best Management Practices" to control agricultural practices that would result in sedimentation, contamination of the basins, or misuse of water resources.

(c) City/County Water Basin Management Planning in cooperation with other affected agencies.

(d) Implementation of City Water Management Plans activities and facilities where it involves unincorporated lands; and, County limitation for further land development which intensifies use of groundwater resources in the Morro and Chorro Basins until a comprehensive water management plan is adopted by the City and joint groundwater management programs have been formulated.

(e) Locate new residential, commercial, or industrial development within, contiguous with, or in close proximity to, existing developed areas able to accommodate it, or where such areas are not able to accommodate it, in other areas with adequate public services and where it will not have significant adverse effects, either individually or cumulatively, on coastal resources. In addition, provide that land divisions, other than leases for agricutlural uses, outside existing developed areas shall be permitted only where 50 percent of the usable parcels in the area have been developed and the created parcels would be no smaller than the average size of surrounding parcels.

(In any event, the City singularly shall take such actions deemed necessary to implement these activities.)

Policy 6.03 All non-prime land within the City of Morro Bay suitable for agricultural use shall not be converted to non-agricultural uses unless (1) continued or renewed agricultural use is not feasible, or (2) such conversion would preserve prime agricultural land or concentrate development consistent with Public Resources Code Section 30250. Any such permitted conversion shall be compatible with continued agricultural use on surrounding lands."

Policy 6.04 All non-agricultural development permitted on non-prime agricultural lands shall preserve the maximum amount of lands in agricultural use. In approving any land division or non-agricultural use, all of the following findings shall be made by the City:

(1) Continued or renewed agricultural use is not feasible without the proposed division and/or supplemental non-agricultural use;

(2) The proposed division and/or use will allow for and support the continued use of the site as a productive agricultural unit, would contribute to longterm agricultural viability and would preserve all agricultural lands;

(3) The proposed division and/or use will result in no adverse effect upon the continuance or establishment of agricultural uses on the undeveloped portion of the property or on surrounding or nearby properties.

(4) Buffer areas are provided between agricultural and non-agricultural uses;

(5) Adequate water supply, sewage disposal and other public services are available to service the proposed development after provision has been made for the continuance of existing agricultural operations and future operations which may require water needs exceeding the present needs.

(6) The proposed division and/or use will not adversely impact environmentally sensitive areas, scenic resources or the rural character of the site, where applicable. Where new non-agricultural developments are permitted on lands in or previously in agricultural production, sensitive habitats shall be protected, restored and enhanced as a condition of development approval.

Policy 6.Ø5 Where continued agricultural use is not feasible without some supplemental non-agricultural use, priority shall be given to public recreational uses, visitor-serving recreational and visitor-serving commercial use. All division and/or non-agricultural development on non-prime agricultural lands shall require a City-approved development plan showing how the proposed division or development would affect the subject property. In reviewing a proposed devleoment plan and determining the density of permitted use, the City shall require the following conditions:

(1) Development shall be clustered to retain the maximum amount of agricultural land in agricultural production or available for agricultural use. No more than 2% of the gross acreage of the property shall be converted to non-agricultural uses (including roads and public works). Residential density shall not exceed one dwelling unit per 2Ø acres. The remaining acreage shall be left in agricultural production and/or open space if agricultural uses are found to be infeasible.

Development shall be located close to existing roads and shall be sited to minimize impacts on scenic resources, wildlife habitat and streams and adjacent agricultural operations.

(2) Prime agricultural land, as defined in Policy 6.01 shall not be removed from production unless consistent with PRC Section 30241.

(3) Land divisions or development proposals shall include a means of permanently securing the remaining acreage in agricultural use, such as agricultural preserves, open space easements, or granting of development rights. Covenants not to further divide shall also be executed and recorded prior to issuance of development permits.

(4) The creation of a homeowners' or other organization or the submission of agricultural management plans shall be required to provide for continued agricultural use of agricultural lands and their availability either on a lease or purchase basis. Such organizations or plans shall also provide for the maintenance of water or road systems.

(5) Agricultural lands supplemented by development shall be accompanied by covenants or other suitable recorded mechanisms to ensure the maintenance of buffers.

Policy 6.06 The City shall participate in the efforts of the Coastal Conservancy or other public or private agencies to implement agricultural enhancement programs. These programs may include but are not limited to:

(1) Coastal Conservancy purchase of development rights or fee interest in agricultural lands.

(2) Agriculture preservation fees from new development.

(3) Transfer of lands to public or non-profit agencies which will lease back for agriculture, retain life estates for current owners, operate "agriculture parks", community farms, or experimental agricultural stations.

(4) Assistance programs (water subsidies, recycling methods, fencing and other buffers, low-cost agricultural loans.)

Policy 6.07 The City's Urban/Rural Boundary shall be drawn to coincide with the present City limits with the

exception of the Cabrillo property and the Williams property which shall be excluded from that line.

Policy 6.08 The City shall implement the following revisions to its LUP land use map to preserve and protect the long term productivity of agricultural lands within and adjacent to the community:

(1) Designate the Cabrillo property for agricultural land use with a minimum allowable parcel size of 40 acres.

(2) Designate the Williams property for agricultural land use, with provisions for supplemental uses subject to the policies contained within the LUP. Permitted supplemental uses on the Williams property are: public recreational, visitor-serving recreational, visitor-serving commercial, commercial and residential, with the siting of such development subject to policies contained in the LUP. The City shall require a precise development plan for any supplemental permitted use proposed by the applicant, and shall make findings that such a plan is consistent with the LUP and relevant Coastal Act and Chapter 3 policies.

(3) Permitted uses on prime and non-prime agricultural lands shall be agricultural use for cultivation of crops or grazing of livestock and non-residential development accessory to agricultural operations. The following uses shall be conditionally allowed:

a. One single family residence
b. Farm labor quarters
c. Public coastal accessways
d. Greenhouse and nurseries

Conditional uses can be permitted on prime lands where it is demonstrated through City findings that no alternative building site exists except on the prime agricultural lands, that the least amount of prime land possible is converted and that use will not conflict with surrounding agricultural lands and uses.

IX. COMMERCIAL FISHING AND RECREATIONAL BOATING

A. INTRODUCTION

Since the founding of the community, the commercial fishing industry has played a significant role in the development of Morro Bay. Today this still is true, with the basic industry providing an economic source for the community as well as serving as an important tourist attraction.

The California Coastal Act of 1976 requires Morro Bay to protect and, where feasible, upgrade commercial and recreational fishing facilities. This is in keeping with the community's policy of giving priority to commercial fishery in new harbor development.

B. COASTAL ACT POLICIES

Recognizing that commercial fishing often cannot compete with recreational boating in new harbor development, the Coastal Act requires the protection of commercial fishing.

Sec. 30224. "Increased recreational boating use of coastal waters shall be encouraged, in accordance with this division, by developing dry storage areas, increasing public launching facilities, providing additional berthing space in existing harbors, limiting non-water dependent land uses that congest access corridors and preclude boating support facilities, providing harbors of refuge and by providing for new boating facilities in natural harbors, new protected water areas, and in areas dredged from dry land."

Sec. 30234. "Facilities serving the commercial fishing and recreational boating industries shall be protected and, where feasible, upgraded. Existing commercial fishing and recreational boating harbor space shall not be reduced unless the demand for those facilities no longer exists or adequate substitute space has been provided. Proposed recreational boating facilities, shall, where feasible, be designed and located in such a fashion as not to interfere with the needs of the commercial fishing industry."

The Act also acknowledges the intense demand made on shorefront areas by competing land uses.

Sec. 30255. "Coastal-dependent developments shall have priority over other developments on or near the shoreline. Except as provided elsewhere in this division, coastal-dependent developments shall not be sited in a wetland."

C. CHARACTERISTICS AND ISSUES

Tables 12 and 13 summarize the dockage and mooring (anchorage) facilities to accommodate approximately 494 vessels, including temporary tie-ups for 23 fishing vessels. The majority of vessels using the harbor are engaged in commercial fishing and sport fishing activities. However, it is difficult to separate the uses in terms of the vessels' activities in relation to the leased dockage or moorage facilities.

Depicted on Table 12, are dockage facilities for approximately 366 vessels. The actual capacity can vary according to the size of the vessel. The space for 366 vessels is based on an average vessel length of 40 feet. Of the 366 spaces, the City manages 91 spaces, leases 237 permanent spaces and 23 temporary spaces. There are two docks privately-owned in the harbor with space available for about 15 vessels.

The number of moorings in the harbor's two anchorages total 128; locations of the moorings are shown on figure 21. Boats are moored in a grid pattern measuring 100 feet on center. By changing from the mooring floats currently being used to floating docks (measuring 10 x 50 feet and anchored to the existing moorings), the City would increase the safety and efficiency of the anchorage areas.

1. Commercial Fishing Industry

The commercial fishing fleet working from Morro Bay utilizes a variety of boats, including trawlers, trammel netters, and hook and line. Similar in composition to the fleet in Port San Luis, the largest number of boats fish for rock fish and albacore.

Commercial fishing has increased in Morro Bay since the mid-1940's. The Harbor inventories, taken yearly, indicated in April, 1979, that there were 185 commercial fishing vessels within the harbor. Estimates of part-time commercial fishing use vary due to the number of boats which may be used for recreational purposes while keeping a commercial fishing license. Additional space could be provided for commercial and recreational boats in the harbor if inoperative boats were abated similarly to inoperative automobiles.

The following table summarizes the use of Morro Bay by commercial fishing boats from 1970-1979:

TABLE 11

Commercial Boats in Morro Bay Harbor
1970 - 1979

Year	Commercial Boats	Year	Commercial Boats
1970	108	1975	199
1971	138	1976	180
1972	145	1977	178
1973	162	1978	199
1974	181	1979	185

Commercial fishing has been an important economic element for the City. Morro Bay has benefitted from the fishing industry and its ancillary facilities. However, the fishing catch has declined over the years while the number of commercial fishing boats has increased. Table 14 summarizes the fishing catch since 1951.

2. Sport Fishing Industry

As a basic element to tourism, sport fishing has been a most important feature in Morro Bay, whereas, commercial fishing has played a larger role in Morro Bay's development as a fishing community. The sport fishermen support local businesses, including purchasing of tackle, bait, wearing apparel and supporting restaurants and motels. Morro Bay's harbor inventory indicated the average number of active sport boats over the last ten years was twelve.

3. Recreational Boating Issues

Boating is one of the most popular recreational activities along the California coastline. However, the high demand for the limited supply of coastal facilites has placed a burden on small harbors such as Morro Bay. Morro Bay's boat launch facility is old and over-utilized, has limited day use boating slips and inadequate parking facilities.

Presently, Morro Bay has 278 moorings and slips for recreational and commercial boats. The total spaces available are either in the mooring spaces or adjacent to the shoreline in various areas of the bay. Because Morro Bay is the only fully protected harbor between Santa Barbara and Monterey, boats out of non-protected harbors during storms will seek refuge in Morro Bay, often causing additional, over utilization of existing berths, docks and moorings. See Chapter III for additional boating information.

TABLE 12

DOCK SURVEY

NAME/IDENTIFICATION	Spaces PERMANENT	TEMPORARY	OWNERSHIP
Midway Marina	90	0	Lease[1]
Golden Tee	11	0	Lease
Floats South Fisherman's Fuel Dock	3	0	Private[2]
Beacon Fuel Dock	30	3	Lease
Gladys Walton	4	0	Lease
All Seasons Seafood	0	0	Lease
Pacific Haven Boatworks	16	0	Lease
City Launch Ramp Rental Slips	14	0	City[3]
Fry	1	0	Lease
Batteiger	1	0	Lease
Associated Divers	6	0	Lease
Sylvester Brothers	4	0	Lease
Morro Bay Yacht Club	10	0	Lease
Hittles	0	0	Lease
McGurns	2	0	Lease
Pyle	2	0	Lease
Deanna	2	0	Lease
Aquarium	2	0	Lease
The Chandlery	4	0	Lease
The Ship Store	4	0	Lease
Morro Bay Marina	11	0	Lease
Fuel Dock	0	0	Lease
Zeke's Wharf	4	0	Lease
Johnsons Morro Bay Oyster	2	0	Lease
Roses Landing	4	0	Lease
Fish Bowl II	2	0	Lease
Bob's Seafood	1	0	Lease
Marine Ways	0	0	Lease
Machine Shop	0	0	Lease
Galley Restaurant	4	0	Lease
Beachcomber Galley/Graham's Landing	6	0	Lease
Central Coast	0	2	Lease
Dunes Street Rental Slips	14	0	City
Brebe's	12	0	Private
Beach Street Rental	5	0	City
South City T-Pier	30	0	City
Sam Cunningham	1	0	Lease
Virg's Long Dock	6	0	Lease
Tiger's Folly	1	0	Lease
Virg's	6	0	Lease
Pacific Shellfish	0	4	Lease
North City T-Pier	28	0	City
M & M Refrigeration	0	2	Lease
TOTAL 366 spaces	343	23	

Total City Owned: 91
Total City Leases: 237 (23 temporary)
Total Private: 15

[1]Lease - Private lease with City of Morro Bay; leasee rents space to others
[2]City - City owns and manages rentals
[3]Private - Under private ownership

TABLE 13

MOORING SURVEY

MOORINGS[1] AREA	LOCATION	NUMBER	WEIGHT(lbs.)	MATERIAL STEEL	MATERIAL CONCRETE
A-1	1	01	1129		C
A-1	1	02	1182		C
A-1	1	1	750	S	
A-1	1	2	1995		C
A-1	1	3	2660		C
A-1	1	4	3830		C
A-1	1	5	3200		C
A-1	1	6	750	S	
A-1	1	7	2150		C
A-1	1	8	2150		C
A-1	1	9	3153		C
A-1	1	9A	500	S	
A-1	1	10	3104		C
A-1	1	11	1500		C
A-1	1	12	3456		C
A-1	1	13	5000		C
A-1	1	14	3421		C
A-1	1	15	1995		C
A-1	1	16	1108		C
A-1	1	17	2604		C
A-1	1	18	400	S	
A-1	1	19	2000		C
A-1	1	19A	1995		C
A-1	1	20	3621		C
A-1	1	21	1995		C
A-1	1	22	2500		C
A-1	1	23	2300		C
A-1	3	1	2956		C
A-1	3	2	2900		C
A-1	3	3	2070		C
A-1	3	4	2660		C
A-1	3	5	2673		C
A-1	3	6	5000		C
A-1	3	7	2956		C
A-1	3	8	3360		C
A-1	3	9	1385		C
A-1	3	10	1400		C
A-1	3	11	3080		C
A-1	3	12	3118		C
A-1	3	13	3547		C
A-1	3	14	1995		C
A-1	3	15	1995		C
A-1	3	16	2660		C
A-1	3	17	2874		C
A-1	3	18	3033		C
A-1	3	19	2545		C
A-1	3	20	3547		C
A-1	3	21	2000		C
A-1	3	22	524	S	
A-1	3	23	1552		C
A-1	3	24	1997		C
A-1	3	25	2669		C
A-1	3	26	2942		C
A-1	3	27	2544		C

TABLE 13 Continued
MOORING SURVEY

MOORINGS[1] AREA	LOCATION	NUMBER	WEIGHT (lbs.)	MATERIAL STEEL	MATERIAL CONCRETE
A-1	4	1	2500-3000		C
A-1	4	2	2500-3000		C
A-1	4	3	2500-3000		C
A-1	4	4	2500-3000		C
A-1	4	5	2500-3000		C
A-1	4	6	2500-3000		C
A-1	4	7	2500-3000		C
A-1	4	8	2500-3000		C
A-1	4	9	2500-3000		C
A-1	4	10	2500-3000		C
A-1	4	11	2500-3000		C
A-1	4	12	2500-3000		C
A-1	4	13	2500-3000		C
A-1	4	14	2500-3000		C
A-1	4	15	2500-3000		C
A-1	4	16	2500-3000		C
A-1	4	17	2500-3000		C
A-1	4	18	2500-3000		C
A-1	4	19	2500-3000		C
A-1	4	20	2500-3000		C
A-1	4	21	2500-3000		C
A-1	4	22	2500-3000		C
A-1	4	23	2500-3000		C
A-1	4	24	2500-3000		C
A-1	4	25	2500-3000		C
A-1	4	26	2500-3000		C
A-1	5	1	NA	NA	NA
A-2	0	0	2710		C
A-2	0	0	500	S	
A-2	0	0	2650		C
A-2	0	0	2400		C
A-2	0	01	3332		C
A-2	0	02	500	S	
A-2	0	03	2950		C
A-2	0	04	3082		C
A-2	0	05	2950		C
A-2	0	06	2150		C
A-2	0	07	2587		C
A-2	0	11	2500		C
A-2	0	12	2833		C
A-2	0	13	3678		C
A-2	0	14	3500		C
A-2	0	15	3788		C
A-2	0	16	3720		C
A-2	0	18	3650		C
A-2	0	19	3450		C
A-2	0	21	3744		C
A-2	0	22	700	S	
A-2	00	02	3546		C
A-2	00	24	2250		C
A-2	00	25	2217		C
A-2	00	26	2100		C
A-2	00	27	2700		C
A-2	00	28	2650		C
A-2	00	29	2950		C
A-2	00	30	2650		C

TABLE 13 Continued
MOORING SURVEY

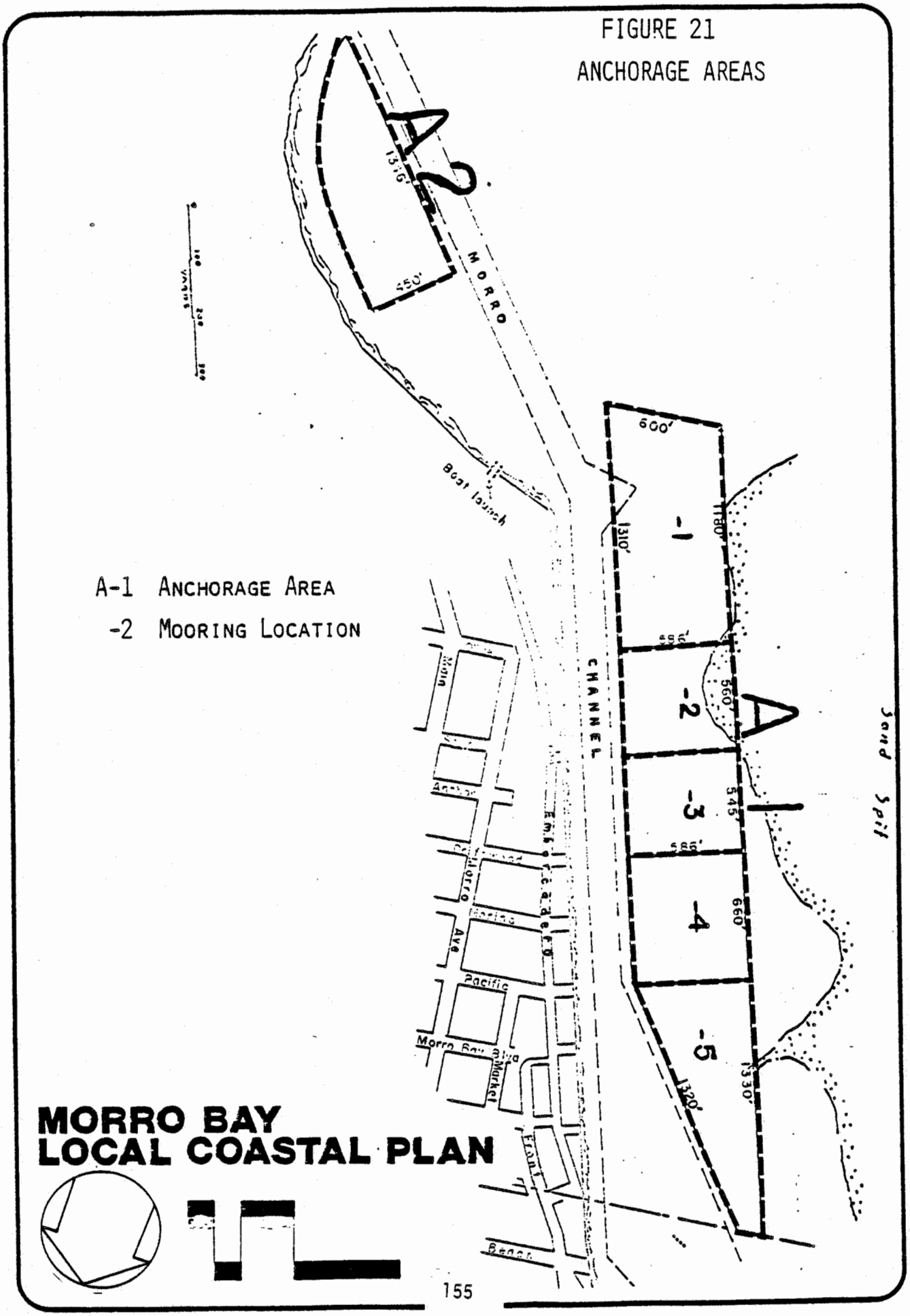
MOORINGS[1] AREA	LOCATION	NUMBER	WEIGHT (lbs.)	MATERIAL STEEL	MATERIAL CONCRETE
A-2	00	31	2130		C
A-2	00	31A	2100		C
A-2	00	32	3990		C
A-2	00	33	3150		C
A-2	00	34	2217		C
A-2	00		2956		C
A-1	2	2	3593		C
A-1	2	3	2956		C
A-1	2	4	2900		C
A-1	2	4A	2660		C
A-1	2	5	2673		C
A-1	2	6	3494		C
A-1	2	7	5000		C
A-1	2	8	2870		C
A-1	2	9	3503		C
A-1	2	10	3643		C
A-1	2	11	3736		C
A-1	2	12	2736		C

TOTAL MOORINGS: 128
TOTAL CONCRETE: 119
TOTAL STEEL: 8
TOTAL N/A: 1

[1]See Figure 21 for mooring locations (Anchorage Area) - The area refers to the area within the harbor. The location number refers to Area A-1 subareas as shown on the figure. The number is the mooring lease number.

FIGURE 21

ANCHORAGE AREAS



A-1 ANCHORAGE AREA

-2 MOORING LOCATION

MORRO BAY
LOCAL COASTAL PLAN

TABLE 14

TOTAL FISH CATCH BY YEAR

1951 THROUGH 1980

YEAR	TOTAL FISH CATCH
1951	6,670,153
1952	2,557,952
1953	1,686,071
1954	2,561,306
1955	5,528,199
1956	5,309,445
1957	6,218,706
1958	37,293,341
1959	9,564,673
1960	9,057,898
1961	8,926,126
1962	7,595,043
1963	7,543,096
1964	11,240,336
1965	8,391,738
1966	8,863,353
1967	7,281,440
1968	4,663,353
1969	3,258,864
1970	6,834,947
1971	4,760,027
1972	6,333,601
1973	5,588,747
1974	4,788,657
1975	5,838,457
1976	Data not available
1977	Data not available
1978	5,696,387
1979	6,491,660
1980	6,411,686

SOURCE: State Department of Fish and Game, 1980

4. Commercial Fishing Issues

Many factors affecting the commercial fishing industry today include:

(1) Market conditions;
(2) Technology;
(3) Availability of facilities; and
(4) Socio-economic factors.

Evaluation of landing (or fish catch) trends for the 13 major commercial species indicate that most fisheries are continuing to show a decrease. Considering that many prices have more than doubled since the early 1970's, the catch value may have increased even if the total landing has declined. Any new types of catches (different fish species) or increases in the number of full or part-time boats would increase the total catch value.

With the increase in beef prices, Americans' consumption of fish has increased. The bulk of the traditional fisheries, including cod, haddock, many flat fish, shrimp or lobster are at or near their maximum sustained yield. In many instances, including the American lobster, abalone, anchovy and sardine, there has been a marked decline of the catches in traditional fishing grounds. In an effort to maintain maximum safe yields for many of the fisheries, the Federal Fishery Conservation Act was passed resulting in the Fisheries Management Plan.

Another limitation facing the fishing industry is the public's general preference for traditional species. Many fish with viable overseas markets are not yet acceptable to the American public. Another concern is the ability of food processors to easily prepare the product. Many fish, abundant off the central coast, are not easily filleted (cut into fish steaks) and therefore are dumped overboard.

Fish catches unloaded at Morro Bay are either processed by the fish buyers and sold locally to markets and restaurants or to wholesale markets in the Los Angeles and San Francisco Bay areas. Fish may be filleted here or sent out whole. Albacore is usually shipped in San Pedro for canning.

A future concern to the commercial fishing industry is the proposed plans by the U.S. Department of the Interior to lease thousands of acres of the Outer Continental Shelf (3+ miles from shore) for offshore oil and gas development. The primary concerns include the potential reduction in fishing grounds or obstruction to fishing areas, compensation for fouled or ruined equipment due to location of rigs, oil and tar, etc., and the increased probability of an oil spill that could have both short-term and long-term adverse effects on the commercial fisheries.

5. City Harbor Policies

Since the incorporation of Morro Bay, the City has struggled with defining what the ultimate goal of the harbor and associated tidelands should be.

The City's responsibility for harbor development stems in part from its State Tidelands Grant. The State originally granted tide and submerged lands in trust to San Luis Obispo County. The City succeeded to such interest by virtue of its incorporation in 1964. The granting statute, Chapter 1076, Statutes of 1947, provided that the County and its successors use the lands for the establishment, improvement and conduct of a harbor and for the construction, maintenance and operation thereon of wharves, docks, piers, slips, quays and other facilities necessary or convenient for the promotion and accommodation of commerce and navigation. The trustee shall not convey the lands but may grant franchises for public purposes or leases for limited period (not to exceed 50 years) for purposes consistent with the public trust and with the requirements of commerce and navigation at the harbor.

An amendment, Chapter 70, Statutes of 1960, provided that in addition to the original purposes, the lands could be used for recreation, public park, parking, highway, playground and incidental business. If the lands were not used for such additional purposes within ten years of the effective date then the authorization to use the lands for such additional purposes would automatically terminate.

Following a report from the City, the State Lands Commission found in October, 1974 that the lands had been improved for the additional purposes required under the 1970 grant amendment.

Business uses incidental to trust purposes are not precluded by the granting statute and may, in appropriate locations, contribute to the use of the lands for trust purposes.

The State patent did not nor could it convey submerged lands. Portions of the patented areas contain submerged lands with title remaining with the State. Although tidelands are held in private fee ownership they remain subject to trust easements. The buyer of the land received the title to the soil subject to an easement for public trust purposes.

Since incorporation, the City has prepared plans for harbor development, once in 1966 and again in 1971. These plans proposed major marina expansion within the harbor, on a scale inconsistent with protection of coastal resources. The latest plan, proposed in 1971, set as a major objective a minimum of 1,500 boat slips in the harbor.

Recently, the City has taken steps to ensure the priority of commercial fishing within the Morro Bay Harbor while still providing for recreational boating. With a demand greater than

the City-owned slips could provide, it was necessary to establish priority for commercial fishing craft use of these slips, and for the slip's waiting list. Vessels of a commercial nature refer to boats which have a current Department of Fish and Game commercial fishing license and whose owner or operator holds a commercial fishing license which within the calendar year has been actively used for commercial fishing activities. In order to be consistent with Coastal Act policies, it is necessary that private slip development within the harbor also give priority to commercial fishing, balanced with the needs of recreational boating.

D. COMMERCIAL FISHING AND RECREATIONAL BOATING POLICIES

Policy 7.01 New commercial fishing facilities shall be located in the northern portion of the Bay north of Beach Street. New recreational boating facilities shall be located south of Beach Street. Commercial fishing shall be accommodated as long as facilities and space allow, consistent with providing for other coastal-dependent uses. Commercial fishing facilities may be allowed on an interim basis south of Beach Street until adequate comparable facilities are provided north of Beach Street. New development must be found consistent with Section 30236 and other resource protection policies contained in the LUP and Chapter 3 policies in the Coastal Act.

Policy 7.01A The City shall immediately take the steps necessary to form a port authority, to be known as "The Morro Bay Harbor Commission," which shall be composed of members of the City Council, and the Mayor who shall preside as chairman.

Policy 7.02 Prior to allowing any further development in the designated Morro Harbor and Navigable ways portions of the City, the City shall either prepare a wetlands/estaurine map if funding permits, or adopt the National Wetland Inventory by U.S. Fish and Wildlife Service dated 1979 as mapping illustration of the wetland areas contained within City boundaries. Development proposed adjacent to defined wetland areas shall be subject to policy standards for development.

Policy 7.02A If the City develops and adopts a revised Harbor Development Plan, it shall include the following standards for review:

(1) provision of mapped wetlands and estuarine portions of the bay (as set forth through implementation of new policy on adopting U.S. Fish and Wildlife Map);

(2) identification of land water uses;

(3) quantitative and qualitative biological inventories, identification of the impacts of land and water development on habitat areas and the marine environment, a delineation of existing water quality, and methods to minimize and mitigate any substantial adverse impacts on areas of the bay defined as sensitive habitat and corresponding buffer zones;

(4) inclusion of all LUP harbor development policies;

(5) provision for adequate public hearings and public participation in harbor planning and development decisions;

If such a revised Harbor Development Plan is adopted, it shall contain information in sufficient detail to allow the Coastal Commission to determine its adequacy, conformity and consistency with the applicable policies of the Coastal Act. Upon Coastal Commission certification, the Harbor Development Plan may be incorporated in the Morro Bay Local Coastal Program.

Policy 7.02B In the event that a port authority is created subject to Chapter 8 of the Coastal Act, it may develop a port master plan. The port master plan shall contain information in sufficient detail to allow the Coastal Commission to determine its adequacy conformity and consistency with applicable policies in the Coastal Act.

Policy 7.03 Prior to approving new developments within the bay or harbor, findings shall be made which demonstrate that as approved, the new development does not cause adverse impacts on the sensitive habitat portions of the Bay, and that adequate public services exist to support the proposed use. It must be found that new development is consistent with policies contained in the LUP and Chapter 3 Coastal Act policies. The following standards at a minimum shall be applied in project review:

(1) New development shall not encroach within any defined wetland or estuarine areas as mapped by U.S. Fish and Wildlife, nor shall it encroach within the protective buffer zones of these areas.

(2) Prior to City hearings or action, Development Plans or applications shall be submitted for review and comment by U.S. Fish and Wildlife and the California Department of Fish and Game.

(3) New development shall contain adequate safety and navigational standards to ensure compatibility with existing uses within the bay and harbor areas.

(4) New development is allocated sufficient public services (water, sewer and roads) in accordance with the water priority allocation system established in Policy 3.02.

Policy 7.04 There is an established need to reorganize the existing harbor mooring configuration to reduce hazards to moored boats and to compensate for the lack of slip facilities. Accordingly, the City may pursue the development of floating docks, subject to all Coastal Development Permit procedures. The floating docks would be approximately 10 x 50 feet; anchored to existing moorings. The number of floating docks would be determined by need and by funding availability. The placement of the floating docks shall be in water areas that do not encroach into wetland or buffer areas surrounding defined wetlands in the Bay. The number of slip facilities created shall assure a priority of space allotted for commercial fishing use, and shall be located in areas of the bay deemed appropriate for further expansion of commercial fishing facilities (as per Policy 7.01 and the LUP land use map). In order to minimize conflicts between commercial fishing activities and recreational boating, the development of floating docks for recreational boating shall be located in areas of the bay deemed appropriate for further expansion (as per Policy 7.01 and the LUP land use map). The City shall find that the increase in docking facilities is consistent with the resource and water quality protection policies contained in the LUP and Chapter 3 of the Coastal Act.

Policy 7.05 "Vessels of a commercial nature" shall mean vessels for which the State of California, Department of Fish and Game has issued a current commercial fishing license, and whose owner or operator holds a current commercial fishing license, and which within the current calendar year has been actively used for commercial fishing activities. Such use shall be evidenced by proof that the vessel has grossed a minimum $5,000 during the calendar year or that the vessel has fished at least 60 days during the calendar year. Gross earnings or fish sales shall be evidenced by State of California, Department of Fish and Game commercial fish receipts of other west coast states. This definition shall be used to identify commercial fishing vessels for priority for coastal-dependent facilities.

Area 5 - Morro Rock

Policy 7.06 "No further development shall be allowed in the Coleman-Den Dulk land and wetland area shown on Figure 9 and designated "Morro Rock Precise Development Plan Area" until a precise development plan and EIR are prepared. The Plan may be prepared independently and/or in conjunction with the possible development of an overall Harbor Development Plan. The City may request the assistance of the State Coastal Conservancy or another appropriate State agency to help prepare such a plan, and such a development plan is a priority improvement project for public funding. The precise development plan would include, but not be limited to the following standards and procedures:

(a) Determine the commercial fishing and coastal-dependent needs and examine the feasibility of accommodating said needs for major waterfront improvements on the Den Dulk and Coleman Park properties including boat launching ways, moveable ways, wharfsides, hoists and dry dock storage. All such uses shall be lowscale and out of the viewshed from the Embarcadero to Morro Rock and the Pacific Ocean. Landside development shall be kept to a minimum and shall not include principal structures.

(b) Development of a detailed waterfront improvement plan which provides priority for commercial fishing, boating and other coastal-dependent uses. The location of such uses shall not conflict with the visual resources of Morro Rock. The plan shall include height and bulk restriction standards and maximum public access standards.

(c) Develop and implement a plan for on-site dune stabilization; said plan shall receive review and comment by the Department of Fish and Game prior to its implementation.

(d) Provide for public parking in an appropriate location outside of viewsheds, and providing for landscaping and park improvments. Adequate setbacks and buffer areas as determined to be necessary by the Department of Fish and Game upon review shall be developed and implemented prior to any development in the area. The public parking area may be developed independently of the other components of the Develoment Plan so long as the parking is confined to the area historically utilized informally for that purpose and adequate mitigation as suggested is incorporated into the project.

(e) Develop a cost-benefit study and funding program for improvements.

(f) The EIR shall include but not be limited to an environmental and biological assessment of the resources contained in this portion of the bay and Morro Rock. The EIR shall include recommended mitigation measures which shall ensure that any new development is consistent with PRC 30230, 30231, 30233, 30234, 30235, 30236 and 30240 and with all other relevant resource protection policies contained in the Coastal Act.

(g) Develop as part of the overall development plan an evaluation for proposed water use, historic water use of commercial fishing and the project's relation to overall water management in Morro Bay. Water consumption shall be consistent with the water management policies included in the LUP.

Area 6 - Bayfront

Policy 7.06A The Embarcadero between Beach Street on the north, Main Street on the east, Olive Street on the south and the waterfront area on the west shall be considered mixed commercial fishing and visitor-serving recreational area. Public access and recreational opportunities shall be maximized along the waterfront consistent with the access policies of Chapter III of the Coastal Act and consistent with public safety needs and the need to protect public rights, rights of private property owners, and natural resources areas from overuse. Public access from the nearest public roadway to the shoreline and along the bayfront shall be provided in new development projects, subject to the limitations set forth in Coastal Act Sections 30210, 30212, 30212.5 and 30214.

Policy 7.07 As part of the Urban Waterfront Restoration Plan conceptually approved in part by the Coastal Commission, the City shall construct improvements along the Embarcadero consistent with protection and preservation of public trust lands in the following manner at the specified locations, as appropriate funding becomes available.

(a) Completion of the restoration of the southern T-pier, with use limited to public access/fishing and commercial fishing boats and vessels operated by the City, the U.S. Government and the State of California. Non-commercial fishing boats shall be allowed space during emergencies. South of Beach Street along the bayfront, the City may construct additional boat slips for recreational boating use;

(b) Improvements to and in the vicinity of the Tidelands Park boat launch ramp at the end of the Embarcadero for recreational boat use and interior commercial boats until adequate facilities for commercial fishing are available in appropriate locations in the harbor;

(c) Recreational boat tie-ups along portions of the Tidelands Park revetment as phase two of that project;

(d) Observation or fishing docks at appropriate street-ends. Day-use floating dock and 50 x 56' deck at the end of Morro Bay Boulevard/Front Street;

(e) Improved public parking and circulation in the Embarcadero area; specifically, acquire parking lot on east side of Embarcadero in the central Embarcadero area, improve publicly owned property at southerly and northerly sections of Embarcadero as parking facilities;

(f) Pedestrian seating and conveniences at all street-ends where needed in the Embarcadero area;

(g) Pocket Park and public transportation loading area at the southeast intersection of Front Street and the Embarcadero;

(h) Other appropriate access-related uses not involving major structures.

(i) Improved traffic circulation in the Embarcadero area; specifically, Embarcadero Drive shall be terminated just north of Tidelands Park and Morro Avenue shall be extended through to Tidelands Park.

Prior to implementation of any of the above improvements, the City shall analyze the environmental impacts associated with the projects formulated, and propose suitable mitigation measures for any identified adverse impacts on sensitive habitats and water quality in Morro Bay. If adverse impacts cannot be adequately mitigated the proposed improvement shall not occur.

Policy 7.08 The State Coastal Conservancy is assisting the City in developing a project design and obtaining implementing funding for the Tidelands Park. The City shall continue to seek improvement of the Tidelands Park with Conservancy guidance and assistance. As funding sources are identified and/or made available, the City shall develop a

precise development plan for Tidelands Park which includes the following:

(a) Development of vehicle access in and out of the Park pursuant to Policy 7.07(i) and as determined by the precise development plan;

(b) Reconstruction of existing stairway at Olive Street;

(c) Landscaping and parking lot improvements as specified by the precise development plan;

(d) Development of waterfront improvements, such as side-ties, fishing and observation decks, as specified by the precise development plan;

(e) Reconstruction of the launch ramp and boat/trailer parking;

(f) Relocation and reconstruction of the public restroom and fish cleaning station;

Area 7 - Central Morro Bay

Policy 7.09 The City shall designate recreational boating and fishing uses as priority uses for the portion of the planning area west of Main Street and south of the Acacia Street intersection. Existing coastal-dependent and coastal-related uses shall be protected when approving new development.

Area 9 - Harbor and Navigable Ways

Policy 7.10 The City shall designate the harbor entrance, the harbor area and the navigable ways to and including the Midway Marina as harbor and navigable ways land use. The City shall find allowable uses consistent with Section 30233 of the Coastal Act and with wetland preservation policies contained in the LUP. Midway Marina shall not be expanded beyond its existing boundaries nor shall the amount of open water area within the marina configuration be expanded. Land areas on the north and east borders of the marina shall be reserved for coastal-dependent support facilities which shall not be located within 100 feet of existing wetland habitat.

Policy 7.11 The City shall work with the County of San Luis Obispo, the U.S. Army Corps of Engineers, and all other interested agencies in order to insure that the existing channel between the Midway Marina and the main channel of Morro Bay is marked and remains open, and is maintained in a condition allowing free passage of recreational boats. The width and depth

of the channel shall be as provided in the Harbor Master Plan. The maintenance of the channels shall include mitigation measures to prevent potential damage to benthic organisms including mollusks and eelgrass beds.

Policy 7.12 As a condition to approval of any permit for development within the Midway Marina, the City shall require that the State Department of Parks and Recreation include the Midway Marina in its Morro Bay State Park Master Plan. The Marina shall be designated for coastal-dependent and coastal-related uses limited to recreational boat dockage and support services.

Policy 7.13 The City shall request the U.S. Army Corps of Engineers to fund and/or construct the necessary repairs of the rock revetment required prior to Tidelands Park waterfront improvements.

Policy 7.14 Consistent with the Coastal Commission conceptual approval of the Urban Waterfront Restoration Plan, the City shall reconstruct the South Embarcadero T-Pier for commercial fishing operations and recreational fishing from the pier.

Policy 7.15 Approximately 50 feet north of the existing Beach Street Docks (and south of the South City T-Pier), the City may construct a floating dock consistent with Coastal Development Permit No. 427-33.

Policy 7.16 In conjunction with the provisions of Policy 7.06 the City shall request from the State Coastal Conservancy or other appropriate state agency the funds to provide commercial fishing dockage and other harbor-related improvements as defined in the precise development plan for the Den Dulk-Coleman properties. An environmental and economic feasibility analysis will be required prior to Coastal Conservancy funding.

Policy 7.17 The City shall request the U.S. Army Corps of Engineers to repair the Coleman Drive rock revetment consistent with the recommendations of the precise development plan under Policy 7.06.

X. HAZARDS

A. INTRODUCTION

The Coastal Act is explicit in directing those communities exposed to natural and man-made hazards to minimize risks to life and property in areas that are subject to such hazards.

Morro Bay is a community that is vulnerable to a wide range of hazards:

(1) Flooding occurs in the lower reaches of the Morro and Chorro Creek watershed: within the City, the drainage plagued developed hillside areas and in the drainage-poor lowlands to the east of State Highway One.

(2) Geologic hazards exist in the hillsides forming the eastern backdrop of the City and are characterized by steeply sloping, highly erosive, and landslide prone terrain.

(3) Natural and man-made fire hazards exist to the grassy hillsides from oil and jet fuel storage tanks near residential areas.

(4) There is erosion of the bluffs overlooking the Embarcadero.

Given these hazards and the Coastal Act's mandate to minimize the risks associated with them, Morro Bay must go beyond its existing Safety and Seismic Safety Elements, its Flood Insurance Program and other policies it has developed in the past to deal with the potential hazards that impinge upon the community.

B. COASTAL ACT POLICIES

In its aim to assure that new development in coastal areas respects any natural or man-made hazards to which these areas may be exposed, the Coastal Act contains one primary policy governing hazards.

Sec. 30253. "New development shall:

(1) Minimize risks to life and property in areas of high geologic, flood, and fire hazard.

(2) Assure stability and structural integrity, and neither create nor contribute significantly to erosion, geologic instability, or destruction of the site or surrounding area

or in any way require the construction of protective devices that would substantially alter natural landforms along the bluffs and cliffs."

There are other Coastal Act policies that must be considered in addressing coastal hazards, such as those concerning shorefront structures, provisions for shoreline access, protection of sensitive habitats and scenic qualities, and the location of new development.

While these related policies are discussed in other components of this report, one of these policies does deserve discussion in this Chapter:

Sec. 30236. "Channelizations, dams, or other substantial alterations of rivers, and streams shall incorporate the best mitigation measures feasible, and be limited to: (1) necesssary water supply projects; (2) flood control projects where no other method for protecting existing structures in the flood plain is feasible and where such protection is necessary for public safety or to protect existing development; or, (3) developments where the primary function is the improvement of fish and wildlife habitat."

The other policies of the Coastal Act mentioned above that have implications for areas exposed to coastal hazards will not be the object of any extensive analysis in this chapter, but they have been kept in mind, as the policy recommendations for hazards were developed.

C. HAZARD ISSUES

1. Flooding

As evidenced by the floods of 1969 and 1973, Morro Bay suffers from flooding problems that could have been worse if the now relatively development-free Morro Bay flood plain had been developed with homesites or other urban uses.

The greatest damage occurred during the storms of early 1969. Although storm waters were generally contained by those portions of Morro Creek that lie within the City, there was significant damage to telephone, power and gas lines, water wells and bridges. Though the majority of overland flood flow occurred in the low lying agricultural areas of the Morro and Chorro Valleys, there was severe damage to property within the City.

Some of the major reasons for flooding was due to the pile up of debris on bridge piers, behind culverts, constricted channels, and utility crossings and the failure of earthen dikes to contain the storm waters.

The storm of January, 1973, considered a storm of only a 20-year magnitude, brought flooding to the critical Highway One underpass

where Highway 41 meets Main Street, and a number of areas in north Morro Bay east of Highway One. Flooding resulted due to backwater from culverts that were unable to handle the storm.

Following the flooding that occurred in those years, Morro Bay applied for HUD's Federal Flood Insurance program which prompted the preparation of flood prone area maps and City passage of a model ordinance governing development in flood prone areas.

As a result, a map of flood prone areas and the model ordinance were prepared and were only recently adopted by the City. The findings of the flood study and mapping concluded that the City suffered from a variety of flooding problems:

(1) The lower Morro Creek and Chorro Creek Valleys, now undeveloped, are areas subject to 100-year flood inundation.

(2) The hillside areas in the northern end of the City area are plagued by development-aggravated drainage problems--undersized culverts under State Highway One, City streets, and some private developments--which cause flood waters to back up and inundate areas upstream from the drainage constrictions.

(3) The large open area east of State Highway One between Morro Bay High School and the Atascadero Beach Tract suffers from very poor drainage. During storms, water stands on the marshy property, unable to escape down any drainage courses. The entire area is shown as subject to inundation from the 100-year flood.

(4) The site of the high school itself, as well as the site of the City's sewage treatment plant and a portion of PG & E's property--all near the lower reach of Morro Creek as it empties to the sea--are subject to the 100-year flood.

(5) State Highway One, the most critical regional transportation link in Morro Bay, is subject to flooding during a 100-year storm where it crosses Morro Creek and at numerous locations in north Morro Bay where the highway crosses Unnamed and Noname Creeks, the drainage area at the foot of Nevis and Nassau Streets, and at the extreme northern end of the City where Toro Creek meets the highway.

Figure 22 is a schematic depiction of the flood prone areas as adapted from the Federal Flood Insurance Rate maps developed for the City of Morro Bay. The map, along with a model Flood Damage Prevention ordinance regulating development activities in flood prone areas, was only recently adopted by the City Council in November, 1979. As yet, however, there are no City policies or standards short of the incremental permit review requirements of the Flood Damage Prevention ordinance, to guide City planning decisions as to the appropriateness of flood prone areas for development or open space uses.

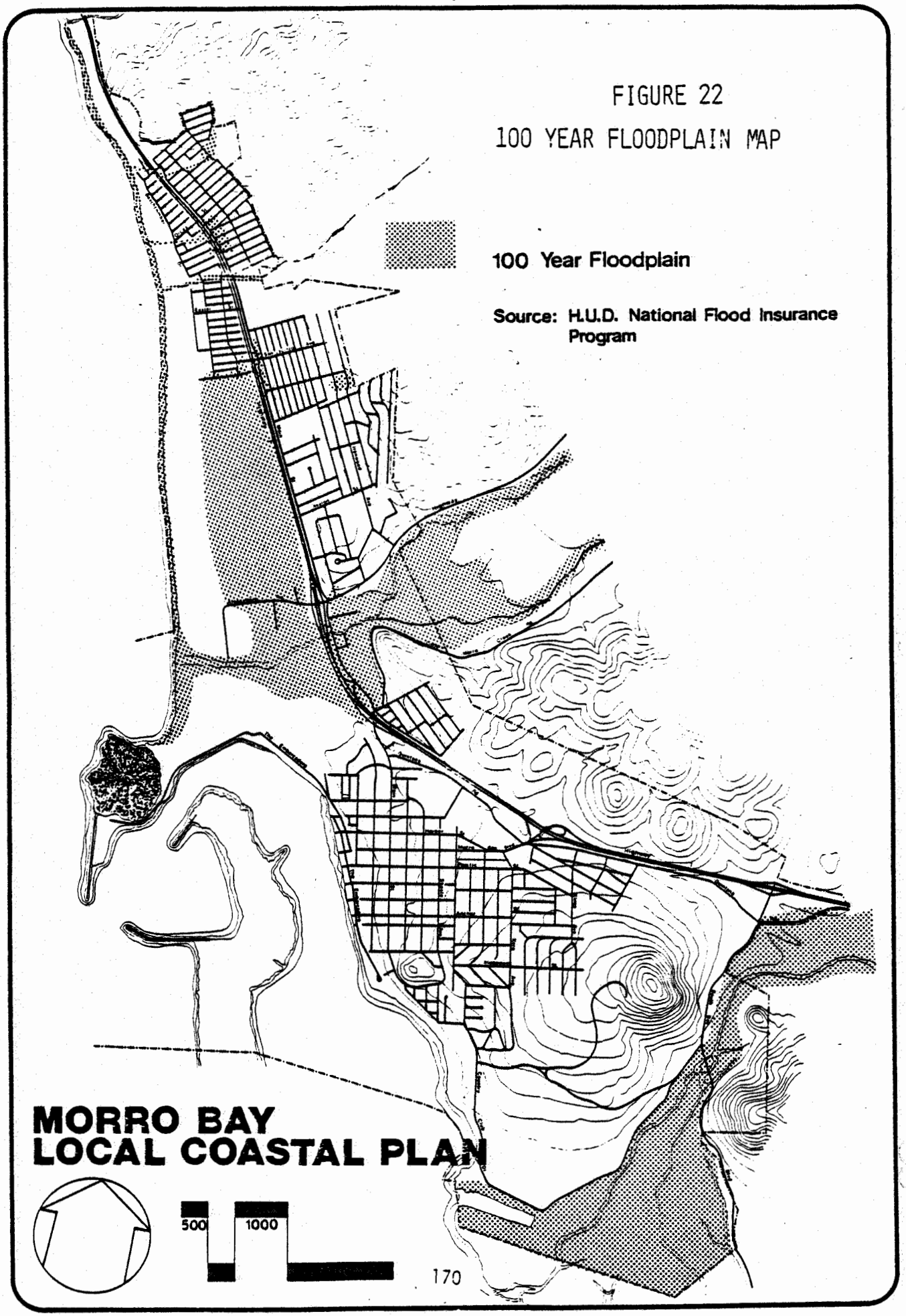


FIGURE 22
100 YEAR FLOODPLAIN MAP
100 Year Floodplain
Source: H.U.D. National Flood Insurance Program
MORRO BAY
LOCAL COASTAL PLAN
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2. Seismic Hazards

While the City of Morro Bay is in a seismically active area, there are no known active faults within or adjacent to the community. Nonetheless, potential threats to life and property from earthquakes are groundshaking, liquefaction, and tsunamis.

These and other hazards were discussed in detail in the City's Seismic Safety (1974) and Safety (1976) Elements. These reports also contained policies and recommendations necessary to minimize impacts from these hazards. The following discussion will identify those areas in the community subject to these hazards and incorporate by reference policies from the adopted elements.

a. Groundshaking

Though not located close to the state's largest fault, the City may expect strong groundshaking from an earthquake on the San Andreas Fault Zone. This fault, located at its closest 41 miles from the City, is expected to generate an earthquake of 8.Ø to 8.5 in the near future.

The level of groundshaking is based on the distance from the earthquake and the geologic strata underlying the City. As shown in Figure 23, those portions of the community underlaid by dune sand or alluvium may expect the greatest amount of shaking. The amount of groundshaking in other portions of the community underlaid by landslide deposits and active sand dunes may vary greatly.

Other small faults, both on and offshore can also cause groundshaking in the community but these are not expected to be as severe as that generated by the San Andreas Fault.

b. Liquefaction

This condition results when a coarse grained, saturated soil loses its structure due to groundshaking. The result is a fluid material, not unlike quicksand. Areas in the community potentially subject to high liquefaction risk are those underlaid by bay muds, landslide deposits and recent alluvium as shown in Figure 24.

c. Tsunamis

Seismic tidal waves or tsunamis, can be triggered by earthquakes or undersea landslides. These may be local with the tsunami striking shore within minutes after the quake or be thousands of miles away and taking hours to reach the coast.

Morro Bay has suffered from tsunami damage in recent years, once in 196Ø and then again in 1964. Triggered by an earthquake off the coast of Chile, the 196Ø tsunami caused minor damage to a pier in the Morro Bay harbor. The 1964 tsunami resulted from an

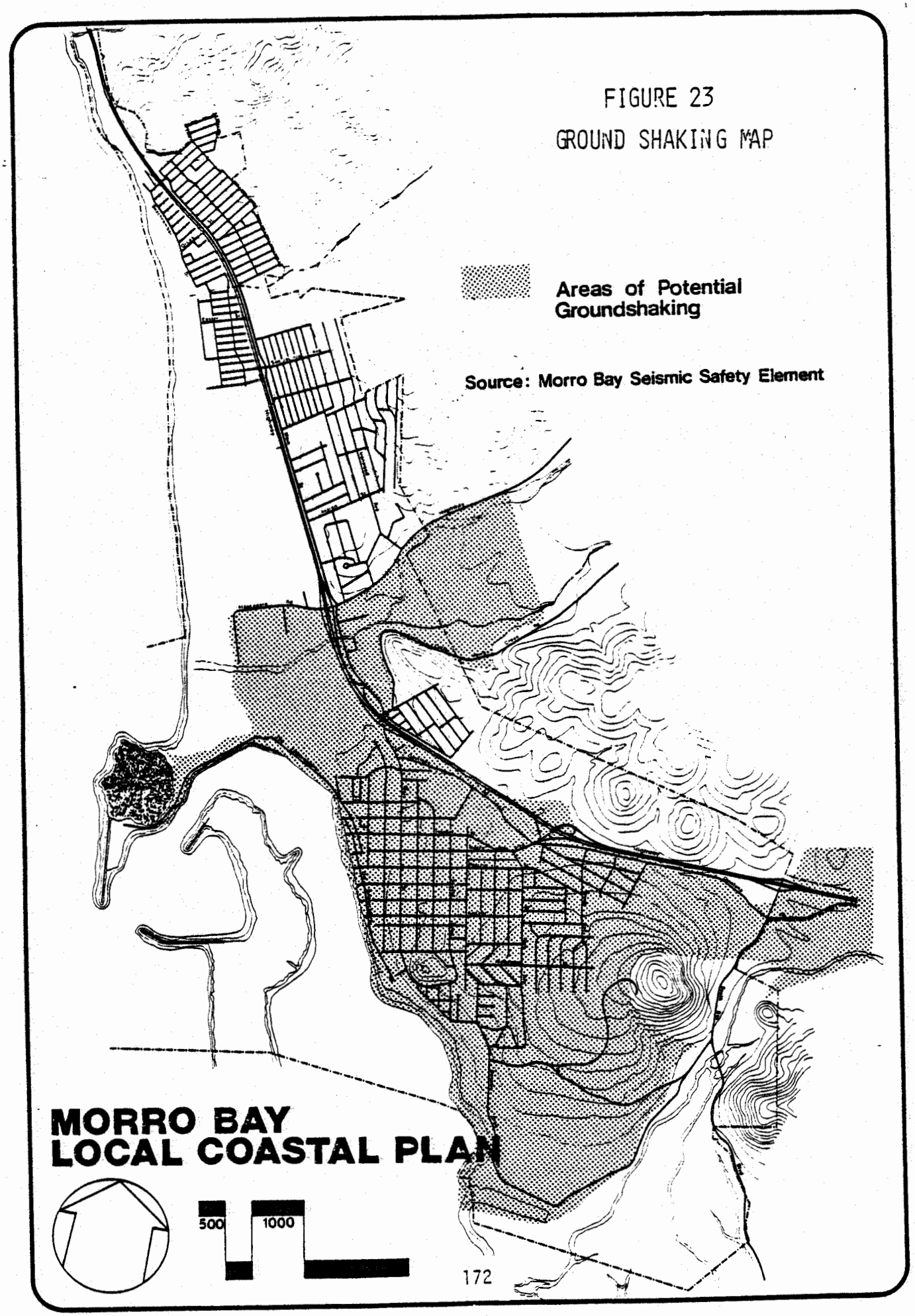
FIGURE 23
GROUND SHAKING MAP
Areas of Potential Groundshaking
Source: Morro Bay Seismic Safety Element
MORRO BAY
LOCAL COASTAL PLAN
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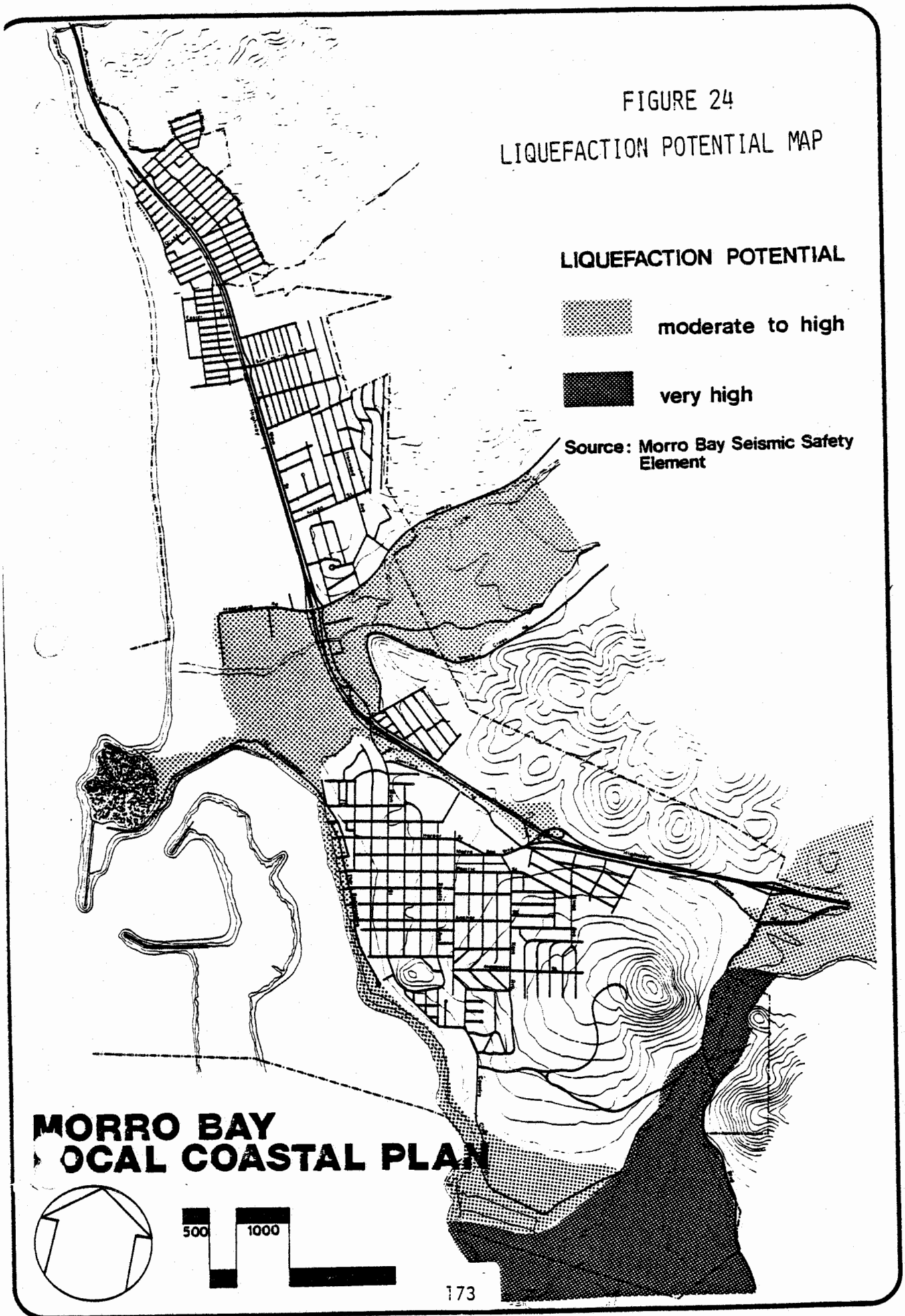
FIGURE 24
LIQUEFACTION POTENTIAL MAP
LIQUEFACTION POTENTIAL
moderate to high
very high
Source: Morro Bay Seismic Safety Element
MORRO BAY
LOCAL COASTAL PLAN
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earthquake off Alaska and caused over $2,500 damage in the harbor to wharfs, piers and buoys.

For planning purposes, tsunami risk is indicated by potential run up areas. Broadly speaking, this would include any area within one mile of the coast with an elevation of less than 50 feet. This would then include the Embarcadero, and all areas up to State Highway One in the Atascadero Beach area. Due to the sand spit and narrow entrance channel providing protection to the harbor, water level fluctuations here should be minimal. The California Division of Mines and Geology (1972) classifies the Morro Bay coast as "potentially dangerous if tide and tsunami are in phase." The major protection from tsunamis is a system of warning and evacuation. Warning is handled by the U.S. Weather Service and other agencies with evacuation in the hands of the local officials. The primary concern in evacuation is the low lying beach areas north of Coleman Park, heavily used for recreation.

The City's Seismic Safety (1974) and Safety (1976) Elements contain a series of policies to address these geologic hazards. These policies are:

"1.0 Provide for the identification and evaluation of existing structural hazards, and abate those hazards to acceptable levels of risk.

2.0 Ensure that new devleopment within the City's jurisdiction is designed to withstand natural and man-made hazards to acceptable levels of risk.

3.0 Regulate land use in areas of significant potential hazards.

4.0 Provide for the maintenance and improvement of emergency response planning and organization.

5.0 Provide for more detailed scientific analysis of natural and man-caused hazards in the City.

6.0 Educate the public in the nature and extent of natural hazards in the area and in ways of minimizing the effects of disasters.

7.0 Review and upgrade the Safety and Seismic Safety Elements on a regular basis."

Accompanying these policies are implementing measures necessary to ensure protection of life and property in the City. Those policies from the Seismic Safety and Safety Element addressing seismic hazards meet the intention of the Coastal Act.

3. Geologic Hazards

The hazards discussed here are those usually not directly related to earthquake activity, but still present a threat to life and property within the community.

Abutting the City on three sides are steep hillsides. Development on these hillsides will alter the natual slope and topography often leading to landslides and erosion. Landslides are the downslope movement of rock and soil which may occur in a few minutes or through many years. Erosion refers to the breakdown and the washing away of surface material, usually soil.

a. Landslides

Due to the structural weakness of the underlying rocks, the hills to the east and north of the community have been subject to naturally caused slides throughout the ages (see Figure 25). While most of these slides are stable in their present condition, new development could reactivate them. This often results from grading practices accompanying development that steepen the slope angle or increase the slope height.

These hillside areas have been identified by the Seismic Safety Element (1974) as a high landslide risk zone. To provide more specific hazard information within this area (Zone F), the City commissioned a detailed geologic analysis which also identified appropriate development standards. These standards are based upon the individual parcels, geologic, slope and soil characteristics, and ensure development is consistent with Coastal Act Policies.

The special study was conducted by Central Coast Laboratory on a parcel-by-parcel basis for the subdivided areas of the City. In addition, the City currently has a policy that, in unsubdivided areas, a geology study must be conducted to determine landslide potential in Zone F areas. Further, the study divided Zone F into five subzones based on percent slope, landslide evidence other geological hazards and soil types. The five subzones are given generally as follows:

Sub-Zone 1: Those land areas having slopes less than ten percent, free of landslides and other significant geological hazards and having soil types which are considered only moderately expansive and of low plasticity.

Sub-Zone 1C: Same as Subzone 1 with soil types which are considered expansive to highly expansive.

Sub-Zone 2A: Those land areas having slopes of 10 percent to 30 percent, free of landslides and other significant geological hazards which exhibit soil types which are either of volcanic or sandstone origin and exhibit low expansion and plasticity.

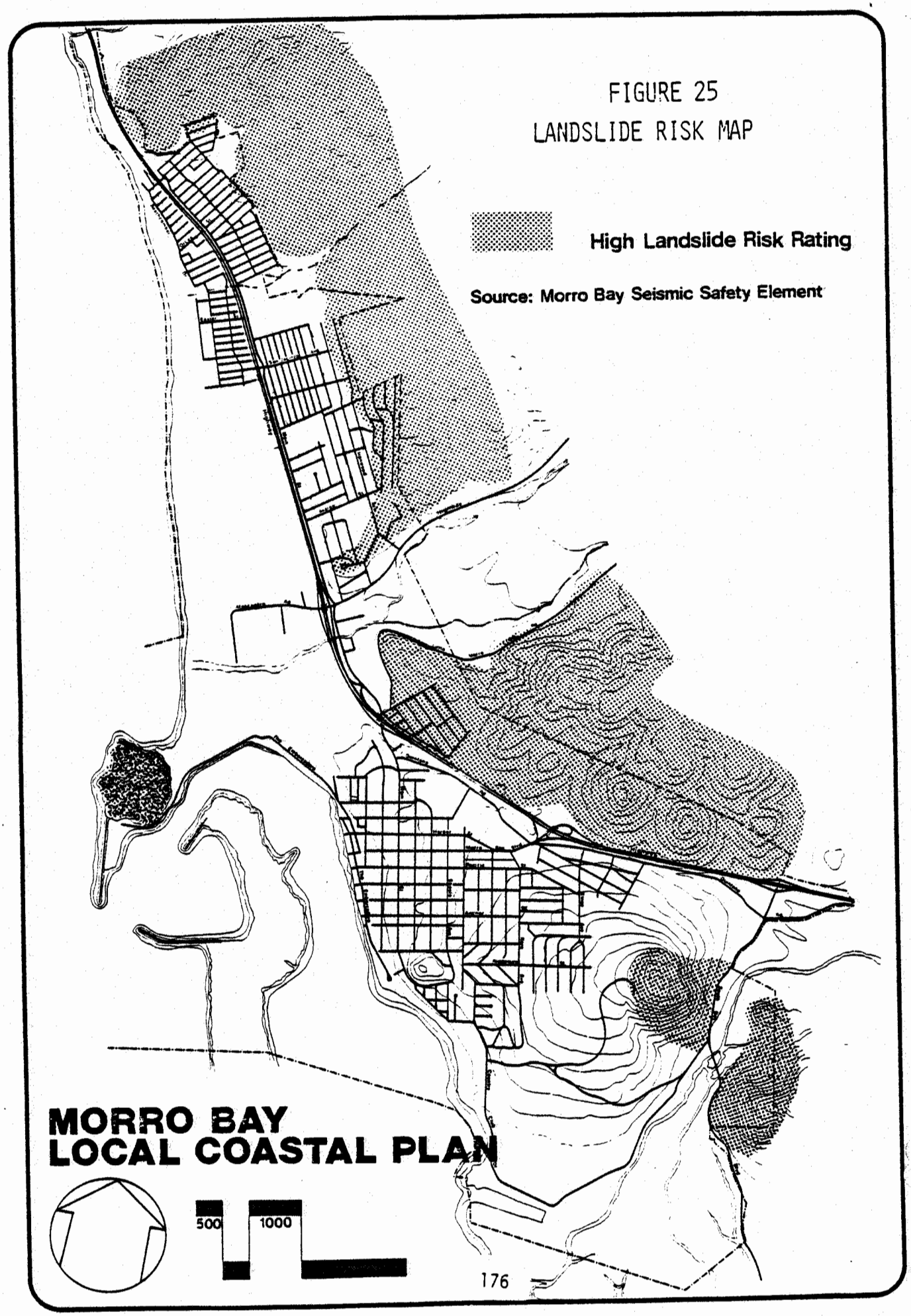
FIGURE 25
LANDSLIDE RISK MAP
High Landslide Risk Rating
Source: Morro Bay Seismic Safety Element
MORRO BAY
LOCAL COASTAL PLAN
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Sub-Zone 2C: Those land areas having slopes of 10 percent to 30 percent, free of landslides and other obvious geological hazards which exhibit soils of high plasticity, medium to high expansion characteristics and moderate to low shear strength when wet.

Sub-Zone 3: Those land areas having landslides, adverse water conditions, unstable soils, slopes greater than 30 percent or other apparent geological hazards.

With the exception of Sub-Zone 3, minimum foundation standards have been set for subdivided parcels on a parcel-by-parcel basis. For Sub-Zone 3, a detailed soils and geological report must be provided which identifies the hazards and provides for mitigating measures to assure a stable foundation. The report is required to be prepared by a licensed geologist or civil engineer. In addition, any subdivided lots so designated as having fill also must have a soils report verifying the condition of the fill and the stability of the lot.

Note: The subzone maps and the Central Coast Laboratory reports are availability from the City Community Development Department. Because of their scale, the maps cannot be reproduced in this document.

b. Erosion

Disturbance of hillsides from development may also alter natural drainage patterns and vegetative cover, thus increasing runoff and the erosion that results. Development also brings an increase in impermeable surfaces--such as roofs and driveways that also increase runoff. This runoff then contributes to downstream flooding and is lost for groundwater basin recharge. It also carries sediment and other pollutants into coastal streams and estuaries.

The City's grading ordinance has been ineffective in preventing offsite sedimentation from construction sites. Amendment of the ordinance with specific standards for hillside development and major subdivision is necessary to protect water quality and to meet the intent of the Coastal Act.

An additional concern to the community is the grading of roads ostensibly for agricultural purposes on hillsides immediately adjacent to the City. This grading creates scenic impacts, increases erosion and may destabilize existing landslides, posing a threat to downslope development.

Due to the sensitivity of these areas, the Conservation Element (1974) has recommended that the City's Zoning and Subdivision Ordinance be amended to address specific hillside concerns. These include:

(1) hillside density and slope limits;
(2) grading and slope stabilization measures;
(3) open space requirements;
(4) site design; and
(5) visual impacts.

The large amount of eroded sediment being deposited within the Morro Bay Estuary can pose a severe threat to the biological productivity of this sensitive habitat (see Chapter on Environmentally Sensitive Habitat Areas). A study prepared for the county's Local Coastal Plan, Erosion Sources in the Morro Bay Watershed (1979), has identified agricultural practices within the watershed as a major source of sediment.

To ensure water quality protection, the Central Coast Regional Water Quality Control Board has developed standards relating to construction, agriculture and other activities that may cause erosion in the Morro Bay watershed. These standards, "Best Management Practices" are designed to minimize runoff and erosion. Use of these practices by both the City and the County watershed management plan as identified in the study Erosion and Sediment in Central Coast Watersheds (1979) could significantly reduce sedimentation in Morro Bay. This plan could be developed in conjunction with the Water Management Plan recommended for the Chorro and Morro groundwater basins (see Chapters on Agriculture and Public Works.)

c. Coastal Erosion

Coastal erosion within the community generally is not a problem with the exceptions of the constant shoaling in the harbor, the accretion of sand in the Coleman Park area and bluff erosion in several areas of the city. The harbor shoaling and the accretion of sand result from the naturally occurring littoral drift and wind pattern for this area.

This sand accumulation poses maintenance problems to the City and threatens to inundate Coleman Park. A dune revegetation program has begun for public ownership parcels with Coastal Conservancy financial assistance.

While not bordering the water, the bluff line running from the PG & E Power Plant to Morro Bay State Park is being eroded in some areas. This is due to the sandy nature of the soil making up the bluff. Another bluff line in the community is found along Beachcomber Drive behind Atascadero State Beach.

The Coastal Act requires bluff-top development to be sited and designed to assure structural stability while minimizing alteration of natural land forms. Since the bluff line along Beachcomber Drive is in Atascadero State Beach, the State Department of Parks and Recreation should ensure new development will not alter the existing topography nor contribute to bluff erosion. Special attention should also be paid to access trails down the bluff face to the beach so they do not contribute to

bluff erosion. These measures may include revegetation, posting or development of stairways. The City shall also ensure runoff from the road does not add to the erosion. Although the bluff line along Beachcomber Drive is within the jurisdiction of State Parks and Recreation, the City will have the responsibility to review and approve all development proposed by State Parks upon LCP certification. Appropriate policies must be included to guide State Parks and other development consistent with the Coastal Act.

Because most of the existing bluff top fronting the Tidelands Park and Embarcadero has been developed and the visual character which this bluff brings to the waterfront area has been established, setbacks will be based on the site specific standards necessary to ensure structural stability. Alteration of the bluff face and the slope stabilizing vegetation will not be allowed.

However, for commercial development in the Embarcadero that will serve as a connecting link between the waterfront and downtown, development that steps down the bluff face may occur. This must be accomplished without major alteration to the bluff face, though retaining walls may be used.

4. Wildland Fire Hazards

The dry vegetation throughout much of the year that exists in the hills east of Morro Bay, together with the dry climate and topography of this area, greatly enhances the potential of major brush fire.

Fires in these areas can have serious impacts on downstream development and water supplies. When vegetation is burned off, erosion becomes a critical problem, especially during the rainy season. Consequently, mudslides and landslides could threaten downhill development.

It is also important that fires be prevented in hillside areas since the foothills are of major importance in protecting the watershed. The vegetation in these areas slow down overland flow which reduces erosion and allows greater groundwater recharge. Otherwise, the water is lost as runoff to the ocean and may greatly contribute to erosion, sedimentation and flooding downstream.

Wildland fires have not historically been a serious problem in the Morro Bay region due to a relatively low use of the hillside areas. Nevertheless, proper management of watershed areas is necessary to protect downstream land uses.

5. Urban Fire Hazards

Due to the concentration of people and property in the City, the potential for fire increases as do the chances for the fire spreading. Urban fire risk is felt to be a factor of both the

structural types and fuel potential in the community as well as the City's capacity to respond to fires.

Based on these and other factors, communities are rated by the Insurance Service Office on a scale of 1 to 10 (with 1 being the lowest risk) for their fire hazard. These ratings are then reflected in the Fire Insurance premiums which homeowners pay. For the urbanized portions of the City, the rating is a Class 5 (median) and the rural section go as low a Class 9 (high risk).

The City's adopted Safety Element (1976) contains policies that address both wildland and urban fire hazards and will be adopted by reference into the LCP-Land Use Plan.

6. Navy Jet Fuel Storage Area

This facility occupies approximately 12 acres in the northern portion of the community. The facility is surrounded by residential development and undeveloped hills. At this time, the Navy does not anticipate expansion of this facility nor phasing out the operation.

Aviation fuel is brought to the facility by ocean tankers and is temporarily stored then transferred to air bases in the Central Valley. Currently, all receiving and shipping of fuel is through underground pipelines. A real potential problem may arise if the volume of fuel through the pipelines cannot be adequately transferred without the use of truck tankers. The impact of increased truck traffic in the area would become a hazard due to the narrow system of streets, exposing lives to increased potential of fuel spills and having trucks impact State Highway One without adequate traffic control in the form of signals. Policies addressing this facility are found in Chapter VII, Energy/Industrial Development.

D. HAZARDS POLICIES

Policy 9.01 All new development located within areas subject to natural hazards from geologic, flood and fire conditions, shall be located so as to minimize risks to life and property.

Policy 9.02 All new development shall ensure structural stability while not creating nor contributing to erosion or geologic instability or destruction of the site or surrounding area.

Policy 9.03 All development, including construction, excavation and grading, except for flood control projects and agricultural uses shall be prohibited in the 100-year floodplain areas unless off-setting improvements in accordance with the HUD regulations are required. Development within flood plain areas shall not cause further stream channelization,

alignment modifications or less of riparian habitat values consistent with Section 30236 of the Coastal Act. Permitted development shall be consistent with all applicable resource protection policies contained in the Coastal Act and in the City Land Use Plan.

The Land Use Plan Map shall designate the flood prone lands at the western limits of the Morro and Chorro Valleys for agricultural uses.

- Developments in the flood prone areas within the City shall include finished floor elevations two feet above the 100-year flood elevation. The heights of permitted development shall be compatible with the character of the surrounding area and not conflict with scenic and visual qualities.

Policy 9.04 In those areas of the City designated as Zone F, Subzone 3 and those areas in the City which have not been surveyed for soils and landslide risk, and those areas designated by the City as having fill material on the property, (all such affected areas are mapped and the maps are available for viewing in the City Planning Department) a detailed geology and soils report must be provided. The report shall identify the hazards and provide for mitigating measures to assure a stable foundation. This report shall be submitted when an application for a development permit is filed. The report shall be prepared by either a registered geologist, a professional civil engineer with expertise in soils or foundation engineering or a certified engineering geologist. Based on this report, a determination shall be made as to the safety of development in landslide areas. Areas over 20 percent slope, or over 200 feet in elevation, and areas of known landslides or gross instability shall be retained in open space.

Policy 9.05 Plans for development shall minimize cut and fill operations. Plans showing excessive cutting and filling shall be denied if it is determined that the development could be carried out with less alteration of the natural terrain.

Policy 9.06 All development shall be designed to fit the site topography, soils, geology, hydrology, and any other existing conditions and be oriented so that grading and other site preparation is kept to an absolute minimum. To accomplish this, structures shall be built to existing natural grade whenever possible. Natural features, landforms, and native vegetation, such as trees, shall be preserved to the maximum extent feasible. Areas of the site which are not

suited to development because of known soil, geologic, flood, erosion or other hazards shall remain in project open space.

Policy 9.07 For permitted grading operations on hillsides, the smallest practicable areas of land shall be exposed at any one time during development, and the length of exposure shall be kept to the shortest practicable amount of time. Grading on slopes steeper than 20 percent shall be prohibited. The clearing of land should be prohibited during the winter rainy season defined as the period between November 1 and March 30 of each year. Grading permits shall include requirements for sediment catch basins, revegetation within a specified period of time and other slope stabilization measures. All measures for capturing sediments and stabilizing slopes including revegetation shall be in place before the beginning of the rainy season, and shall be implemented in conjunction with the initial grading operations.

Policy 9.08 Sediment basins (including debris basins, desilting basins, or silt traps) shall be installed on the project site in conjunction with the initial grading operations and maintained through the development process to remove sediment from runoff waters. Sediment basins shall be in place prior to the commencement of the winter rainy season defined in Policy 9.07. All sediment shall be retained on site unless removed to an appropriate dumping location approved by the City consistent with relevant policies of the Coastal Act and the Morro Bay Local Coastal Program.

Policy 9.09 Temporary vegetation, seeding, mulching, or other suitable stabilization methods shall be used to protect soils subject to erosion that have been disturbed during grading or development. All cut and fill slopes shall be stabilized immediately with planting of native grasses and shrubs, appropriate nonnative plants, or with accepted landscaping practices.

Policy 9.10 In permitted development, drainage devices shall be required in order to conduct surface water to storm drains or suitable watercourses to prevent erosion. Drainage devices shall be designed to accommodate increased runoff resulting from modified soil and surface conditions as a result of development. Water runoff shall be retained on-site whenever possible or whenever there is the capability to facilitate groundwater recharge.

Policy 9.11 Degradation of the water quality of groundwater basins, nearby streams, or wetlands shall not result from development of the site. Pollutants, such as chemicals, fuels, lubricants, raw sewage, and other harmful waste, shall not be discharged into or alongside coastal streams or wetlands either during or after construction.

Policy 9.12 To protect the sensitive Morro Bay Estuary, the City shall require all development including any interim agricultural uses to follow the Best Management Practices of the Regional Water Quality Board within the City limits and will urge the County to adopt the use of Best Management Practices for all land uses within the Morro Bay watershed. These Best Management Practices, as determined by the Regional Water Quality Control Board, are designed to minimize runoff and erosion.

Policy 9.13 The City shall also urge the County and other appropriate public agencies to develop a Watershed Management Plan to review all land uses within the watershed for potential impacts on water quality and quantity.

Policy 9.14 All development along bluff tops must be adequately setback to ensure protection of the development for its economic life and development shall not require alteration of the existing land form or beach. New development shall assure stability and structural integrity, and neither create nor contribute significantly to erosion or geologic instability by accomplishing the following:

(1) Bluff-top setbacks shall be determined from a site-specific geology report prepared by a registered geologic engineer. The report shall set forth recommendations for building setbacks which shall ensure structural stability and integrity without altering bluff land form or necessitating the construction of protective devices such as seawalls for the life of the development (75-100 years).

(2) The face of the bluff and vegetation or fill material stabilizing the slope shall not be altered.

Policy 9.15 All new development on bluff tops shall be required to install drainage systems to carry runoff inland to the nearest public street. In areas where the topography prevents such conveyance, because additional filling or grading would create greater adverse environmental or visual impacts, private bluff drainage seaward should be permitted if the drainage system is sized to accommodate drainage

from adjacent parcels and the system is designed to minimize visual impacts utilizing natural coloring, natural landforms and vegetative planting to hide the system.

Policy 9.16 Development shall not be permitted on the bluff face except for the above drainage systems and for engineered staircases or accessways to provide public beach access and pipelines for scientific research or coastal-dependent industry. To the maximum extent feasible, these structures shall be designed to minimize alteration of the bluff and beach.

Policy 9.17 In the Embarcadero area between Surf Street and Anchor Streets, development may be stepped down the bluff face. However, the development shall not require the construction of protective devices or retaining walls that would alter natural landforms or impede public access.

Policy 9.18 Channelizations, dams, or other substantial alterations of rivers and streams shall incorporate the best mitigation measures feasible, and be limited to (1) necessary water supply projects, (2) flood control projects where no other method for protecting existing structures in the flood plain is feasible and where such protection is necessary for public safety or to protect existing development, or (3) developments where the primary function is the improvement of fish and wildlife habitat.

XI. DIKING, DREDGING, FILLING AND SHORELINE PROTECTION

A. INTRODUCTION

The Coastal Act requires an assessment of possible impacts which might be caused by diking, dredging, filling of wetlands and shoreline protection. The City of Morro Bay is primarily involved with dredging its harbor and protecting the Embarcadero from tidal erosion. Periodically, the City must dredge the harbor in order to maintain the standards set by the 1945 Rivers and Harbors Act.

B. COASTAL ACT POLICIES

Sec. 30230. "Marine resources shall be maintained, enhanced, and, where feasible, restored. Special protection shall be given to areas and species of special biological or economic significance. Uses of the marine environment shall be carried out in a manner that will sustain the biological productivity of coastal waters and that will maintain healthy populations of all species of marine organisms adequate for long-term commercial, recreational, scientific, and educational purposes."

Sec. 30233 (a). The diking, filling, or dredging of open coastal waters, wetlands, estuaries, and lakes shall be permitted in accordance with other applicable provisions of this division, where there is no feasible less environmentally damaging alternative, and where feasible mitigation measures have been provided to minimize adverse environmental effects, and shall be limited to the following:

(1) New or expanded port, energy, and coastal-dependent industrial facilities, including commercial fishing facilities.

(2) Maintaining existing, or restoring previously dredged depths in existing navigational channels, turning basins, vessel berthing and mooring areas, and boat launching ramps.

(3) In wetland areas only, entrance channels for new or expanded boating facilities; and in a degraded wetland, identified by the Department of Fish and Game pursuant to subdivison (b) of Section 30411, for boating facilities if, in conjunction with such boating facilities, a substantial portion of the degraded wetland is restored and maintained as a biologically productive wetland; provided, however, that in no event shall the size of the wetland area used for such boating facility, including berthing space, turning basins,

necessary navigation channels, and any necessary support service facilities, be greater than 25 percent of the total wetland area to be restored.

(4) In open coastal waters, other than wetlands, including streams, estuaries, and lakes, new or expanded boating facilites.

(5) Incidental public service purposes, including, but not limited to, burying cables and pipes or inspection of piers and maintenance of existing intake and outfall lines.

(6) Mineral extraction, including sand for restoring beaches, except in environmentally sensitive areas.

(7) Restoration purposes.

(8) Nature study, aquaculture, or similar resource-dependent activities.

b. Dredging and spoils disposal shall be planned and carried out to avoid significant disruption to marine and wildlife habitats and water circulation. Dredge spoils suitable for beach replenishment should be transported for such purposes to appropriate beaches or into suitable longshore current systems.

c. In addition to the other provisions of this section, diking, filling, or dredging in existing estuaries and wetlands shall maintain or enhance the functional capacity of the wetland or estuary. Any alteration of coastal wetlands identified by the Department of Fish and Game, including, but not limited to, the 19 coastal wetlands identified in its report entitled "Acquisition Priorities for the Coastal Wetlands of California", shall be limited to very minor incidental public facilities, restorative measures, nature study, commercial fishing facilities in Bodega Bay, and development in already developed parts of south San Diego Bay, if otherwise in accordance with this division."

Other sections of the Coastal Act which relate to the physical area of the harbor pertain to protection of uses as they are located within the harbor and alterations of the shoreline to accommodate coastal-dependent uses.

Sec. 30234. Facilities serving the commercial fishing and recreational boating industries shall be protected and, where feasible, upgraded. Existing commercial fishing and recreational boating harbor space shall not be reduced unless the demand for those facilities no longer exists or adequate substitute space has been provided. Proposed recreational boating facilities shall, where feasible, be designed and located in such a fashion as not to interfere with the needs of the commercial fishing industry.

Sec. 30235. "Revetments, breakwaters, groins, harbor channels, seawalls, cliff retaining walls, and other such construction that alters natural shoreline processes shall be permitted when required to serve coastal-dependent uses or to protect existing structures or public beaches in danger from erosion and when designed to eliminate or mitigate adverse impacts on local shoreline sand supply. Existing marine structures causing water stagnation contributing to pollution problems and fish kills should be phased out or upgraded where feasible.

The Act's provision 30233 (2), (7), (8), and B give permission and provide the criteria in determining the extent and magnitude of dredging and shoreline restoration. The Army Corps of Engineers is responsible for maintenance dredging of the navigational channel and restoration of the shoreline retainer. The City assumes the responsibility of maintaining the mooring area. (see Figure 26).

The following discussion reviews the issues confronting the maintenance and operation of the Morro Bay Harbor.

C. DREDGING AND SHORELINE PROTECTION ISSUES

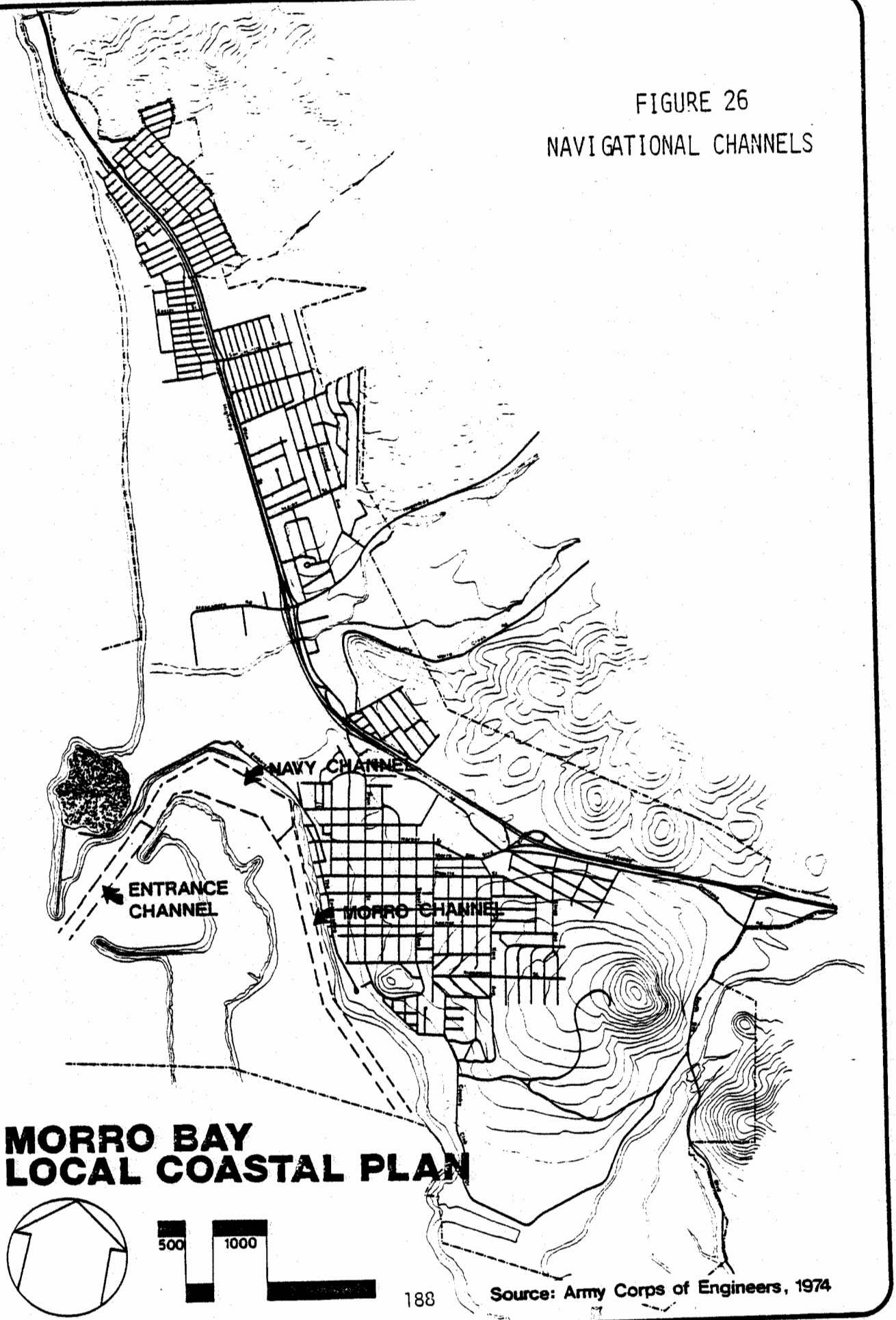
1. Dredging

Major development of Morro Bay Harbor was begun in 1942 by the U.S. Government and continued until the end of World War II. The initial dredging operation between 1942 and 1946 removed over 3,000,000 cubic yards of spoils, two-thirds of which were deposited on the sandspit and the remainder on areas north of Morro Rock. Subsequent dredging is summarized below:

Date	Dredging in Cubic Yards
1949	822,000
1956	905,000
1964	702,000
1968	406,000
1971	190,000
1974	350,000
1980	740,000

FIGURE 26

NAVIGATIONAL CHANNELS



The maintenance dredging of navigational channels in the harbor is located entirely within the jurisdiction of the City of Morro Bay. This activity will maintain existing federal channels at presently authorized widths and depths and assure the continued navigability of the channels. Authorized channel configurations are:

	Width	Depth	Length
Entrance Channel	350 ft.	16 ft.	2,500 ft.
Navy Channel	Variable	16 ft.	4,500 ft.
Morro Channel generally	250 ft.	12 ft.	5,300 ft.

It must be noted that since the completion of the initial dredging activity in 1946, the southernmost channel in the harbor, Morro Channel, has only been dredged twice, in 1954 and 1980. Periodic maintenance dredging in the harbor is to comply with the agreement between the City and the Federal Government. While the U.S. Army Corps of Engineers is the lead agency in the harbor maintenance, dredging of the Morro Bay Channel is the City's responsibility.

Disposal of dredge spoil has occurred mostly on the Morro Bay Sand Spit, though some spoil has been placed north of Morro Rock. The deposition of spoils on the sand spit has often led to severe impacts on the sensitive plant community found there. Much of this disposed spoil has then been blown back into the harbor. The spoils from the most recent dredging were transported several miles down the sand spit and dumped in the intertidal zone. These spoils were then dispersed by the currents for beach replenishment.

The sedimentary material that fills in the navigation channel has been identified as being from several sources. A study conducted by the U.S. Geologic Survey pinpointed the major source as silt and clay which is carried north along the sand spit and then into the harbor as shown by Figure 27. Some of the heavier material carried is deposited on the sand spit by the littoral current and forms sand dunes. The wind then creates blow out areas along the spit which allows sand to move freely across the spit into the bay. The blow out areas also prevent vegetation from stabilizing the wind carried sand. The sand dunes in the Coleman Drive area have also been created by the same process and contributes some material to the harbor.

While sediment carried into Morro Bay by the Los Osos and Chorro Creeks may have a severe impact on the wetlands in the southern portion of the bay, this source contributes little material to the navigation channels. Since material carried by the littoral currents accounts for approximately 90 percent of the sediment, shoaling in the extension of the breakwater may significantly interfere with this process and reduce the need for maintenance dredging. The City should encourage the Army Corps of Engineers to conduct a study to fully evaluate this proposal.

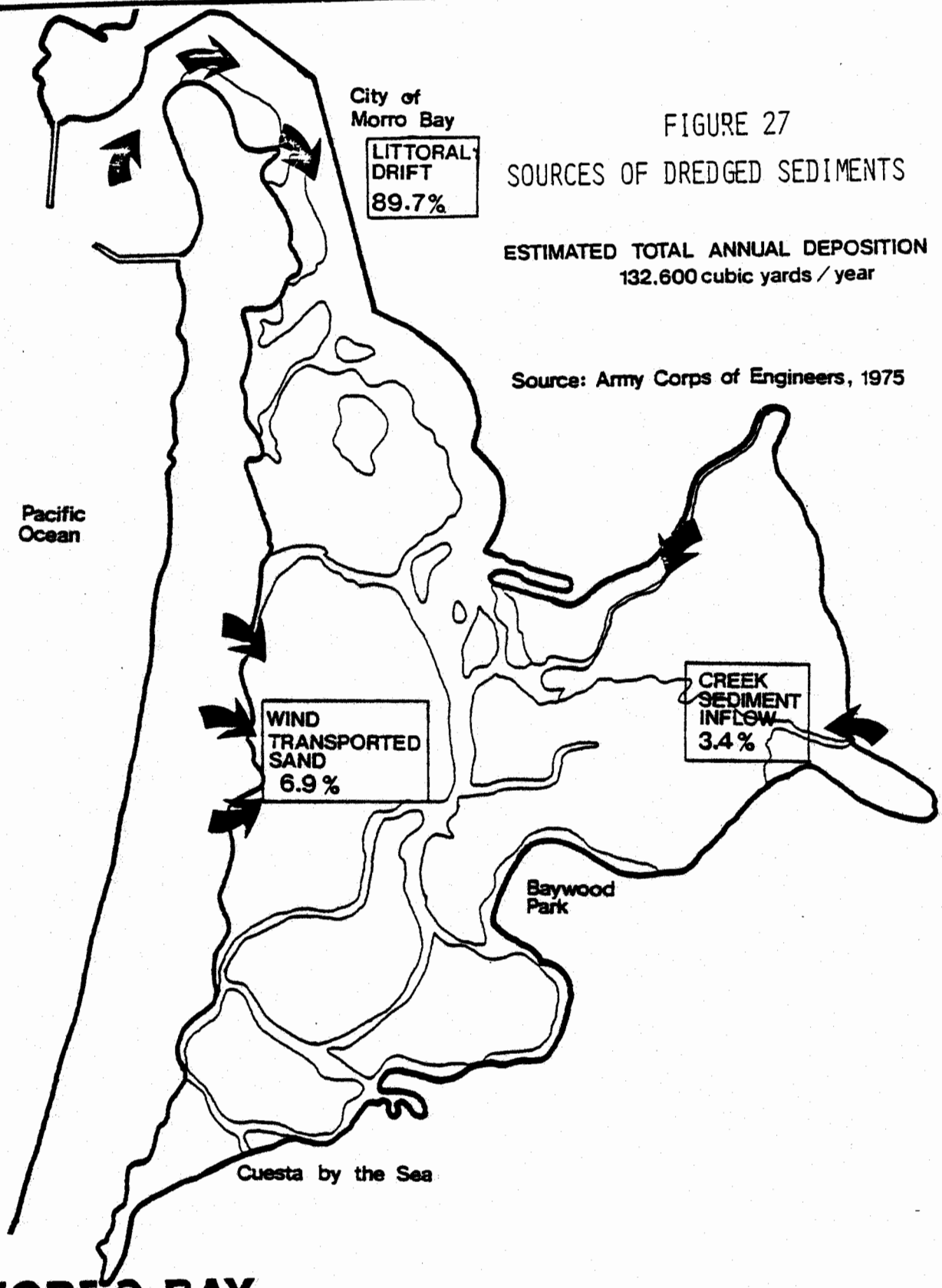


FIGURE 27

SOURCES OF DREDGED SEDIMENTS

ESTIMATED TOTAL ANNUAL DEPOSITION
132,600 cubic yards / year

Source: Army Corps of Engineers, 1975

MORRO BAY LOCAL COASTAL PLAN

An additional project the City should encourage is a dune stabilization project by the State Department of Parks and Recreation on the Morro Bay Sand Spit. This dune stabilization program utilizing native vegetation could protect habitat values while reducing shoaling in the harbor.

2. Shoreline Protection

Piers, rock shore facing, sheet piles and other pilings are constantly being pressured by the current within the bay. Over a period of time, the current can undercut the rock shore facing and cause it to slip down the bank, likewise the current can deposit sand in and around slips thus making the area more shallow. Currently, the Coleman Drive rock facing is being undercut by the bay and potentially causing the need to repair or reconstruct the facing.

The Corps of Engineers is responsible for maintaining the navigational channel and the maintenance of the rock shore facing. The maintenance of the rock facing in the portions of the bay which are not under buildings or wharfs stand a greater chance of being eroded by the current. The maintenance of the rock facing under buildings and wharfs will be most difficult to accomplish.

3. Environmental Impacts

In the past, Morro Bay has been dredged prior to consideration of the environment and any adverse impacts which might result from that dredging. The first dredging probably had the most adverse impact, with approximately 3,000,000 cubic yards removed within the bay. Since that time, subsequent dredging operations have been only for harbor maintenance and have been less environmentally disruptive.

As shown on Figure 26, the navigation channels where dredging occurs have been designated as open water areas. Here environmental impacts have been concerned with bottom dwelling organisms which quickly recolonize the area.

One specific resource that may be impacted by dredging has been the eel grass bed. Eel grass is an important food for the Black Brant and serves as a cover plant for many juvenile fish species. Impacts on the eel grass from dredging may be reduced by only allowing the minimum disturbance necessary and through the replanting of those beds that are disturbed.

Another concern is for the timing of dredge operations. Dredging during the spawning season may inhibit reproduction and alter migratory patterns. Additionally, disposal of these dredge spoils may have significant environmental impacts. The dumping of spoils may smother plant and animal communities and increase erosion and destabilization of the dunes. However, to protect the environmental resources in the bay, it is necessary that the Army Corps of Engineers, the U.S. Fish and Wildlife Service and

the California Department of Fish and Game evaluate before and after, all dredging and spoil disposal operations as well as pursue baseline studies to allow proper evaluation of the bay.

The bay appears to have the capacity to assimilate the present loads of waste generated by human and aquatic organisms, however, there are indications that further commercial and recreational development would heavily tax the capacity of the bay. Currently, pressures to increase the use of the bay must be analyzed with regard to the impact of additional commercial fishing and recreational boating.

4. Harbor Dredging

Maintenance of the harbor is necessary for the continued economic and productive longevity of Morro Bay. Balanced with this must be the protection of the sensitive resources in the bay, especially in the southern bay.

For these reasons, future harbor expansion, specifically for commercial fishing, should occur in the northern portion of the bay. This area is better suited to accommodate the larger boats which are becoming more prevalent in the fishing industry. If this future harbor expansion reduces the demand for existing commercial fishing facilities, those areas south of Tidelands Park should be utilized by recreational boats.

D. DIKING, DREDGING, FILLING AND SHORELINE PROTECTION POLICIES

Policy 10.01 All diking, dredging, filling and shoreline protection developments within the harbor area (land and water) shall be subject to a full assessment of potential biological impacts until an accurate delineation the areal extent of wetlands and estuarine resources contained within City limits are reflected on a map adopted by the City as provided for in Policy 7.02 in Commercial Fishing/Recreational Boating. Once such a map has been adopted, the level of biological assessment may be diminished relative to the resource(s) (wetland, estuary, open coastal water) and corresponding buffer zones potentially impacted by a project. Diking, dredging, filling, and shoreline protection development within Morro Bay's wetland areas shall only be permitted consistent with Section 30233(c) of the Coastal Act. In designated areas, diking, dredging, filling and shoreline protection developments for commercial fishing, coastal-dependent industry and recreation and visitor-serving uses shall be permitted when consistent both on an individual and cumulative project basis, with the preservation of the Morro Bay wetland/estuarine system.

Policy 10.02 All permissible new development within the harbor which may adversely impact the current tidal flushing of the harbor or which may increase shaoling shall be prohibited unless there is no feasible less environmentally damaging alternative, and where feasible mitigation measures have been provided to minimize adverse environmental effects.

Policy 10.03 The City should encourage the U.S. Army Corps of Engineers to evaluate potential harbor improvements, such as expanding the existing breakwater, to reduce sediment deposition in the harbor channels.

Policy 10.04 The City should encourage the State Department of Parks and Recreation to implement a dune stabilization program, utilizing native plant species, on the Morro Bay Sand Spit.

Policy 10.05 Future harbor development shall provide waste disposal to protect the water quality of Morro Bay.

Policy 10.06 The City should monitor the continued effect of the bay's erosion cycle on shoreline protection structures and seek the Army Corps of Engineers' assistance in the repair or reconstruction of these structures and should request the Army Corps of Engineers to repair the Tidelands Park revetment prior to installation of the improvements as proposed for the Tidelands Park project, i.e., boat side tie-ups and shore-based recreational fishing and accessways facilities.

Policy 10.07 (Deleted per revisions of September, 1982).

Policy 10.08 Dredging and spoils disposal in open coastal waters and estuaries shall be planned and carried out to avoid significant disruption to marine and wildlife habitats and water circulation, or affect public access. Dredge spoils suitable for beach replenishment should be transported for such purposes to appropriate beaches or into suitable longshore current systems. Studies assessing the impacts of dredging and spoils disposal shall accompany applications for dredging and spoils disposal development subject to review and comment of U.S. Fish and Wildlife and California Department of Fish and Game. Spoils disposal impacts shall be monitored so that the U.S. Army Corps of Engineers, U.S. Fish and Wildlife and California Department of Fish and Game in conjunction with the applicants can participate in the assembling of baseline data to allow proper assessment of the impact of present and future harbor development.

Policy 10.09 Construction of shoreline structures that would substantially alter existing land forms shall be limited to projects necessary for:

(a) protection of existing development; new development must ensure stability without depending on shoreline protection devices;

(b) public recreation areas;

(c) other coastal-dependent uses.

Shoreline structures include revetments, breakwaters, groins, harbor channels, seawalls, cliff-retaining walls, and other such structures that alter natural shoreline processes.

Policy 10.10 Retaining walls shall be permitted only where necessary to stabilize bluffs adjacent to the coastline where no less environmentally damaging alternative exists or where necessary for coastal-dependent projects, protection of existing development and public recreation uses.

Policy 10.11 The diking, dredging or filling of open coastal waters, wetlands and estuaries shall be permitted in accordance with Coastal Act provisions and where there is no feasible less environmentally damaging alternative, and where feasible mitigation measures have been provided to minimize adverse environmental effects, and shall be limited to the following:

(a) New or expanded energy and coastal-dependent industrial facilities including commercial fishing facilities.

(b) Maintaining existing or restoring previously dredged depths in existing navigational channels and berthing and mooring areas and boat launching ramps.

(c) In open coastal waters, other than wetlands, including estuaries, new or expanded boating facilities.

(d) Incidental public service purposes, including, but not limtied to, burying cables and pipes or inspection of piers and maintenance of existing intake and outfall lines.

(e) Restoration purposes.

(f) Nature study, aquaculture, or similar resource-dependent activities.

(g) In addition to the other provisions of this policy, diking, filling or dredging in existing estuaries shall maintain or enhance the functional capacity of the estuary. Any alteration of the Morro Bay wetland area shall be limited to very minor incidental public facilities, restorative measures and nature study.

XII. ENVIRONMENTALLY SENSITIVE HABITAT AREAS

A. INTRODUCTION

The City of Morro Bay is fortunate to have many unique environmental habitat areas within and immediately adjacent to the community. Besides providing a unique setting for the City, there are critical habitat areas for several rare and endangered plant and animal species.

The California Coastal Act of 1976 requires that the biological productivity and quality of coastal waters, streams, wetlands and estuaries be maintained, and where feasible, restored.

While the Morro Bay area contains a relatively large amount of environmentally sensitive habitat ares, the majority of these are under the jurisdiction of either the State Department of Parks and Recreation, the State Department of Fish and Game, or San Luis Obispo County. Those policies and standards recommended for areas outside the City are advisory only. Environmentally sensitive habitat areas within the City but under State Park and Recreation or Fish and Game jurisdiction must be managed consistent with the City's Local Coastal Plan.

B. COASTAL ACT POLICIES

In its aim to protect, enhance and restore the sensitive habitat areas of the coastal areas, the Coastal Act contains a comprehensive set of policies which recommend guidelines for preservation and restoration of habitat areas. These policies shall act as a guide in the development and implementation phase of the City's Local Coastal Program.

The Coastal Act specifically addresses the marine environment in several of its policies. In an effort to protect the marine environment for the biological activity which occurs and provide a livelihood for commercial activities the following policies have been established:

Sec. 30230. "Marine resources shall be maintained, enhanced, and where feasible, restored. Special protection shall be given to areas and species of special biological or economic significance. Uses of the marine environment shall be carried out in a manner that will sustain the biological productivity of coastal waters and that will maintain healthy population of all species of marine organisms adequate for long-term commercial, recreational, scientific, and educational purposes.

Sec. 30231. "The biologial productivity and the quality of coastal waters, streams, wetlands, estuaries, and lakes appropriate to maintain optimum populations of marine organisms and for the protection of human health shall be maintained, and where feasible, restored through, among other means, minimizing adverse effects of waste water discharges and entrainment, controlling runoff, preventing depletion of groundwater supplies and substantial interference with surface water flow, encouraging wastewater reclamation, maintaining natural vegetation buffer areas that protect riparian habitats, and minimizing alteration of natural streams."

In its aim to protect and enhance the marine resources of the coastal areas, the Coastal Act identifies the types of developments which may occur in relation to the coastal waterways. Limitations on such development are also identified.

Sec. 30233. "(a) The diking, filling, or dredging of open coastal waters, wetlands, estuaries, and lakes shall be permitted in accordance with other applicable provisions of this division, where there is no feasible less environmentally damaging alternative, and where feasible mitigation measures have been provided to minimize adverse environmental effects, and shall be limited to the following:

(1) New or expanded port, energy, and coastal-dependent industrial facilities, including commercial fishing facilities.

(2) Maintaining existing, or restoring previously dredged, depths in existing navigational channels, turning basins, vessel berthing and mooring areas, and boat launching ramps.

(3) In wetland areas only, entrance channels for new or expanded boating facilities; and in a degraded wetland, identified by the Department of Fish and Game pursuant to subdivision (b) of Section 30411, for boating facilities if, in conjunction with such boating facilities, a substantial portion of the degraded wetland is restored and maintained as a biologically productive wetland; provided, however, that in no event shall the size of the wetland area used for such boating facility, including berthing space, turning basins, necessary navigation channels, and any necessary support service facilities, be greater than 25 percent of the total wetland area to be restored.

(4) In open coastal waters, other than wetlands, including streams, estuaries, and lakes, new or expanded boating facilities.

(5) Incidental public service purposes, including, but not limited to, burying cables and pipes or inspection of piers and maintenance of existing intake and outfall lines.

(6) Mineral extraction, including sand for restoring beaches, except in environmentally sensitive areas.

(7) Restoration purposes.

(8) Nature study, aquaculture, or similar resource-dependent activities.

(b) Dredging and spoils disposal shall be planned and carried out to avoid significant disruption to marine and wildlife habitats and water circulation. Dredge spoils suitable for beach replenishment should be transported for such purposes to appropriate beaches or into suitable longshore current systems.

(c) In addition to the other provisions of this section, diking, filling, or dredging in existing estuaries and wetlands shall maintain or enhance the functional capacity of the wetland or estuary. Any alteration of coastal wetlands identified by the Department of Fish and Game, including but not limited to, the 19 coastal wetlands identified in its report entitled, "Acquisition Priorities for the Coastal Wetlands of California," shall be limited to very minor incidental public facilities, restorative measures, nature study, commercial fishing facilities in Bodega Bay, and development in already developed parts of south San Diego Bay, if otherwise in accordance with this division.

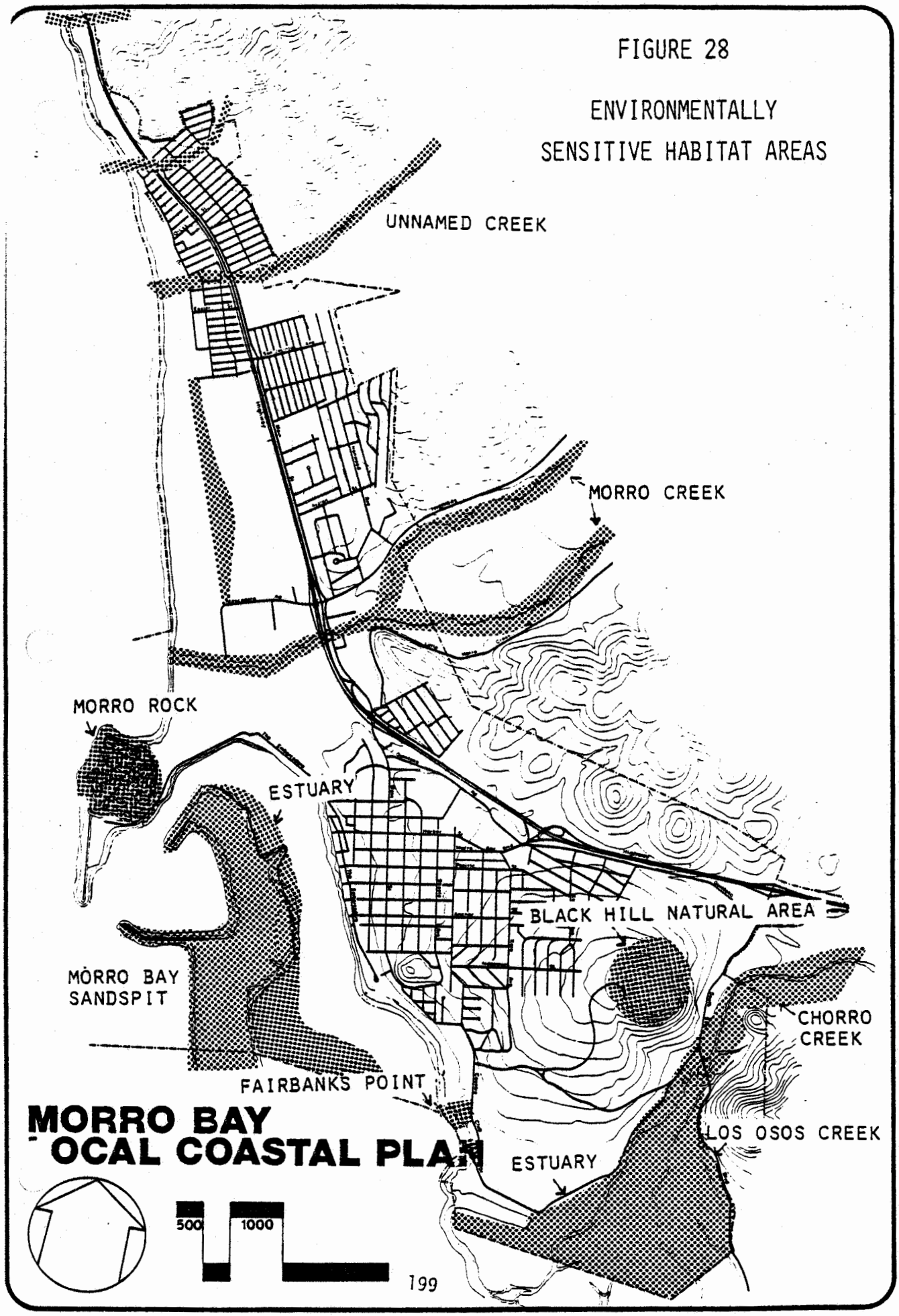
Sec. 30236. "Channelizations, dams, or other substantial alterations of rivers and streams shall incorporate the best mitigation measures feasible, and be limited to (1) necessary water supply projects; (2) flood control projects where no other method for protecting existing structures in the flood plain is feasible and where such protection is necessary for public safety or to protect existing development, or; (3) developments where the primary function is the improvement of fish and wildlife habitat."

Since the marine resources of Morro Bay also include a wide variety of habitat areas, the protection of the environmentally sensitive habitat areas should play an integral part in the preparation and implementation of the City's Local Coastal Program. The following policy identifies environmentally sensitive habitat areas and allowable uses for such areas.

Sec. 30240. "(a) Environmentally sensitive habitat areas shall be protected against any significant disruption of habitat values, and only uses dependent on such resources shall be allowed within such areas. (b) Development in areas adjacent to environmentally sensitive habitat areas and parks and recreation areas shall be sited and designed to prevent impacts which would significantly degrade such areas, and shall be compatible with the continuance of such habitat areas."

FIGURE 28

ENVIRONMENTALLY
SENSITIVE HABITAT AREAS



MORRO BAY
LOCAL COASTAL PLAN

C. SENSITIVE HABITAT AREAS

To ensure the implementation of the Coastal Act Policies addressing environmentally sensitive habitat areas, it is necessary to inventory those resources within the Coastal Zone. The following criteria was used in determining which areas warrant specific protection under the Coastal Act as environmentally sensitive habitats:

(1) unique, rare or fragile communities which should be preserved to ensure their survival in the future;

(2) rare and endangered species habitats that are also protected by state and federal laws;

(3) specialized wildlife habitats which are vital to species survival;

(4) outstanding representative natural communities which have an unusual variety or diversity of plant and animal species;

(5) areas with outstanding educational values that should be protected for scientific research and education uses now and in the future.

Those resources that meet one or more of these criteria will be designated as an environmentally sensitive habitat area. The following discussion will review these coastal resources under the appropriate habitat type. These are defined below and shown on Figure 29.

(1) Coastal wetlands;

(a) "Wetland" means lands within the coastal zone which may be covered periodically or permanently with shallow water and include saltwater marshes, freshwater marshes, open or closed brackish water marshes, swamps, mudflats and fens.

(b) An "Estuary" is a coastal water body usually semi-enclosed by land, but which has open, partially obstructed, or intermittent exchange with the ocean and in which ocean water is at least occasionally diluted by fresh water runoff from the land. The salinity may be periodically increased above the open ocean by evaporation. In general, the boundary between "wetland" and "estuary" is the line of extreme low water.

(c) "Open coastal waters" or "coastal waters" refer to the open ocean overlying the continental shelf and its associated coastline. Salinities exceed 30 parts per thousand with little or no dilution except opposite mouths of estuaries.

(2) Coastal streams/riparian habitats;

(a) A "Stream" or a "River" is a natural watercourse as designated by a solid line or dash and three dots symbol shown on the United States Geological Survey map most recently published, or any well-defined channel with distinguishable bed and bank that shows evidence of having contained flowing water as indicated by scour or deposit of rock, sand, gravel, soil or debris.

(b) A "Riparian Habitat" is an area of riparian vegetation. This vegetation is an association of plant species which grows adjacent to freshwater watercourses, including perennial and intermittent streams, lakes, and other bodies of fresh water.

(3) Rare or unusual native plant communities.

1. Wetlands - Morro Bay and Its Estuary

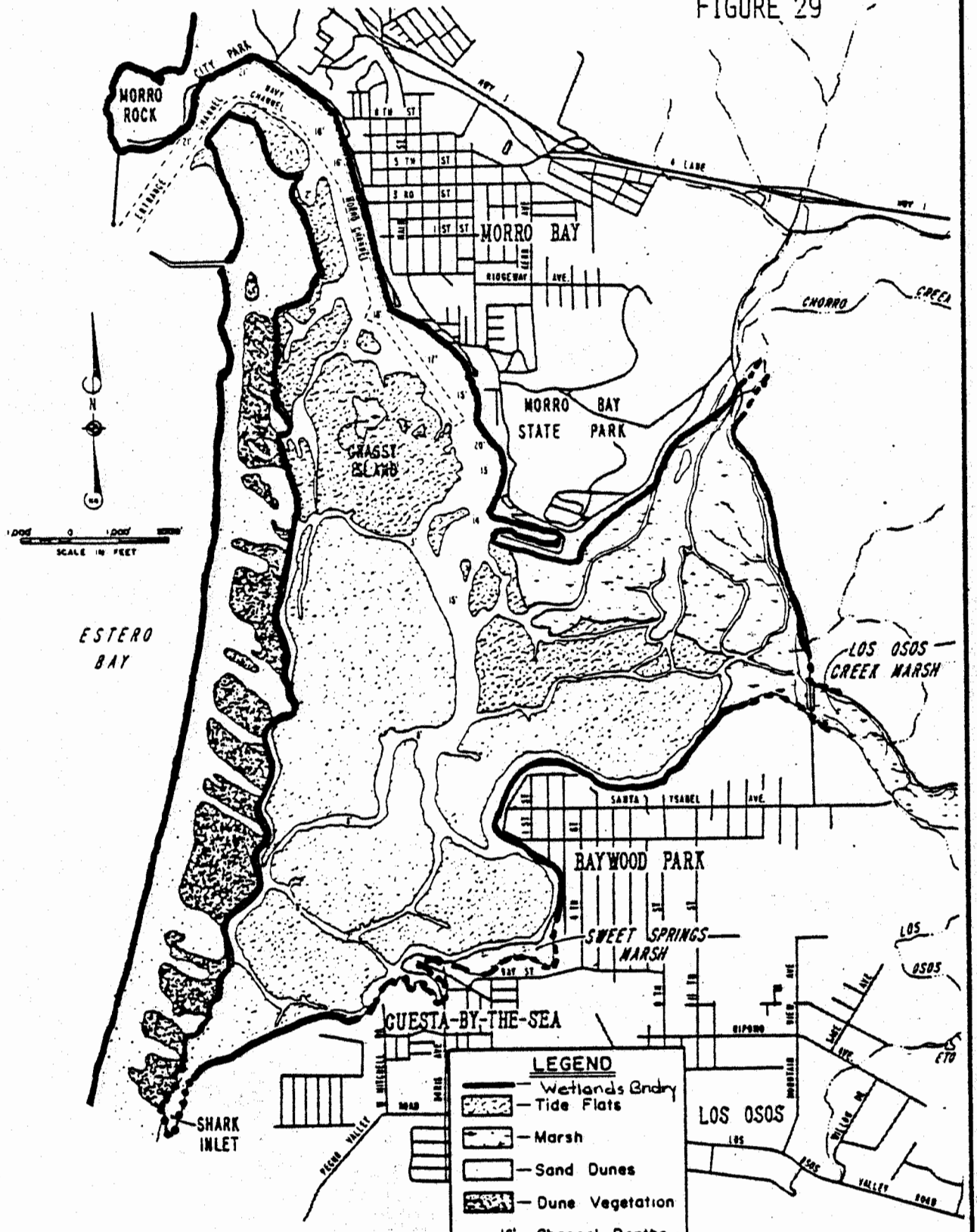
Morro Bay and the Morro Bay Estuary comprise the wetlands area of the City of Morro Bay. The wetlands boundary and Morro Bay Habitat are shown on Figure 29. Morro Bay is considered the most important wetland on the Central Coast of California. The bay is actually a shallow lagoon with two freshwater creeks (the Chorro and Los Osos) draining into it. Tidal waters also fill the bay flowing through the bay entrance and southward to fill the bay. At high tide the bay contains 2,000 acres of water surface and at w tide it contains 500 acres. The intertidal area is a salt-marsh and mudflat. The bay is separated from Estero Bay by a 4-mile long sandbar which extends north/northeastward from the Irish Hills to the mouth of the Bay at Morro Rock. The bay is owned and administered by three separate entities: the northern third of the bay is controlled by activities of the City of Morro Bay; Morro Rock, located at the entrance of the harbor is State property and designated as a State Park. The middle third of the bay is also State Park land. The southern third of the bay consists of privately owned tidelands which are under the jurisdiction of the County of San Luis Obispo.

Coastal wetlands, tidal marshes, mudflats, freshwater marshes and related bodies of water are an important link between oceanic and terrestrial ecosystems. A sensitive and delicate balance exists between the tidal flushing of the bay and the nutrient-rich freshwater runoff which retains the productivity of these systems. A disruption of this balance could adversely affect the biological communities which rely upon the bay.

The bay supports several biotic communities, including coastal salt marsh, tidal mudflats and coastal scrub. The salt marsh is extensive, covering approximately 472 acres. Pickleweed is the dominant plant species and the rare Pt. Reyes bird's beak is also found here.

MORRO BAY HABITATS

FIGURE 29



MORRO BAY LOCAL COASTAL PLAN

Morro Bay is a significant stop on the Pacific Flyway for migratory birds. Up to 25,000 waterfowl have been counted on one peak day and Morro Bay is one of the last remaining places on the California Coast where the black brandt still congregates in relatively large numbers. The eel grass of the tidal flats provides a specialized nesting area for the black brandt and covers 483 acres of intertidal area. The rare and endangered Black Rail and the California Clapper Rail have also been observed here, although not in recent years.

The bay also supports a variety of fish species. Sixty-six species of fish have been identified as habitating the bay, eleven of which appear to be residents. Several of the fish species found in the bay are important to the sport fishery as well as the commercial fishery of Morro Bay. Clams and oysters also live in the bay. The state has allotted approximately 960 acres of tidelands for the commercial seeding and growing of oysters.

The basic food producers of the estuary and lagoon are marine and marsh plants such as eel grass, algae and pickleweed. Broken down by bacterial action, the plant material becomes the base for the detritus food chain on which all marine animals (both microscopic and macroscopic), water birds and shore birds depend. Protecting the vitality of the estuary begins with the protection of marine plants and the plants of the saltmarsh.

Fish of the continental shelf are directly or indirectly dependent on the estuaries. The quiet, nutrient-rich waters of the estuaries provide nursery habitats for young fish. Much of the food in the ocean is that which originated in the estuaries and has been carried out to sea by the tides.

A healthy estuary and saltmarsh are of inestimable value for both aesthetic and economic reasons.

Policies are established to ensure the continued productivity of the wetlands.

2. Streams

The Morro, Chorro and Los Osos Creeks and tributaries (Toro Creek, Little Morro Creek and Unnamed Creek) serve as an important coastal resource. Besides providing habitat for fish and other aquatic orgnisms, the streams provide food and shelter for migratory birds and other animals. The Chorro and Los Osos Creeks drain into Morro Bay Estuary from the upland areas of a large watershed. The combined estuary of these two perennial creeks is a significant habitat in the bay. Morro and other creeks within the City are, unlike the Chorro and Los Osos, ephemeral, that is, they do not run year round. These creeks also drain directly into Estero Bay.

The Morro, Chorro and Los Osos creeks provide habitat for steelhead trout (<u>salmo gairdneri</u>), and important commercial and

recreational species. This fish is anadromous, that is it spends a portion of its life cycle in the ocean and then returns to the stream where it was spawned to reproduce. The streams then serve as a nursery for the young fish until they are old enough to return to the ocean. The freshwater discharged from the Los Osos and Chorro Creeks into the estuary transports nutrients that serve as an important food source for the whole bay complex. Additionally, this freshwater prevents the bay's salinity from exceeding the tolerance level of many species.

3. Rare and Endangered Wildlife Habitats

a. Morro Rock

The ecological preserve located on Morro Rock serves as a nesting site for Peregrine Falcons. Morro Rock is located at the mouth of the bay and is the northernmost visible volcanic plug in a chain of plugs which extends from Islay Hill in San Luis Obsipo to Morro Rock. The rock is connected to the mainland via a strand which is composed of fill materials, much of it dredged from the bay during past operations.

The rare and endangered Peregrine Falcon nests on Morro Rock. The rock is one of the last remaining sites for the falcons and is one of the few known nesting sites on the coast north of the Channel Islands in Santa Barbara County.

b. Fairbanks Point

Located at the southern end of Morro Bay's City limits and adjacent to Morro Bay State Park is Fairbanks Point; the Golden Tee Restaurant and Motel lies to the north. The State of California has acquired the Fairbanks Point property as an addition to Morro Bay State Park.

The grove of eucalyptus trees located at Fairbanks Point serves as a major nesting site for herons. In 1971, 74 active nests of the great heron were counted. A count conducted in 1972 indicated 100 nests of the Black Crowned Night Heron were located here.

c. Black Hill Natural Area

This upland area of Morro Bay State Park is located southeast of the City of Morro Bay. The country club and golf course are located to the southwest of Black Hill. The dominant community is coastal sage scrub.

Within the plant community of coastal sage scrub are such species as California sagebrush, deerweed and buckwheat. This community also contains species characteristic of chaparral and grasslands. As is typical of coastal foothill areas, the grasslands are characterized by pasturelands and scattered grass openings of the chaparral. The rare <u>layia jonesii</u> is located here.

D. ISSUES AND CONSTRAINTS

1. Trends in the Habitat Areas

...e sensitive habitat areas of Morro Bay may be attributed in part for making Morro Bay a popular recreation site. Recreational use undoubtedly accounts for the highest use of the area's natural assets. This may be reflected in the number of persons coming to Morro Bay each year for activities such as birdwatching, hiking, photography or sightseeing. The bay also serves as a major commercial fishing and recreational boating harbor, as well as a backdrop for the City of Morro Bay and the South Bay communities. Ironically, the aesthetic and recreational appearance of the area create further demands on the development of additional harbor facilities, urbanization of the privately owned shoreline and alteration of the tidelands to serve recreational purposes, all of which pose threats to the environmentally sensitive habitat areas.

Increased agricultural activity and development occurring within the Chorro and Los Osos Creek watersheds have, in turn, increased the amount of sediment reaching the bay.

2. Issues and Constraints

Among some of the problems which will face the preservation and enhancement of habitat areas are the following:

(1) The increase in the amount of development occurring in the Chorro and Los Osos Creek watersheds has increased the amount of sediment entering the bay;

(2) The dredging, performed by the U.S. Army Corps of Engineers, which is required to clear the navigable portions of Morro Bay, may have a major impact on the water quality of the bay and disposal of spoils is a problem.

(3) An increase in boating activities on the bay may result in increased water pollution and the likelihood of habitat disruption if proper measures are not implemented;

(4) Increased recreational uses in the Morro Bay area will place a further strain on the habitat areas if mitigation measures are not realized and implemented;

(5) Destabilization of dune vegetation in the City and in the County areas adjacent to the bay caused by off-road vehicle trespass and the dumping of dredge spoils have increased erosion and sediment entering the bay;

(6) Natural areas containing rare and endangered plant species need to be protected;

(7) Protection of the Peregrine Falcon habitat is imperative to survival of the species.

a. Increased Development

An increase in the development and intensification of the agriculture located within the Los Osos and Chorro Creek watersheds has increased the amount of sediment entering the creeks. This, in turn, has increased the amount of sediment entering the estuary and accelerated the infilling of the bay. While this process is a natural one, man's activities have accelerated its rate.

Heavy siltation of stream beds may also clog the natural flow of water from the surface into groundwater reserves. Higher flows and an increased flood hazard may also result from increased stream sedimentation. Polluted runoff from upland development or indirect discharge of pollutants into streams may infiltrate into groundwater, thereby polluting underground water sources.

Riparian vegetation is critical to the ecological balance found in the creeks. The trees located along the creek banks can act as a canopy to the creek, thereby providing shade to maintain the low water temperatures necessary to the survival of the young steelhead trout. Excessive evapotranspiration is limited by a canopy of vegetation in the already low water levels of the summer months. Removal of this tree cover could lead to the extinction of fish from the creeks. One of the major sources of sediment entering the bay from the upland areas is from stream bank erosion. Riparian vegetation plays an important role in retarding this erosion.

An extensive pattern of highly erodible, unstable soils exists in the watershed areas outside the city limits making the hillsides vulnerable to natural erosion and to the process of mass wasting or landsliding. This process may be greatly accelerated by development activities. Disturbance of the hillsides by extensive development, overgrazing, or vegetation loss by clearing or wildfire can significantly disrupt the balance of the hillside areas and cause mass wasting to occur. Since streams are sensitive haitats in and of themselves, and also influence a larger sensitive habitat area in the bay, development and land use located adjacent to these areas can have a tremendous impact on such things as stream hydrology, channel geometry and water quality. Protection of these creeks and their influence on other habitats requires regulation of land use within the immediate environment as well as control of land use in the larger watershed.

b. Dredging of the Bay

Every two years the U.S. Army Corps of Engineers dredges the bay for harbor maintenance. This dredging is necessary to allow continued operation of the harbor and enhancement of habitat areas in the bay. However, adverse impacts may also result from dredging, and an understanding of the problems and benefits associated with dredging are imperative. In order to maintain

the natural habitat areas of the bay, harbor development must be carried out with a minimum of adverse impacts.

Dredging does have an adverse impact on the benthic organisms of the bay. Dredging also increases turbidity, thereby disrupting the photosynthetic processes of the bay organisms.

One major problem resulting from the dredging of the bay is the disposal of dredge spoils. In past years dredge spoils were deposited on the sand spit. This action placed undue stress on a balanced system and "blow-outs" occurred on the sand spit causing infilling in the bay. Vegetative cover is increasing, however, and beginning to stabilize the dunes. The disposal of more sand on the north end of the sand spit would destroy the present vegetation and increase the potential supply of sand to be blown back into the channel by winds. Dredging does play an important role in maintaining Morro Bay as a harbor, however, care must be taken to protect the natural habitat areas of the bay.

c. Pollution

At present, pollution and contamination are not a problem, in fact, Morro Bay is known to have some of the "cleanest" water on the coast. Sewage from Camp San Luis and the California Men's Colony is treated prior to discharge into Chorro Creek, and the City of Morro Bay discharges its treated sewage directly into the ocean. PG & E also discharges its water through an ocean outfall, thus thermal pollution is not a problem. There is very little "living-on-board" use of boats, hence boats are not a significant source of pollution at this time. However, it is reasonable to assume that an increase in the boating activity on the bay would, in turn, lead to an increase in water pollution and the likelihood of habitat disruption.

The major issue to deal with at this time is the expected increase in boating activities. Such pollutants which may be expected to increase are:

(1) Coliform bacteria from sewage disposal--this encourages the growth of algae and speeds the process of eutrophication;

(2) Increased turbidity--this is caused by a stirring of organic matter. Turbidity inhibits photosynthesis;

(3) Grease and oil--these substances float on the water acting as a barrier between air and water, thereby preventing oxygen from dissolving;

(4) Trash--unsightly paper, plastic and food waste generally increases with an increase in usage in an area;

(5) Changes in odor, color, or taste--this may be influenced by various sources such as oil, gasoline and detergents.

d. Increased Recreational Uses

As development in and around Morro Bay increases, the need for recreational uses around the bay will increase and strain on habitat areas will result. The heron rookery at Fairbanks Point is a case in point. The heron nesting here requires seclusion and protection during the nesting period if the process is to be completed. Man's activities in the area could disrupt the process but need not. Through proper recognition of the need for seclusion by the heron, activities in the area may be restricted so as not to endanger the bird's habitat.

e. De-Stabilization of Dune Vegetation

Filling of the bay by sedimentation is a natural process. However, the rate at which the filling occurs may be greatly affected by the activities of man surrounding Morro Bay. A significant part of the sedimentation which enters Morro Bay is placed there by winds blowing over the sand spit and carrying sand with it. This process is inevitable to some extent but in this case is accelerated by man's activities. Trespassing of off-road vehicles onto the dunes and the dumping of dredge spoils have in past years removed or buried the vegetaion which is so critical to the stabilization of the dunes. Alternate spoil dump sites should be sought to help alleviate this problem and increased park surveillance and posting of signs prohibiting off-road vehicles will be necessary to protect the dune stabilization process.

f. Rare and Unique Plant Communities

Several areas of Morro Bay contain rare and endangered or unique plant communities. These natural plant communities provide a site for passive and active recreational activities: bird-watching, hiking, etc., and protection and improvement of the areas should be performed as a part of the Local Coastal Program process.

g. Peregrine Falcon Habitat Protection

The Peregrine Falcon has suffered from low reproduction rates resulting in a greatly declining population rate, and the loss of appropriate habitat range. This in turn has increased the chances for possible extinction of the species and makes the protection of nesting sites essential to survival of the species. Morro Rock has been known to be the nesting site of Peregrine Falcons and has been designated as an ecological reserve. This area should be protected and maintained in its present status so as to enhance the chances of survival for the falcon.

E. ENVIRONMENTALLY SENSITIVE HABITAT AREA POLICIES

Policy 11.01 Environmentally sensitive habitat areas shall be protected against any significant disruption of habitat values, and only uses dependent on such resources shall be allowed within such areas. The City shall either prepare a wetlands/estuarine map, or, if funding does not permit such preparation, adopt the National Wetland Inventory by U.S. Fish and Wildlife Service dated 1979, as the mapping illustration of the wetland and estuarine areas contained within City boundaries. If the City adopts the National Wetland Inventory Mapping as their LUP wetlands map, then because that map does not precisely delineate the extent of wetland habitats and types, all proposed development located within 1000 feet of the mapped wetland boundaries shall be required to submit additional mapping based on U.S. Fish and Wildlife and Coastal Commission Statewide Interpretive Guidelines done by a qualified biologist. The additional mapping will be submitted for review and comment from U.S. Fish and Wildlife and the California Department of Fish and Game. After public agency approval has been obtained, the City shall define buffer areas around the wetland areas. The buffer areas shall be 100 feet around all wetland areas except where biologists identify the need for a greater buffer to protect the overall wetland system or a particular resource. Developments permitted within wetland and/or buffer areas are limited to the uses listed in Section 30233(c) of the Coastal Act.

Policy 11.02 Development in areas adjacent to environmentally sensitive habitat areas and parks and recreation areas shall be sited and designed to prevent impacts which would significantly degrade such areas, and shall maintain the habitats' functional capacity.

Policy 11.04 No land divisions shall be allowed in the environmentally sensitive habitat areas of the wetlands, sand dunes, stream beds and endangered wildlife habitats as designated on Figures 6 and 28.

Policy 11.05 Prior to the issuance of a coastal development permit, all projects on parcels containing environmentally sensitive habitat as depicted on the Land Use Plan map or habitat maps included within the LUP and on the adopted U.S. Fish and Wildlife wetland inventory map, or projects on parcels within 250 feet of all designated areas (except wetlands where projects on parcels within 1000 feet is the criterion), or projects having the

potential to affect an environmentally sensitive habitat area must be found to be in conformity with the applicable habitat protection policies of the Land Use Plan. All development plans, grading plans, etc., shall show the precise location of the habitat(s) potentially affected by a proposed project. Projects which could adversely impact an environmentally sensitive habitat area shall be subject to adequate environmental impact assessment by a qualified biologist(s). In areas of the City where sensitive habitats are suspected to exist but are not presently mapped or identified in the City's Land Use Plan, projects shall undergo an initial environmental impact assessment to determine whether or not these habitats exist. Where such habitats are found to exist, they shall be included in the City's environmentally sensitive habitat mapping included within the LUP.

Policy 11.06 Buffering setback areas a minimum of 100 feet from sensitive habitat areas shall be required. In some habitat areas setbacks of more than 100 feet shall be required if environmental assessment results in information indicating a greater setback area is necessary for protection. No permanent structures shall be permitted within the setback area except for structures of a minor nature such as fences or at-grade improvements for pedestrian or equestrian trails. Such projects shall be subject to review and comment by the Department of Fish and Game prior to commencement of development within a setback area. For other than wetland habitats, if application of the 100-foot buffer on previously subdivided parcels would render the subdivided parcel unusable for its designated use, the setback area may be adjusted downward only to a point where the designated use is accommodated but in no case is the buffer to be less than 50 feet. The lesser setback shall be established in consultation with the Department of Fish and Game. If a setback area is adjusted downward mitigation measures developed in consultation with the Department of Fish and Game shall be implemented.

Policy 11.07 Passive recreation activities (i.e. bird-watching, walking, nature studies) shall be permitted with appropriate controls to prevent adverse impacts.

Policy 11.08 Pollutants such as chemicals, fuels, lubricants, raw sewage and other harmful wastes generated during commercial or recreational boating activities shall be prohibited from being discharged into the bay.

Policy 11.09 The recreational use of rare or endangered species habitats shall be minimal, i.e. walking, birdwatching. Protective measures for such areas should include fencing and posting so as to restrict, but not exclude, use by people.

Policy 11.10 Only native vegetation shall be planted in the habitat areas of rare or endangered species. Where feasible, use of drought tolerant plants of a native variety shall be used in coastal zone areas.

Policy 11.12 Recreational uses allowed on Black Hill and the sand spit shall not disrupt the viability of rare or native plant communities. Passive recreational use of these sensitive habitat areas shall be allowed as long as they are determined to be compatible with preserving the sensitive habitat, following review and comment of the proposed recreational uses by U.S. Fish and Wildlife, the California Department of Fish and Game and the Department of Parks and Recreation.

Policy 11.13 The dumping of dredge spoils on the sand spit shall be prohibited. Native plants should be planted along the sand spit to aid in dune stabilization.

Policy 11.14 A minimum buffer strip along the streams shall be required as follows:

(1) a minimum buffer strip of 100 feet in rural areas;

(2) A minimum buffer strip of 50 feet in urban areas.

If the applicant can demonstrate that the implementation of the minimum buffers on previously subdivided parcels would render the subdivided parcel unusable for its designated use, the buffer may be adjusted downward only to a point where the designated use can be accommodated, but in no case shall the buffer be reduced to less than 50 feet for rural areas and 25 feet for urban areas. Only when all other means of project modifications are found inadequate to provide for both the use and the larger minimum buffer. The lesser setback shall be established in consultation with U.S. Fish and Wildlife and the California Department of Fish and Game and shall be accompanied by adequate mitigations. The buffer area shall be measured landward from the landward edge of riparian vegetation or from the top of the bank (e.g., in channelized streams). Maps and supplemental information may be required to determine these boundaries.

Adjustments to the minimum buffer must protect the biological productivity and water quality of the streams. Assessment of impact shall include, but not be limited to the following factors:

(a) Soil type and stability of stream corridors;

(b) How surface water filters into the ground;

(c) Slope of land on either side of the stream; and

(d) Location of the 100-year flood plain boundary.

Where riparian vegetation has been previously removed, except for stream channelization, the buffer shall allow for the reestablishment of riparian vegetation to its prior extent to the greatest degree possible.

Policy 11.15 No structures shall be located within the stream corridor except: public trails located within a buffer when no alternative location is feasible but outside of riparian habitat; necessary water supply projects; flood control projects where no other method for protecting existing structures in the flood plain is feasible and where such protection is necessary for public safety or to protect existing development; and development where the primary function is the improvement of fish and wildlife habitat. Bridges (when support structures are located outside the critical habitat areas) may be permitted when no alternative route/location is feasible. All development shall incorporate the most protective mitigations feasible.

Policy 11.16 All permitted development, including dredging, filling, and grading within stream beds and setback buffer areas shall be limited to activities necessary for the construction of uses specified in Policy 11.15. When such activities require removal of riparian plant species, revegetation with local native riparian species shall be required except where undesirable for flood control purposes. Projects which would cause the removal of vegetation shall be subject to review and comment by U.S. Fish and Wildlife Service and the Department of Fish and Game.

Policy 11.17 The biological productivity of the City's environmentally sensitive habitat areas shall be maintained and, where feasible, restored through maintenance and enhancement of the quanitity and quality of the Morro and Chorro groundwater basins

and through prevention of interference with surface water flow. Stream flows adequate to maintain riparian and fisheries habitat shall be protected.

Policy 11.18 New subdivisions shall be prohibited in areas designated as environmentally sensitive habitat areas. New subdivisions proposed adjacent to wetland areas shall not be approved unless the to-be-created parcels contain building sites entirely outside the minimum applicable buffer (i.e., 100 feet for wetlands and rural streams, and 50 feet for urban streams.)

Policy 11.19 No vehicle traffic shall be permitted in wetlands and pedestrian traffic shall be regulated and incidental to the permitted uses. New development adjacent to wetlands shall not result in adverse impacts due to additional sediment, runoff, noise, and other disturbances.

Policy 11.20 Coastal dune habitats shall be preserved and protected from all but resource-dependent, scientific, educational, and passive recreational use. Disturbance or destruction of any dune vegetation shall be prohibited, unless no feasible alternative exists, and then only if revegetation is made a condition of project approval. Such re-vegetation shall be with native plants propagated from the disturbed sites or from the same species at adjacent sites.

All non-authorized motor vehicles shall be prohibited in beach and dune areas. A buffer strip, a minimum of 50 feet in width in urban areas and 100 feet in non-urban areas shall be maintained between the dune habitat and adjacent development. All permitted uses shall be regulated and restrictions enforced to protect critical bird habitats during breeding and nesting seasons. Controls may include restriction of access, noise abatement, restriction of hours of operations of public or private facilities. For all permitted uses within dune habitat areas, including recreation, foot traffic on vegetated dunes shall be minimized. Where access through dunes is necessary or reestablished through historical public use, well-defined footpaths or boardwalks shall be developed and used.

XIII. VISUAL RESOURCES

A. INTRODUCTION

The City of Morro Bay is located in a physical setting with spectacular visual qualities. The visual resources of the community serve as valuable assets to both City residents and visitors, and the protection and enhancement of the resources is one of the foremost policies of the Coastal Act of 1976.

Scenic views of unique and varied coastal scenes are important to people both in terms of aesthetics and functional qualities. Aesthetically, viewing an attractive scene can be, for many, a rewarding experience. For other people, scenic views give identity, character and value to their community. Visually attractive areas are good locations for recreational activities and facilities, and moreover, are good sites for ports, commercial activities and residential developments, all of economic importance.

This chapter will address the visual quality concerns of the following areas in the community and will organize the discussion by planning area:

(1) Morro Rock
(2) Morro Bay State Park
(3) Morro Rock City Beach/Atascadero State Beach
(4) Morro Creek and the adjacent flatlands
(5) State Highway One
(6) Embarcadero area
(7) Central Morro Bay
(8) PG & E Power Plant
(9) Coleman Park
(10) Residential Neighborhoods
(11) Undeveloped Land within the City

Additionally, visual concerns relating to the following issues will be addressed:

(1) Signs and sign regulations
(2) Landscaping
(3) Utility Lines
(4) Property Maintenance

B. COASTAL ACT POLICIES

Since protection and preservation of coastal scenic resources is one of the primary goals of the Coastal Act of 1976, several sections specifically address the visual preservation of coastal areas.

Sec. 30251. "The scenic and visual qualities of coastal areas shall be considered and protected as a resource of public importance. Permitted development shall be sited and designed to protect views to and along the ocean and scenic coastal areas, and to minimize the alteration of natural land forms, to be visually compatible with the character of surrounding areas, and where feasible, to restore and enhance visual quality in visually degraded areas. New development in highly scenic areas such as those designated in the California Coastline Preservation and Recreation Plan prepared by the Department of Parks and Recreation and by local government shall be subordinate to the character of its setting."

The Coastal Act also recognizes the pressures exerted on coastal communities insofar as development is concerned. In order to address this issue and at the same time protect and preserve the coastal natural resources, the following policy was included.

Sec. 30253. 1. Assure stability and structural integrity, and neither create nor contribute significantly to erosion, geologic instability, or destruction of the site or surrounding area in any way that would require the construction of protective devices that would substantially alter natural land forms along bluffs and cliffs;

2. Where appropriate, protect special communities and neighborhoods which, because of their unique characteristics, are popular visitor destination points for recreational uses."

C. ASSESSMENT OF SCENIC VALUES

In order to implement the policies of the Coastal Act regarding visual resources, the City must identify areas providing significant public views such as Morro Bay, Morro Rock, and the Pacific Ocean.

To accomplish this task, it is necessary to define scenic views. For the purpose of this document, a scenic view shall be defined as something that is looked at which has significant man-made or natural qualities and which contributes to the identity of a community or area.

These scenic views can then be further evaluated based upon the following criteria:

(a) the abundance and variety of forms and textures;
(b) the richness and range of color;
(c) the distance and extent of views;
(d) uniqueness of scenic qualities;
(e) the availability of street furniture and public facilities;
(f) the ease of access on foot or by motor vehicle;
(g) the extent of public information.

Because man-made visual quality and natural visual quality are aesthetically pleasing and desirable in different ways, urban views are evaluated under different criteria than natural views.

The criteria used for assessing views of the urban environment include such things as:

(a) the enhancement of the City's character through the use of building materials and scale of the structures;
(b) the compatibility with surrounding structures;
(c) the compatibility with the natural features of the area (i.e. topography);
(d) the preservation of public views;
(e) the enhancement and definition of the City's image;
(f) the uniqueness of the City's image.

Based upon these criteria, natural open space areas, residential neighborhoods, and commercial zones with significant scenic resources or community character were identified and evaluated. Figures 30 and 31 show the location of scenic views and identify areas of visual significance.

1. Area 1 - North Morro Bay

a. Morro Rock City Beach/Atascadero State Beach: A stretch of sandy beach running from Morro Rock northerly to Cayucos that affords long unobstructed views of the coastline. Landward of the sea, these beaches have a backdrop of shifting sand dunes and shallow sandy bluffs that give the user a sense of privacy and closeness to nature.

b. Atascadero Beach Tract: A low-lying, single-family residential area characterized by its single-level buildings, its proximity to Atascadero State Beach and the open views of the beach from Beachcomber Drive, and the visual corridors afforded by mature groves of Eucalyptus along San Jacinto Street and on the Cloisters parcel.

2. Area 2 - Atascadero Beach

a. Cloisters Parcel: A beach front parcel at the southern end of the Atascadero Beach Tract that has been proposed for State acquisition due to its physical and visual access to the beach and its unique grove of Eucalyptus trees.

b. Large Undeveloped Parcel: Located in Morro Bay, seaward of State Highway One, between the Morro Bay High School and the Atascadero Beach Tract, this affords viewers along State Highway One and in the hillside residential areas of northern Morro Bay with a broad vista in the tidelands beach area of shifting pristine sand dunes and marshy lowlands.

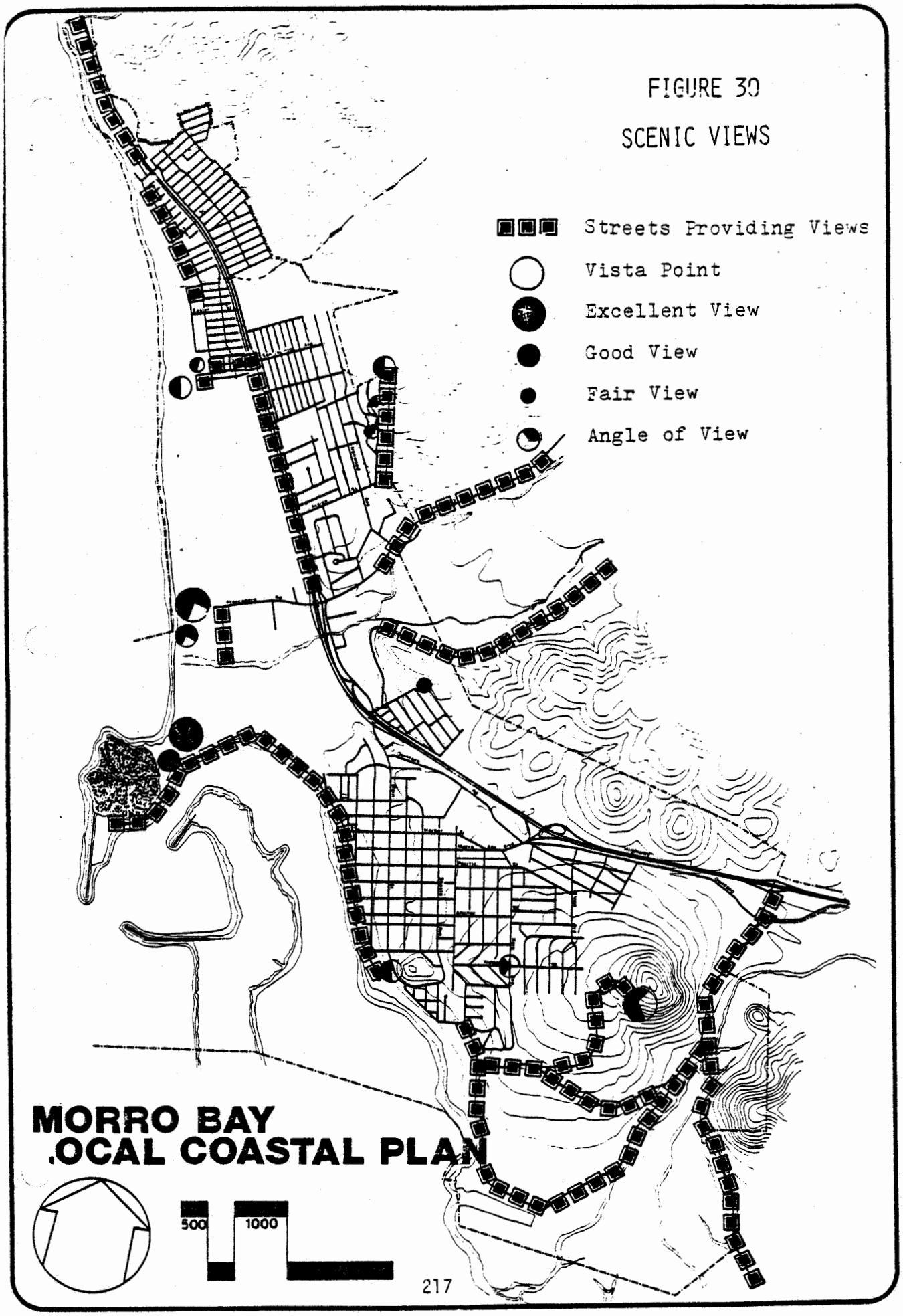


FIGURE 30
SCENIC VIEWS
Streets Providing Views
Vista Point
Excellent View
Good View
Fair View
Angle of View
MORRO BAY
LOCAL COASTAL PLAN
500
1000

3. Area 3 - Del Mar

a. Del Mar Park: A ten-acre or more site in the hills of northern Morro Bay that when developed will provide its users with significant views of the sea, Morro Rock, Atascadero Beach, and the dunes between them.

4. Area 4 - Morro Highlands

a. Morro Heights area: A mixed residential area that is visually appealing primarily because of landscaping and rural character. Mature Monterey Pines are interspersed among residences some of which have been designed to take advantage of the trees and serve to frame views and create pleasant settings for homes.

b. Adjacent Hillsides: The backdrop of the community, the hills climbing up from the coastal bench and the agricultural flatlands of the Morro and Chorro Valleys are a significant visual resource. Those portions of hillsides in the City that are already developed provide spectacular views of the sea, bay and rock, as well as urban areas to the residents of these areas.

The undeveloped hillsides and ridgelines, left open for grazing, add an important visual dimension to the City. Their color, texture and shape contrast sharply with the urban areas and coastline, serve to give a visual definition to the urban form of the City, and reinforce Morro Bay's image and character as a rural, small scale waterfront community.

5. Area 5 - Morro Rock

a. Morro Rock: The landmark of the community, Morro Rock is the most significant visual feature of the area which can be seen from almost any location in Morro Bay. To those who travel to the base of the rock, they are offered views of the harbor mouth, the sea, the sand spit, and the City urban areas.

b. PG & E Power Plant: A massive installation that is the dominant man-made form in Morro Bay. While many aspects of the power plant have detracted from the visual character of Morro Bay, the main facility with its three stacks thrusting skyward have become a part of Morro Bay's visual character.

c. Coleman Park: A City park located on the bayfront between Morro Rock and the PG & E power plant that could take better advantage of its potential views of the bay to the south and Morro Rock Beach and Atascadero Beach to the north.

6. Area 6 - Bayfront

a. Embarcadero: A heavily developed area along the waterfront of Morro Bay that still provides its users with views of the bay, the sandspit, Morro Rock and a picturesque collection of fishing and recreational boats. Made up of a mixture of visitor-serving

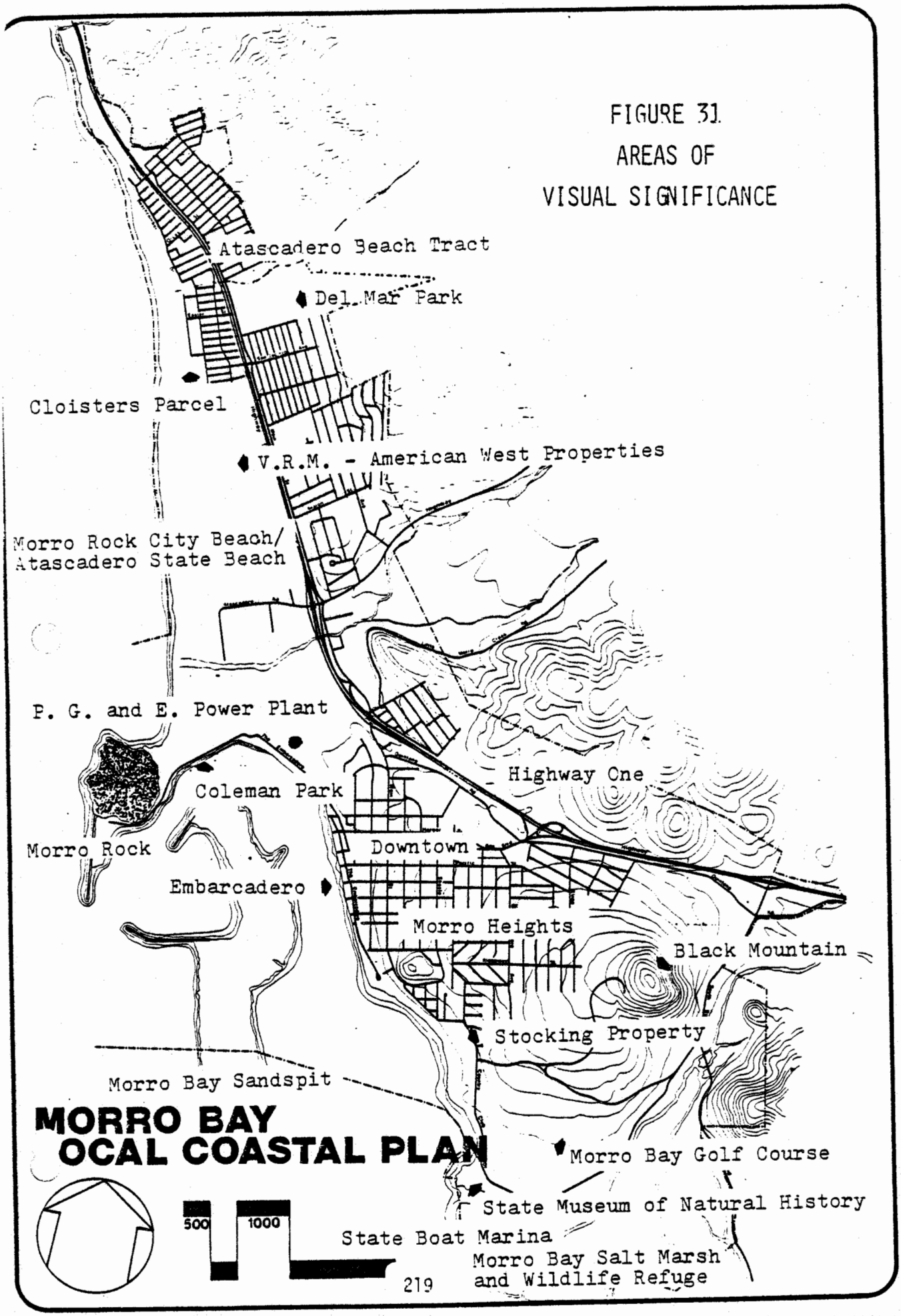


FIGURE 31
AREAS OF
VISUAL SIGNIFICANCE
Atascadero Beach Tract
Del Mar Park
Cloisters Parcel
V.R.M. - American West Properties
Morro Rock City Beach/
Atascadero State Beach
P. G. and E. Power Plant
Coleman Park
Highway One
Morro Rock
Downtown
Embarcadero
Morro Heights
Black Mountain
Stocking Property
Morro Bay Sandspit
MORRO BAY
OCAL COASTAL PLAN
Morro Bay Golf Course
State Museum of Natural History
500
1000
State Boat Marina
Morro Bay Salt Marsh
and Wildlife Refuge

and harbor-related land uses, the Embarcadero is the major tourist attraction of the community.

7. Area 7 - Central Morro Bay

a. Highway One: This State Highway traveling north to south while bisecting Morro Bay probably provides more poor views than good ones. Nonetheless, travelers are afforded significant views of Morro Rock, of the open grazing lands flanking the southeastern entrance to the community, the ridgetops to the east of Morro Bay that help define its urban form, the large vacant area between the road and the sea to the north of the high school, and an immediate view of the sea and coastal bluffs at the northernmost point of the community.

b. Downtown: The Central Business District of Morro Bay is primarily lcoated along Morro Bay Boulevard. This area is composed of small businesses serving both visitors and residents. Views of the bay and Morro Rock are provided from various points within the downtown area.

8. Area 8 - State Park

a. Morro Bay State Park: A resource of both man-made and natural beauty located in the southern part of the community that contributes significantly to the visual quality of Morro Bay. It contains the following scenic features:

(1) Morro Bay Salt Marsh and Wildlife Refuge: an area possessing a variety of wildlife and scenic qualilties that provides unique views to users of the Park.

(2) Black Mountain: the backdrop of Morro Bay State Park which has a road and viewing area, viewers are provided with a full vista of the bay, the sea, and the communities of Morro Bay, Baywood and Los Osos.

(3) Morro Bay Golf Course: a well-maintained 18-hole golf course affording views of the bay, sandspit and sea to its users while establishing a forested, rural character for nearby residential areas.

(4) State Museum of Natural History: located on a strategic point overlooking the bay, this facility provides users with views of the bay and sandspit as well as information regarding its natural characteristics and wildlife.

(5) State Boat Marina: a small boat marina with a quaint visual character of its own.

b. Vacant Property: A significant parcel of vacant land on a coastal bluff above the bay immediately north of Morro Bay State Park on Main Street that provides significant views of the bay and sandspit framed by a grove of large Eucalyptus trees. The

openness of the parcel also gives neighboring residential areas a view of the bay and the imposing grove of trees that is also the site of Morro Bay's heron rookery. This vacant property is pending development.

9. Area 9 - Harbor and Navigable Ways

a. Harbor: Like the Morro Rock area, the dominant view from the central section of the City is the harbor. It is a major focal point of the City and the primary theme for setting the visual character of the visitor-serving areas of the community.

10. Area 10 - Sand Spit

a. Morro Bay Sand Spit: A pristine, windblown spit of sand dunes separating the bay from the sea, the sand spit can be seen from and provides spectacular views to the hillside residential areas in the City.

D. CONFLICTS AND ISSUES

While Morro Bay has been blessed with a physical setting of unique and spectacular visual quality, the community can improve, take better advantage of, and prevent abuses to its visual character.

It is desirable to enhance Morro Bay's views. It is equally desirable that the City consciously seek to take better advantage of its visual qualities while attempting to restore and repair the damage that had been done to those qualities.

1. Property Maintenance

One issue that has detracted from the visual character of Morro Bay is poor property maintenance. An inordinate number of abandoned buildings and cars, buildings with peeling paint, accumulated debris and junk, substandard housing, unscreened trash containers, and conflicting nonconforming uses have served to tarnish Morro Bay's natural beauty. It has become such a problem that the City has developed a property maintenance code to designate poor property maintenance as a nuisance and violation of the code subject to formal citation and abatement. The problems of poor property maintenance are particularly acute in the neighborhoods of northern Morro Bay and in the Downtown, Quintana, North Main, and Embarcadero Commercial Areas, and their correction is necessary for Morro Bay to restore and enhance its visual character.

2. Signs and Sign Regulations

Signs in Morro Bay have come to be a problem, detracting from the visual quality of the community and in some cases interfering with important views. Among some of the problems associated with signs are:

(a) Failure to remove old, non-functional or nonconforming signs.

(b) The allowable height and size of signs are excessive under the existing ordinance.

(c) The lack of a realistic and enforceable timetable for the amortization of nonconforming signs.

(d) The proliferation of lighted signs that have excessive glare or are offensive to nighttime vision in the Community.

(e) The lack of appropriate design standards that would better guide the size, type, color, location, lighting, and materials of construction of signs.

(f) Failure to consider views when reviewing applications to erect and light signs.

3. Overhead Utility Lines

Throughout Morro Bay's residential neighborhoods and most of its commercial areas, there seems to be a maze of overhead utility lines darting in every direction. While this problem is not unique to Morro Bay, it seems particularly acute in this community, particularly in the northern sections of the City. This web of lines serves to both:

(a) create a jumbled, blighted appearance for those areas in which it is most predominant;

(b) interfere with, obstruct, and in some cases render unsightly views that would otherwise be spectacular.

Existing utility lines will continue to plague what is visually pleasant about Morro Bay and detract from property values unless a concerted effort is taken to eliminate this eyesore.

4. Landscaping

With the notable exceptions of the Morro Heights area, isolated tree groves in selected areas of the community, and those few locations where a street tree program has been implemented, Morro Bay requires additional landscaping.

Among some of the problems associated with landscaping and the need to provide more landscaping to enhance and/or restore Morro Bay's visual qualities are the following:

(a) The lack of landscaping along Highway One exposes numerous views that detract from Morro Bay's visual qualities.

(b) There are no regulations to prevent the removal of existing trees and vegetation that have helped establish a rural character for some of Morro Bay's neighborhoods.

(c) The City's street tree program has not been progressing and some of the specimens called for by the Master Tree List are inappropriate.

(d) The lack of water will continue to inhibit any attempts to make significant landscaping improvements in Morro Bay.

(e) While there are zoning districts that call for special landscaping and architectural treatment in new developments, there are areas critical to the community's visual quality -- i.e. the downtown -- that are not included in these districts.

(f) The lack of clear regulations and standards for landscaping of buildings and parking lots is inhibiting opportunities to take better advantage of Morro Bay's visual qualities.

(g) Landgrading operations have created unattractive scars and cut faces in hillside areas, and there are no regulations governing the protection of cut slopes with attractive, erosion preventive plant materials, (This can be solved with enforcement of a grading ordinance; see Chapter X, Hazards).

(h) Morro Bay has relied upon the County to develop a Scenic Highways Element that it could adopt by reference, but as yet neither the City nor County have a Scenic Highways Element.

5. Hillside Development and Grading Practices

Some hillside areas within the community have not been developed with regard for the natural topography. Existing subdivisions reflect design criteria more suitable for flat land areas. Some past grading practices also did not take into account the natural topography of the terrain, leading to erosion and scarring of the hillsides.

Some of the problems associated with these subdivisions have been:

(a) Existing development has not followed the natural contours of the hillsides, detracting from the visual qualities this scenic backdrop can provide;

(b) Streets in these portions of the community traverse directly up the hillside, often at ninety degrees to the natural contour.

(c) Ridgelines that help define the eastern edge of the community are not protected from development that would lessen the visual quality of the hillside areas.

(d) Grading practices are not required to reflect as much as possible the natural contours resulting in substantial and unnecessary alteration of the landscape.

For further discussion of hillside concerns see Chapter X, Hazards.

5. Protection of Neighborhood Character

One of the priorities of the Coastal Act is the protection of the character of the community and its neighborhoods. Morro Bay recognizes the need to preserve the unique character of its varied neighborhoods and to create a higher quality visual environment within them. Among some of the issues that predicate the establishment of policy to preserve neighborhood character are the following:

(a) New residences and new residential additions are often out of scale and character with other residences in the vicinity.

(b) The current allowable height and bulk for residential development is not appropriate for some portions of the community. Such buildings would in many cases block important views and conflict with the character of individual neighborhoods.

(c) Standards or guidelines are needed to create buffers between conflicting land uses;

(d) There is a need for a balancing formula governing the allowable height and bulk of residential and commercial buildings.

There are three neighborhoods which require consideration for neighborhood character protection. These are the Embarcadero, the Downtown and Atascadero Beach Tract (Planning Area 1). It should be noted that protection of community character does not mean protection of or continuation of dilapidated buildings, no community improvements or no progress. It means that the enjoyable qualities of the area should be preserved as much as possible.

a. Embarcadero

Development of waterfront areas along the Embarcadero, as well as along the bluff above the waterfront is an integral part of the views of the bay and Morro Rock and the views from this area should be enhanced.

The Embarcadero is a random mix of tourist and harbor-related uses that creates certain circulation problems, both vehicular

and pedestrian. This random mix does, however, give the area a charm and honesty not found in pre-planned areas. This honesty and individualistic appearance should be encouraged, mindful of a desire for harmony (rather than homogeneity) and its waterfront/bay orientation. Visual problems present on the Embarcadero include:

(1) A lack of landscaping to soften and screen the less pleasing visual impacts of the existing development;

(2) An additional need for public improvements, specifically the paving of parking lots, upgrading restroom facilities and park improvements;

(3) A need to establish standards for signs;

(4) A need to screen rubbish and storage areas;

(5) A need for underground utility lines on the Embarcadero and along the Bluff;

(6) A need for an effective clean-up and maintenance program.

Circulation problems on the Embarcadero include:

(1) A need to widen sidewalks;

(2) A need to locate long-term parking for sports fishing activities where such use will not create parking congestion.

b. Downtown

The downtown business center presents an uninteresting visual appearance to the public. A poor mixture of architectural styles have served to visually fragment this district and sever its connection with the Embarcadero. Other visual concerns facing the downtown are:

(1) A lack of continuity in colors and building materials which lessens visual quality and denies the area character; it also does not emphasize unification and common business goals of the downtown area;

(2) Landscaping is lacking, especially when needed to screen parking areas that lessen scenic qualities;

(3) Overhead utility lines are an eyesore and should be undergrounded;

(4) A lack of design continuity in signs also lessens visual qualities and character.

c. Atascadero Beach Tract

This ocean-front neighborhood is visually well defined, consisting mostly of single story residences. Problems facing the protection of this neighborhood's visual qualities are:

(1) Existing zoning would allow new residences with height not in keeping with neighborhood characteristics;

(2) Existing Eucalyptus groves add a visual quality to the neighborhood but can be a problem species;

(3) Development on adjacent vacant property may impact the visual characteristics of the Atascadero Beach Tract.

E. VISUAL RESOURCES POLICIES

Policy 12.Ø1 The scenic and visual qualities of coastal areas shall be considered and protected as a resource of public importance. Permitted development shall be sited and designed to protect views to and along the ocean and scenic and coastal areas, to minimize the alteration of natural land forms, to be visually compatible with the character of surrounding areas, and where feasible, to restore and enhance visual quality in visually degraded areas. New development in highly scenic areas such as those designated on Figure 31, shall be subordinate to the character of its setting.

Policy 12.Ø2 Permitted development shall be sited and designed to protect views to and along the coast and designated scenic areas and shall be visually compatible with the surrounding areas. Specific design criteria shall be established for the following areas:

a. The Embarcadero (as defined in Policy 2.Ø3)
b. Downtown commercial area

The criteria shall include the following specific requirements and shall be applied to proposed projects on a case-by-case basis during architectural review:

a. Building height/bulk relationship compatible with existing surrounding uses;

b. Landscaping to restore and enhance visually degraded areas using native and drought resistant plant and tree species;

c. Preservation and enhancement of views of the ocean, bay, sandspit and Morro Rock;

d. Any other requirements applicable from Coastal Commission conceptual approval of the Urban Waterfront Restoration Plan.

Policy 12.02A The City shall develop special design criteria for the development of the Coleman Drive planning area to include the following:

(1) Development of the landward portion of the area shall be limited to only low profile structures necessary to support development of commercial fishing facilities. Structures shall be sited to protect existing views available to Morro Rock and to and along the ocean and structures shall be subordinate to the character of the setting.

(2) New development shall not encroach within the setback areas of the sensitive habitat located on Morro Rock.

Policy 12.02B The City shall require a specific development plan for the VRM parcel consistent with Policy 1.13; said plan shall at a minimum include the following visual resource design standards:

(1) A major view corridor to Morro Rock from southbound U.S. Highway One shall be included in the development proposal. The corridor shall preserve the existing views of the Rock and its adjacent land and waterscape. It shall provide for the preservation of the view of existing dune landforms which are located in the western portion of the parcel and which provide the foreground view of Morro Rock. Accordingly:

a. A primary view corridor beginning at a point 100 feet from the northwest corner of the property and extending to the south a distance not less than 600 feet along the property line (7.4 seconds of view at 55 mph) shall be required. No principal structures shall be constructed within this primary view corridor. Development shall be limited to low profile structures, such as tennis courts and swimming pools, for public and private recreation and access so long as they are located as close to the northeast corner of the property as possible, and in no case extend seaward into the corridor more than 500 feet from the property line.

b. Secondary view corridors contiguous with and paralleling each side of the primary corridor

shall also be provided. The secondary corridor to the east (or landward) shall be no less than 200 feet wide at the eastern property line. Within the seaward 100 feet of this corridor along its entire length, structures shall be of only one story and not exceed 17 feet in height from the lowest possible first finished floor height. In no case shall the height of any structure within this corridor obscure the existing tree line presently visible along the southern boundary of the parcel. The seconary corridor along the western (or seaward) line of the primary corridor shall be a minimum of 100 feet wide. Building heights within this corridor shall be one story structures, a maximum of 17 feet in height as measured from the lowest possible first finished floor elevation. To prevent the appearance of a straight line of buildings bordering each side of the primary corridor, structures in the secondary corridor shall be located with varying setbacks from the primary corridor boundary.

(2) To preserve as much as possible the existing expansive view of Morro Rock and its coastal setting, the combined width of the primary and secondary view corridors at their seaward end shall be wider than the minimum 800 foot width at the eastern porperty line. Accordingly, no less than a combined width provided by the following standards shall be provided:

a. The most seaward corridor boundary line shall intersect the western property line no less than 1350 feet from the southwest corner of the property.

b. The eastern corridor boundary line shall intersect the southern property line no less than 300 feet from the southwest corner of the property.

3. In order to accomplish a development which is the least impactive on visual resources as possible, a primary design objective shall be the provision of varying roof heights and roof lines throughout the site. Accordingly, except for Sections 1(b) and 4 of this policy, building heights in all other portions of the site shall be a random mix of one, partial-two and two stories. The maximum building height shall be 25 feet from existing grade.

4. In order to insure that the scale of residential development adjacent to the State

Beach, Cloisters Parcel and dune habitat area is visually compatible with and not intrusive upon these park and recreational areas, consistent with PRC Section 30240(b) of the Coastal Act, structures within the first 100 feet of developable area landward of the dunes/marsh habitat area shall be one story only, not exceeding a height of 17 feet from the lowest possible first finished floor.

Policy 12.02C Consistent with Policy 6.05, a specific development plan shall be required for all divisions and/or nonagricultural development on non-prime agricultural land, if and when supplemental uses are found to be consistent with the agricultural policies contained in the LUP and the Coastal Act. Visual resources for the specific plan shall include:

1. Development shall be sited in clusters on the most level portions of the site adjacent to Highway One. Development shall be compactly clustered onto the portions of the site that have stable slopes of 5 to 15% and shall not cover more than 2% of the gross acreage of the property both within and outside the City.

2. Prior to the siting of new structures, a detailed geotechnical report shall be prepared in accordance with Policy 9.04. The report shall define which portions of the site are less suitable for new development due to geologic constraints.

3. Portions of the site outside of the approved development area shall be retained in open space or agricultural use to preserve the visual and rural character of the area.

4. Structure heights shall not exceed 18 feet above average finished grade of each site pad except that structures designed and approved for visitor-serving lodging may be two stories, not to exceed 25 feet in height, above existing grade.

5. The visual impact of any development on views from Highway One shall be minimized to the maximum extent feasible through the utilization of native plant species indigenous to the area.

Policy 12.03 Development between State Highway One and the ocean in Planning Areas 1, 2 and 5 shall provide view corridors as defined in Policy 12.02B [VRM visual policy] so as not to significantly block views of travelers on the Highway. New development shall be subordinate to the character of its setting and

shall be visually compatible with the surrounding areas.

cy 12.04 The City will pursue enforcement of the Property Maintenance Code in order to continue improving the visual characteristics of Morro Bay. Also, the City shall identify and work towards the removal or require the mitigation of the effects of those nonconforming uses that cause visual blight or otherwise demean the character of residential neighborhoods and commercial districts.

cy 12.05 The City shall, as part of the implementation phase of the LCP, adopt new provisions to:

a. Require monument and surface mounted signs and discourage roof mounted and pole signs;

b. Require that view protection and the nighttime characteristics of the sign be mandatory considerations of any sign installations;

c. Prohibit billboards;

d. Reduce allowable height and size where they interfere with views to and along State Highway One.

e. Develop and adopt sign criteria for signs appropriate for Morro Bay's commercial districts.

icy 12.06 New residential development in areas designated on Figure 31 as having visual significance shall include as appropriate the following:

a. Height/bulk relationships compatible with the character of surrounding areas or compatible with neighborhoods or special communities which, because of their unique characteristics, are popular visitor destination points for recreation uses.

b. Designation of land for parks and open space in new developments which because of their location are popular visitor destination points for recreation uses.

c. View easements or corridors designed to protect views to and along the ocean and scenic and coastal areas.

licy 12.07 The City shall establish a policy for undergrounding of utilities in connection with new development or major redevelopments. In the event

that funding becomes available for the undergrounding of existing utility lines not in connection with new development or major redevelopment, priority shall be given to the undergrounding of lines in the Embarcadero and Downtown areas and entrances to the City.

Policy 12.08 Morro Bay shall request the Division of Highways to develop a plan and program for landscaping the entire length of State Highway One as it traverses through the community that would:

a. Frame and protect important views;
b. Screen unattractive views;
c. Accentuate entrances to the City.

Policy 12.09 Morro Bay will modify its ordinances so as to:

a. Develop clearer requirements, standards, and criteria for installation of landscaping and rentention of existing specimen trees as part of new developments, parking lots, etc.;

b. Prohibit land grading that will create large cut faces, and where minor alteration is necessary, require plantings and appropriate maintenance to conceal and prevent erosion of cut faces.

Policy 12.10 Morro Bay will request that the County and State consider designating State Highway 41 east of the City, State Highway One, South Bay Boulevard, and Main Street in the Morro Bay State Park area as scenic highways when completing the County and City Scenic Highway Elements.

Policy 12.11 Industrial development shall be sited and designed in areas specifically designated in the Land Use Plan to protect views to and along the ocean and scenic coastal areas, to minimize land alteration, to be visually compatible with the character of the surrounding areas, and where feasible, shall include measures to restore and enhance visually degraded areas. In addition, industrial development shall be subordinate to the character of its setting.

GLOSSARY OF TERMS

ACOUSTICS: The science that deals with the production, control, transmission, reception and the effects of sound.

AEROBIC: Living, active or occurring only in the presence of oxygen.

ACRE-FEET: An engineering term used to denote a volume one acre in area and one foot in depth.

AF/yr: Acre-feet per year.

ALQUIST-PRIOLO ACT: Allows the State Mines and Geology Board to develop policies and criteria concerning development proposed within special hazard zones; as defined by the State Geologist.

AMBIENT: Surrounding, encompassing; for example, ambient noise is the surrounding noise such as wind through the trees and ocean waves.

AMBIENT AIR QUALITY: Quality of the air, with respect to pollutants in the atmosphere, in any given area.

ANAEROBIC: Living or active in the absence of free oxygen.

ANNUAL PLANT (ANNUALS): A plant that completes its life cycle and dies in one year or less.

ARCHAEOLOGY: The scientific study of material remains (as fossil relics, artifacts, monuments) of past human life and activities.

AVIAN: Pertaining to birds.

BENTHIC: Occurring at the bottom of the ocean.

BERM: A ledge, shoulder, or terrace.

BIOCIDE: Pesticide.

BIOTIC: Of or relating to life.

BLOWOUT: The uncontrolled discharge of gas, liquids or solids (or a mixture thereof) from a well.

BRACKISH: Containing salt; briny.

BLM: Bureau of Land Management.

BUFFER LANDS: Land uses which protect public safety and provide sufficient distance and barriers between incompatible land uses to lessen noise, dust, vibration, and visual blight.

BUILDOUT: The point when all vacant lots are developed to their fullest extent.

CALIFORNIA COASTAL COMMISSION: When the term California Coastal Zone Conservation Commission appears in any law, it means California Coastal Commission.

CALIFORNIA COASTAL ZONE CONSERVATION COMMISSION: California Coastal Commission, Regional Coastal Commission, State Coastal Commission are all the same agency.

CAPITAL IMPROVEMENT PROGRAM: A long range schedule of public projects with their estimated costs over a period of five to ten years.

CARBONACEOUS: Sedimentary deposits of which the chief constituent is carbon, derived from plant residues.

CARRYING CAPACITY: The level of activity which may be tolerated by an area without causing damage.

CLASS 5: The level of protection provided by the fire department in a jurisdiction. Determined by the Insurance Service Office's Standard Grading Schedule. Cities are classified from 1 to 10 with Class 7 being the most capable of coping with a fire and Class 10 being a community without a fire department or fire flow requirements.

CLAYSTONE: Very fine-grained sedimentary rock made from clay.

CLUSTER DEVELOPMENT: A type of development that places buildings or units in groups or specific areas, leaving the remaining land area in open space, recreational open space or similar use.

COASTAL COUNTY: A county or city which lies, in whole or in part, within the coastal zone.

COASTAL-DEPENDENT DEVELOPMENT OR USE: Any development or use which requires a site on, or adjacent to, the sea to be able to function.

COASTAL DEVELOPMENT PERMIT: A permit for any development within the coastal zone that is required pursuant to subdivision (a) of Section 30600 of the Coastal Act.

COASTAL PLAN: The California Coastal Zone Conservation Plan prepared and adopted by the California Coastal Zone Conservation Commission and submitted to the Governor and the Legislature on December 1, 1975, pursuant to the California Coastal Zone Conservation Act of 1972.

COASTAL ZONE: Extending outward to the state's outer limit of jurisdiction, including all offshore islands, and extending inland generally 1,000 yards from the mean high tide line of the

sea. In significant coastal estuarine, habitat, and recreational areas it extends inland to the first major ridgeline paralleling the sea or five miles from the mean high tide line of the sea whichever is less, and in developed urban areas the zone generally extends inland less than 1,000 yards.

COASTAL-RELATED DEVELOPMENT: Any use that is dependent on a coastal-dependent development or use.

CEIP: Coastal Energy Impact Program.

CUMULATIVELY OR CUMULATIVE EFFECT: The incremental effects of development shall be reviewed in connection with the effects of past projects, other current projects and the effects of possible future projects.

COLIFORM BACTERIA: Bacteria of the colon which is measured in sewage effluent.

COMMISSION: The California Coastal Commission. Whenever the term California Coastal Zone Conservation Commission appears in any law, it means the California Coastal Commission.

CONDEMNATION: To pronounce unfit for use.

CONDUIT: A natural or artificial channel for the transport of water.

CRITICAL FACILITIES: Facilities housing or serving many people or otherwise posing unusual hazards in case of damage from or malfunction during an earthquake; includes hospitals, fire, police and emergency service facilities; utility "lifeline" facilities, such as water, electricity, and gas supply, sewage disposal, and communication and transportation facilities.

CRITICAL ZONE: A sensitive area in which some quality or property may suffer from change.

CUT: An excavation. The difference between a point on the original ground and a designated point of lower elevation on the final grade. Also, the material removed in excavation.

dBA: A noise measurement, often referred to as decibels.

DECIBEL: Numerical expression of the loudness of sound, based on a logarithmic scale.

DECIDUOUS: Referring to trees and other plants which lose their leaves, generally during the winter.

DWT: Deadweight ton.

DWR: Department of Water Resources, State of California.

DEMOGRAPHIC: Statistical study of human populations.

DENSITY BONUS: The awarding of greater unit densities within an established land use density range in the form of more intensive use of the land in return for the provision of greater amenities including but not limited to open space above minimum open space requirements and additional recreational facilities. Density bonuses above the specified ranges may be considered in return for the provision of low and moderate cost housing.

DENSITY TRANSFER: A technique of retaining open space by transferring allowable density from one developable parcel or area to another developable parcel or area.

DEVELOPMENT: On land, in or under water, the placement or erection of any solid material or structure; discharge or disposal of any dredged material or of any gaseous, liquid, solid, or thermal waste; grading, removing, dredging, mining, or extraction of any materials; change in the density of intensity of use of land, including but not limited to, subdivision pursuant to the Subdivision Map Act and any other division of land except where the land division is brought about in connection with the purchase of such land by a public agency for public recreational use; change in the intensity of use of water, or of access thereto; construction, reconstruction, demolition, or alteration of the size of any structure, including any facility of any private, public, or municipal utility; and the removal or harvesting of major vegetation other than for agricultural purposes, kelp harvesting, and timber operations which are in accordance with a timber harvesting plan submitted pursuant to the provisions of the Z'verg-Nejedly Forest Practice Act of 1973.

DIATOMITE: Variety of shale composed largely of the remains of diatoms (microscopic plants). Sedimentary.

DNA: "Does not apply".

DOLOMITE: Calcareous sedimentary rock consisting largely of the mineral dolomite.

EASEMENT: Usually the right to use property owned by another for specific purposes. A common form of easement is an access easement for purposes of pedestrian and/or vehicular circulation.

EIR: Environmental Impact Report, State of California.

EIS: Environmental Impact Statement, Federal document as per the National Environmental Policy Act of 1970 as amended.

ERDC: California Energy Resources Conservation and Development Commission.

EVAPOTRANSPIRATION: Loss of water from the soil both by evaporation and by transpiration (emission of watery vapor) by plants growing thereon.

EMINENT DOMAIN: The right of a government to take private property for public use upon payment of just compensation to the owner.

ENDANGERED: A species in danger of extinction.

ENERGY FACILITY: Any public or private processing, producing, generating, storing, transmitting, or recovering facility for electricity, natural gas, petroleum, coal, or other source of energy, excluding active and passive applications for residential and resort developments.

ENVIRONMENTALLY SENSITIVE AREA: Any area in which plant or animal life or their habitats are either rare or especially valuable because of their special nature or role in an ecosystem and which could be easily disturbed or degraded by human activities and development.

EROSION: The process by which soil and rock are detached and moved by running water, wind, ice and gravity.

ESTUARY: A coastal water body usually semi-enclosed by land, but which has open, partially obstructed, or intermittent exchange with the ocean and in which ocean water is at least occasionally diluted by fresh water runoff from the land. The salinity may be periodically increased above the open ocean by evaporation. In general, the boundary between "wetland" and "estuary" is the line of extreme low water.

EXHUMATION: The removal from a grave.

FAULT: A fracture in the earth's crust forming a boundary between rock masses that have shifted.

Active fault: A fault that has moved recently and which is likely to move again and poses a risk to structures.

Potentially active fault: A fault which is judged to be capable of ground rupture or shaking and poses risk for structures.

Inactive fault: A fault which shows no evidence of movement in recent geologic time and is judged to have no potential for movement in the relatively near future.

FAUNAL: Pertaining to animals.

FEASIBLE: Capable of being accomplished in a successful manner within a reasonable period of time, taking into account economic, environmental, social, and technological factors.

FILL: A deposit of earth material placed by artificial means; any act by which earth, sand, gravel, rock, or any other material is placed, pushed, dumped, pulled, transported, or moved to a new

location above the natural surface of the ground or on top of the stripped surface and shall include the conditions resulting therefrom. The difference in elevation between a point on the original ground and a designated point of higher elevation on the final grade.

FIRE FLOW: The delivery rates and pressure of water that should be maintained to adequately halt and reverse the spread of fire.

FISH LADDER: A structural device used by migrating fish (i.e., salmon, steelhead trout) enabling them to move upstream to spawn.

FLOOD PLAIN: A lowland or relatively flat area adjoining inland or coastal waters that is subject to flooding.

FLOOD PLAIN, 100-YEAR: The area subject to flooding in a major storm which has the potential for occurring once during a 100-year period.

FLOODWAY: A channel for diverting floodwaters.

FLORAL: Pertaining to flowers.

FLOWS: Movements of water, mud or other materials and objects.

FRANCISCAN FORMATION: A geologic formation composed of sandstone, shale and other various materials, forming the base for all of the City of Pismo Beach.

GEOMORPHOLOGY: That branch of both physiography and geology which deals with the form of the earth, the general configuration of its surface, and the changes that take place in the evolution of landforms.

GOAL: The ultimate purpose of an effort stated in a way that is general in nature and immeasurable. Example: "To enhance the open space amenities of the community."

GROIN: A shore protection structure built (usually perpendicular to the shoreline) to trap littoral drift or retard erosion of the shore.

GROUNDWATER: Subsurface water in the zone of saturation.

GROUNDWATER BASIN: Subsurface water reservoir.

gpcd: Gallons per capita per day.

HABITAT: The natural environment of a plant or animal.

HECTARE (ha): Metric unit of measurement. Equals 2.47 square miles.

HERTZ (hz): A unit of frequency equal to one cycle per second.

HILLSIDE: The steeper part of a hill between its summit and the drainage line, valley flat or depression floor at the base of the hill.

HOLDING CAPACITY: See storage capacity.

HYDROLOGIC: Relating to hydrology.

HYDROLOGY: A science dealing with the properties, distribution and circulation of water on the earth's surface.

IMPLEMENTING ACTIONS: The ordinances, regulations, or programs which implement the provisions of the certified local coastal program.

IMPLEMENTATION PROGRAM: A coordinated set of measures to carry out the policies of the general plan. Example: Open space action program for implementing open space policies.

IMPERVIOUS: Materials which do not allow for the passage of water.

INCORPORATED TERRITORY: Land within the City limits.

INDICATOR SPECIES: Vegetation types which are characteristic of a certain biotic community.

INFILL: Development of vacant areas within existing developed areas of the City.

INFILTRATION RATE: The speed at which water enters the soil.

IN-LIEU FEES: Cash payments required as a substitute for a dedication and/or improvement of land by an owner or developer.

IN-MIGRATION: The movement of people from one country, place or locality into another.

INSULATING BARRIER: Walls, structures or landscaping primarily constructed to block noise.

INUNDATION: An area which is flooded.

INTERNMENT: To be detained or confined.

INTERSTITIAL: The small space or crevice between things.

INTERTIDAL: The region between the extremes of high and low tide.

KW (h): Kilowatt (per hour).

LANDSLIDE: A general term for the falling of a mass of soil or

rocks.

LAND USE PLAN: The relevant portions of a local government's general plan, or local coastal element which are sufficiently detailed to indicate the kinds, location, and intensity of land uses, the applicable resource protection and where necessary, a listing of implementing actions.

Ldn: Day-night noise level, a function of average day-time and night-time noise levels (in decibels) with 10 decibels added to the night-time levels as a penalty for increased impact.

LEACHING: A process in the soil in which water moving downward carries and removes the minerals.

LEAST-COST HOUSING: The lowest amount required for construction of a house without federal aid.

LITTORAL ZONE: An indefinite zone extending seaward from the shoreline to just beyond the wave- breaking zone.

LIQUEFACTION: A process by which water-saturated granular soils are transformed from a solid to a liquid state because of a sudden shock or strain.

LOCAL COASTAL ELEMENT: That portion of a general plan applicable to the coastal zone which may be prepared by local government pursuant to this division, or such additional elements of the local government's general plan.

LOCAL COASTAL PROGRAM: A local government's land use plans, zoning ordinances, zoning district maps, and implementing actions which, when taken together, meet the requirements of, and implement the provisions and policies of, the California Coastal Act of 1976.

LOCAL GOVERNMENT: Any chartered or general law city, chartered or general law county, or any city and county.

LONGSHORE: Parallel to and near the shoreline.

MARSH: An area of soft, wet, or periodically inundated land, generally treeless and usually characterized by grasses and other low growth.

MARSH, SALT: A marsh periodically flooded by salt water.

METER (m): Metric unit of measurement equals 39.37 inches.

mbbls: Million barrels

mgd: Million gallons per day;

MITIGATION: The substantial reduction, but not necessarily elimination, of an impact.

MONTEREY FORMATION: A geologic formation consisting of cherty shale, dolomitic siltstone, and tuffaceous siltstone.

MORPHOLOGY: The biological study of the form and structure of organisms.

MULTIPLE VALUE CONCEPT: The importance of a resource based on several reasons rather than one. For example, the protection of open space may be important on an aesthetic as well as recreational basis.

NA: "No available information".

NET-MIGRATION: The sum of in-migration and out-migration.

NATURAL INCREASE: Population increase based strictly on births and deaths, excluding migration.

NOISE EMISSION STANDARDS: Regulations set by the Environmental Protection Agency governing maximum noise limits.

OBISPO FORMATION: A geologic formation consisting of fine-to-coarse grained tuff.

OPALINE: Resembling opal (a mineral).

OPEN COASTAL WATERS or COASTAL WATERS: Refers to the open ocean overlying the continental shelf and its associated coastline. Salinities exceed 30 parts per thousand with little or no dilution except opposite mouths of estuaries.

OPEN SPACE: That part of the countryside which has not been developed and which is desirable for preservation in its natural state for ecological, historical or recreational purposes, or in its cultivated state to preserve agricultural forest or urban greenbelt areas.

ORGANIC: Derived from living organisms.

OUTFALL: Sewage, storm runoff, or cooling water discharged through a structure extending into a body of water.

OUT-MIGRATION: The movement of people out of a specified area.

OVERDRAFT: An amount of groundwater extraction in excess of water recharge.

OVERLAY ZONING: Establishes development standards in areas of special concern (i.e., fault zones, historic districts, flood plains, and hillsides) over and above the standards applicable to basic land uses (i.e., commercial, residential, industrial).

PACIFIC FLYWAY: The routes used by migratory birds along the Pacific Coast.

PALEONTOLOGY: A science dealing with the life of past geological periods as known from fossil remains.

PASO ROBLES FORMATION: Loosely consolidated gravel and well-rounded cobbles of Monterey chert and Franciscan lithologies.

PELAGIC: Living in the open ocean.

PERCENTAGE SLOPE: A calculation derived from measuring the change in elevation on a site. Percentage slope equals the amount of elevation rise or fall, divided by the distance of land used to measure the change in elevation. For example:

$$\frac{\text{4 foot elevation change}}{\text{100 foot lot length}} = \frac{4}{100} = 4\% \text{ Slope}$$

PERMEABILITY: Capacity for transmitting a fluid. It is measured by the rate at which a fluid of standard viscosity can move through material in a given interval of time under a given hydraulic gradient.

PERMIT: Any license, certificate, approval, or other entitlement for use granted or denied by any public agency.

PERMIT CONDITIONING: Specific conditions placed upon an approved permit.

PERRENNIAL PLANT: A plant that normally lives for three or more years.

PERCOLATION: The process by which water flows through the interstices of a sediment.

PERSON: Any individual, organization, partnership, or other business association or corporation, including any utility and any federal, state, local government, or special district or an agency thereof.

PHOTIC ZONE: The upper water layer down to the depth of effective light penetration where photosynthesis balances respiration.

PHYSIOGRAPHY: A description of nature or natural phenomena.

PLANNED UNIT DEVELOPMENT (Planned Development):

Residential: A residential development with clustered residential uses with common open space, ranging from a cluster of detached residences on a few acres to large developments of 100 to 1000 acres.

A simple planned unit development contains a number of homes of the same type combined with common open space. A complex form may include a variety of housing types--detached single family houses, townhouses, garden apartments and high-rise apartments--along with open space and common areas containing recreational and community facilities such as a swimming pool, a school, a community center or a variety of other accessory uses.

Non-residential: Planned unit developments are frequently referred to as PUD's. Planned industrial parks, shopping centers, office building parks or any development that comprises groups of buildings planned and built in prearranged relationships to each other and to the common facilities or properties may be considered planned unit developments.

PRESCRIPTIVE RIGHTS: Rights founded on or acquired by longstanding custom or use.

POLICY: A specific statement guiding action and implying clear commitment. Example: "Recreational uses in wildlife refuges and nature preserves shall be limited to those activities which are compatible with maintaining the environment with a minimum of disruption, such as hiking or horseback riding."

PORT GOVERNING BODY: The Board of Harbor Commissioners or Board of Port Commissioners.

PRIME AGRICULTURAL LAND: Those lands defined in Section 51201 of the Government Code; see Chapter VIII.B. "Coastal Policies".

PUBLIC WORKS: All production, storage, transmission, and recovery facilities for water, sewerage, telephone, and other similar utilities owned or operated by any public agency or by any utility subject to the jurisdiction of the Public Utilities Commission except for energy facilities. Also, all public transportation facilities, including streets, roads, highways, public parking lots and structures, ports, harbors, airports, railroads, and mass transit facilities and stations, bridges, trolley wires, and other related facilities; all publicly financed recreational facilities and any development by a special district; all community college facilities.

RARE: Uncommon.

RECONNAISSANCE: A preliminary survey of a region.

RECREATION, ACTIVE: Swimming, boating, tennis, hiking, riding, golf, ball-playing, diving, bowling, etc. Generally includes campgrounds, parking lots, and other support facilities, though these may not require the same location as the principal recreational use.

RECREATION, PASSIVE: Picnicking, sunbathing, fishing, birdwatching, windowshopping, etc. Generally does not require support facilities.

RESOURCE PROTECTION ZONE: A buffer area located near publicly owned and operated areas in the coastal zone and designated by the Coastal Commission.

REVETMENT: Facing of stone or other material, either permanent or temporary, placed along the perimeter of a stream to stabilize the bank and to protect it from the erosive action of the stream.

RIGHT-OF-WAY: The right of passage over the property of another. More commonly right-of-way refers to the land on which a road or railroad is located.

RIPARIAN HABITAT: An area of riparian vegetation. This vegetation is an association of plant species which grow adjacent to freshwater watercourses, including perennial and intermittent streams, lakes, and other bodies of fresh water.

RISK: The degree of probability of loss or injury.

RUNOFF: The surface water flow or rate of flow over a given watershed after a fall of rain or snow melt.

SALT SINK: A saltmarsh formed by the deposition of sediments in runoff.

SCENIC CORRIDOR: The visible area outside the road's right-of-way, generally described as "the view from the road."

SEA: The Pacific Ocean and all harbors, bays, channels, estuaries, salt marshes, sloughs, and other areas subject to tidal action through any connection with the Pacific Ocean, excluding non-estuarine rivers, streams, tributaries, creeks, and flood control and drainage channels.

SEDIMENT: Solid material, both mineral and organic, that is in suspension, is being transported, or has been moved from its site of origin by air, water, gravity, or ice and has come to rest on the earth's surface either above or below sea level.

SEDIMENTATION: The process by which mineral or organic matter is removed from its site or origin, transported and deposited by water, wind, or gravity.

SEEPAGE: A movement of fluid through a porous matarial.

SEICHES: Earthquake-induced waves in lakes, reservoirs, and harbors.

SEISMIC: Relating to seismology:

SEISMOLOGY: The study of earthquakes.

SELF-HELP PROGRAM: Assistance provided to low and moderate income families, in the form of both money and technical assistance, for the construction of their own residence.

SEMI-PUBLIC LAND USE: Privately owned land or buildings open to general public use.

SENSITIVE RESOURCE COASTAL AREAS: Those identifiable and geographically bounded land and water areas within the coastal zone of vital interest and sensitivity. Includes the following:

a. Special marine and land habitat areas, wetlands, lagoons, and estuaries as mapped and designated in Part 4 of the coastal plan.

b. Areas possessing significant recreational value.

c. Highly scenic areas.

d. Archaeological sites referenced in the California Coastline and Recreation Plan or as designated by the State Historic Preservation Officer.

e. Special communities or neighborhoods which are significant visitor destination areas.

f. Areas that provide existing coastal housing or recreational opportunities for low and moderate income persons.

g. Areas where division of land could substantially impair or restrict coastal access.

SETTLEMENT: To become compact by sinking.

SHALE: Fine-grained, sedimentary rock, derived from the compaction of clay, silt, or mud, characterized by its tendency to break into thin layers.

SHALL: Implies mandatory action.

SHEET FLOW: Water, usually storm runoff, flowing in a thin layer over the ground surface.

SHOULD: Implies less than mandatory action.

SILTATION: To become obstructed by silt.

SILTSTONE: Sedimentary rock derived from the compaction of dust-sized particles (silt). Similar to shale.

SLOPE: An inclined ground surface, the inclination of which is expressed as a ratio of horizontal distance to vertical distance. The face of an embankment or cut section.

SLUMP: A form of landslide in which a single, large block of earth moves downward on a hillside.

SPECIAL DISTRICT: Any public agency, other than a local government, formed pursuant to general law or special act for the local performance of governmental or proprietary functions within limited boundaries. "Special district" includes but is not limited to, a county service area, a maintenance district or area, an improvement district or zone, or any other zone or area, formed for the purpose of designating an area within which a property tax rate will be levied to pay for a service or improvement benefitting the area.

SPECIAL TREATMENT AREA: An identifiable and geographically bounded forested area within the coastal zone that constitutes a significant habitat area of special scenic significance, and any land where logging activities could adversely affect public recreation or the biological productivity of any wetland, estuary, or stream which is especially valuable because of its role in a coastal ecosystem.

SPHERE-OF-INFLUENCE: A plan for the probable ultimate physical boundaries and service area of a local agency. Area not controlled by the City, but considered to have a significant effect on City character.

STATE UNIVERSITY OR COLLEGE: The University of California and California State University and Colleges.

STORAGE CAPACITY: The maximum ability to accomodate, hold or store.

STREAM or RIVER: A natural watercourse as shown by a solid line or dash and three dots on the United States Geological Survey map most recently published, or any well-defined channel with distinguishable bed and bank that shows evidence of having contained flowing water as indicated by scour or deposit of rock, sand, gravel, soil or debris.

STRUCTURE: Any building, road, pipe, flume, conduit, siphon, aqueduct, telephone line, and electrical power transmission and distribution line.

SUBSIDENCE: The gradual, local settling or sinking of the earth's surface with little or no horizontal motion.

SUBTIDAL: The area of the marine environment which is continuously submerged.

SURGE CHANNELS: An erosional feature of the shoreline which is formed by the eroding away of soft cliff sediments forming a narrow channel into the cliff.

SWALE: A low-lying stretch of land which gathers or carries surface water runoff.

TDS: Total dissolved solids.

TERRACE, MARINE: An uplifted wave cut platform.

TERRESTRIAL: Of or relating to land.

TERTIARY: The Tertiary period of geologic history.

TIDES, MINUS: Tides which are below the mean tide line exposing shoreline which is normally covered.

TRANSPIRE: The loss of water vapor from a plant.

TSUNAMI: A long-period wave caused by an underwater disturbance such as a volcanic eruption or earthquake. Commonly miscalled "tidal wave."

TUFF: Consolidated volcanic ash.

TUFFACEOUS: Consisting of tuff.

ULTRASONIC: Having a frequency above the audible range for humans.

ULTRASOUND: Vibrations of the same physical nature as sound but with frequencies above the range of human hearing.

URBAN SERVICES LINE: The area, identified through official public policy, within which urban development will be allowed during a specified time period. Beyond this line, development is prohibited or strongly discouraged.

VACANCY RATE: The ratio between the number of vacant units in a designated area and the total number of existing units within that area.

VEGETAL: Plant growth.

VIEWSHED: An area bounded by topographic limits considered as common horizons and as scenic resources and settlements, acknowledged as of important to the community.

WASTE WATER RECLAMATION: The re-use of water after processing by a sewage treatment plant.

WATERCOURSE: A permanent stream, intermittent stream, river, brook, creek, channel or ditch for water, whether natural or man-made.

WATERSHED: The total area above a given point on a stream that contributes water; its flow; the entire region drained by a waterway or which drains into a lake or reservoir.

WETLANDS: Lands within the coastal zone which may be covered periodically or permanently with shallow water and including saltwater marshes, freshwater marshes, open or closed brackish water marshes, swamps, mudflats and fens.

WILL: Implies mandatory action.

ZONES, MARINE: Consists of the open ocean overlying the continental shelf and its associated coastline.

ZONING ORDINANCE: An ordinance authorized by Section 65850 of the Government Code.

APPENDIX B

F CALIFORNIA
a Coastal Commission
CE RAL COAST REGIONAL COMMISSION
ST V. AGE CIRCLE, SUITE 36
ARBARA, CALIFORNIA 93108
5828

EDMUND G. BROWN JR., *Governor*

September 12, 1978

TO: INTERESTED PARTIES

FROM: CARL C. HETRICK, EXECUTIVE DIRECTOR

RE: CITY OF MORRO BAY ISSUE IDENTIFICATION AND PHASE II WORK PROGRAM FOR THE LOCAL COASTAL PROGRAM

Attached is a copy of the preliminary joint staff analysis and recommendation prepared by the Regional and State staff for the City of Morro Bay Issue Identification and Phase II Work Program. A public hearing before the South Central Coast Regional Commission will be held on September 22, 1978 beginning at 9:00 a.m. in the San Luis Obispo County Board of Supervisors Hearing Room, 1035 Palm Street, San Luis Obispo, California. A second public hearing, with possible action on the documents, is tentatively scheduled before the South Central Coast Regional Commission for October 13, 1978.

Any person interested in this matter may attend the public hearings and present testimony or may submit letters to the South Central Coast Regional Commission on or before the hearing date at the Regional Commission office. For further information contact Mark Capelli in the Regional Commission office.

CCH/MC/cm

CITY OF MORRO BAY LOCAL COASTAL PROGRAM
ISSUE IDENTIFICATION AND PHASE II WORK PROGRAM

Introduction

The City of Morro Bay is seeking Regional Coastal Commission approval for its Issue Identification doucment and the Phase II Work Program for the preparation of the Land Use Phase of the Local Coastal Program. Additionally the City of Morro Bay is requesting approval of a grant application for $39,984.25 to complete Phase II of the Local Coastal Program.

The Regional and State Commission staffs reviewed and commented upon the Issue Identification and Phase II Work Program drafts prior to their formal submittal to the City of Morro Bay for adoption. The Issue Identification, Phase II Work Program, and funding request were approved by the Morro Bay City Council on August 28, 1978.

On September 5, 1978, the State Coastal Commission approved an interim funding request from the City of Morro Bay for $5,252 to fund three months of work covering the tasks in Subcategory 106: Environmentally Sensitive Habitat Areas/Water and Marine Resources.

A. Preliminary Staff Recommendation

1. General Fundings and Declarations

The preliminary staff recommendation is that the Regional Commission recommend to the State Coastal Commission (a) approval of the proposed Issue Identification and Phase II Work Program, as conditioned; and (b) that the proposed Issue Identification Phase II Work Program, as conditioned, meets the following requirements of Section 00023(d) of the LCP regulations:

(1) Policies of Chapter 3 of the 1976 Coastal Act are adequately addressed, including uses of more-than-local importance and potential cumulative impacts or conflicts with other jurisdictions; (2) the costs of undertaking such tasks are reasonably related to the amount of work needed to resolve coastal planning issues; (3) tasks to be contracted for under such grants are not already required under other statutes or more appropriately undertaken by other agencies; and (4) the work program includes programs for involving the public and other agencies which are responsive and innovative. The public and agency participation programs are in compliance with Coastal Act policies and with the requirements of the funding authority.

2. Conditions

No special conditions have developed at this time. Based upon public testimony, and Regional Commission direction, conditions may be incorporated into the final staff recommendation.

B. Staff Summary

1. General Area Description

The City of Morro Bay is located along the central California

Coast between the unincorporated areas of Cayucos and Baywood Park/ Los Osos in the northern half of the County of San Luis Obispo. Highway #1 links the City of Morro Bay, with the City of San Luis Obsipo, and divides the City along its north/south axis. It is approximately six (6) square miles in size including a large portion of the Morro Bay lagoon and Morro Bay State Park and Atascadero Beach State Park. The current population is approximately 8830.

Almost the entire City of Morro Bay is included within the coastal zone (see Map #1). The City has been divided into seven (7) major areas for planning purposes. (see map #2).

2. Issue Identification Summary

a. Recreation and Visitor Serving Facilities/Coastal Access

Morro Bay provides a large number of important visitor serving and recreational facilities, and is a popular visitor destination point along the central coast. Most of these facilities are concentrated along the bayfront area know as the Embarcadero which abuts a commercial fishing and recreational boating harbor.

Two state parks lay within the city boundaries; Morro Bay State Park to the south provides both day use and overnight camping facilities as well as direct access to Morro Bay Estuary. Atascadero State Beach to the north provides day use and overnight facilities as well as direct access to the ocean.

An analysis will be made of existing public and private recreational facilities to determine type, (including lower cost facilities), capacity, level of use, and condition. The data developed will be used to determine land use policies and designations which will insure the protection of existing visitor serving facilities and the maximum provision of future facilities consistent with the development and resource protection policies of the Coastal Act. Additionally, an analysis will be made of existing public and private accessways to determine existing levels and types of use. This analysis will be used to establish land use policies and designations which will insure maximum public access to the coastline consistent with public safety, resource protection and other restraints set forth in the Coastal Act.

b. Housing

Morro Bay presently provides significant low and moderate income housing opportunities. However, existing low and moderate income housing stock (which is generally older and less bulky than higher cost housing) is in the process of being recycled with higher cost housing, usually at increased density.

c. Environmentally Sensitive Habitat Areas/Water and Marine Resources

Morro Bay encompasses a number of important environmentally sensitive habitat areas: these include the Morro Bay Estuary, Morro Rock surrounding wetland complex, Morro and Chorro Creeks,

upland foothill areas, the Morro Bay sand spit and dune complex, and the Eucalyptus groves along the southeast border of Morro Bay. All of these habitats provide valuable feeding, nesting, and breeding sites for a wide variety of fish and wildlife. Their continued biological productivity, however, is dependent upon careful management, and in some cases, restrictions on development of the habitats and the immediately adjacent and upland areas. Specifically, the introduction of silt into the Morro Bay Estuary through agricultural and urban developments in the Morro Bay Watershed will be a major area of concern. Allowable land uses adjacent to sensitive environmental habitat areas, and the introduction of pollutants from boating and related activities will also be a major consideration in the development of land use policies and designations for Morro Bay.

d. Diking, Dredging, Filling, and Shoreline Protective Works

Moro Bay Estuary contains recreational boating and commercial fishing facilities and is an important harbor of refuge along the Central Coast. To support these functions and activities, it has been and will continue to be necessary to periodically dredge existing navigation channels and mooring areas. Additionally, the harbor facilities include significant bulkheads and other shoreline protective works, while the harbor entrance itself has been created through the construction of two land-linked jetties. There is also a potential for diking or dredging in the wetland areas surrounding the Morro Bay area. These dredging operations and shoreline protective works can impact marine and other resources if not carefully controlled and designed.

e. Commercial Fishing and Recreational Boating

As noted, the Morro Bay Estuary contains important recreational boating and commercial fishing activities, and is an important harbor of refuge along the central coast. In addition, there is a man-made small boat marina within the boundaries of the Morro Bay State Park. The boating facilities and related activities are an important industrial component in the economy of Morro Bay. These features also contribute to the picturesque character of Morro Bay and are an important factor in the tourist appeal of the City. There are indications that the current boating and related support facilities (including fish processing facilities) may not be adequate to serve existing and future demands. Additionally, there is competition between recreational boating and commercial facilities, and between these facilities and other uses (such as restaurants) for the limited water frontage along the northeastern shore of Morro Bay. The priority of commercial fishing facilities established in the Coastal Act must be reflected in local land use policies and designations. The impact on water quality in the Bay from intensified development of all types along the bayfront is another area of major concern.

f. Agriculture

The major portion of the City of Morro Bay is developed with urban uses, or is in uncultivated open space. There are, however, some cultivated prime and non-prime agricultural lands in the Morro and

Chorro Valleys which lay within the City's current coundaries; the foothills in the eastern portion of the City also support limited cattle grazing operations. Additionally, the City's sphere of influence and general planning area encompass substantial prime and non-prime agricultural lands within the Morro and Chorro Valleys. Present planning for these agricultural lands includes urban uses which would conflict with the continued and potential agricultural productivity of these lands.

g. Hazards

Morro Bay is bounded by low coastal foothills, some of which have been developed with residential structures, and others which have been or may be proposed for future development. Portions of these foothills are geologically unstable and prone to land slides. The City is also bisected by two creeks, Morro and Chorro Creeks, which have a potential for flooding. Additionally, the harbor and adjacent development are subject to damage from a significant tsunami. The foothills and the Pacific Gas and Electric Company's power generating station pose the most significant fire hazards.

h. Public Works

The City's water and sewage systems are limited and are presently being utilized close to their maximum capacity. The safe-yield of the shallow groundwater basins has in recent years been exceeded by annual withdrawals and is inadequate to supply the potential buildout of all existing parcels within the city limits. Increased annual withdrawals from the basins could adversely effect groundwater quality, fish and wildlife resources, and agricultural operations. These potential impacts will be analysed as part of a special Morro Bay Watershed Study being conducted as part of the San Luis Obispo County Local Coastal Program. The impacts of achieving proposed water importation schemes must also be evaluated. The City's existing sewage treatment plant is presently not capable of meeting Regional Water Quality Control Board waste discharge standards, and is rapidly reaching its design capacity which is below the sewage demands which would be generated by the potential buildout of all existing parcels. The City has applied for a Coastal Development Permit to extend the existing ocean outfall line, upgrade the treatment capacity of the plant, increase its design capacity, and develop a partial reclamation scheme. This application has been withdrawn from active consideration pending an analysis of an alternative reclamation scheme. Consideration of the sewage treatment plant applications must be integrated with the preparation of the Local Coastal Plan. Where limited public services are identified, allocations must be established to insure adequate services to priority uses, and protection of natural resources.

Transportation and parking facilities serving coastal recreational and visitor serving areas such as the Embarcadero are often congested during peak load periods. Provision of adequate circulation facilities will be, therefore, a major concern.

i. Locating and Planning New Development

Much of the area within Morro Bay's existing boundaries is already developed with residential and commercial structures. There is however, potential for new development in the foothill areas and in Morro and Chorro Valleys, and along a stretch of beach front property adjacent to Atascadero State in the central section of the city, there are also a significant number of vacant parcels which under present zoning could accommodate high density development that would be out of character with the existing older structures. There is also a strong likelihood that many of the older residential structures throughout the city could be replaced with larger units. Presently the City has no specific land use controls which insure that new or rehabilitated structures conform to the development priorities and resource protection policies of the California Coastal Act. Additionally, the City will need to coordinate planned new development with the capacities of present and planned public works facilities. Archaeological and palentological resources are not presently protected under current local land use controls, and mitigation standards must therefore be incorporated into present development review procedures.

j. Coastal Visual Resources and Special Communities

Morro Bay contains significant coastal visual resources including Morro Rock, Morro Bay Estuary, and the surrounding foothills. Additionally, developed portions of Morro Bay, particularly the harbor facilities along the Embarcadero and the older small scale residential neighborhoods constitute significant scenic aspects of the City. Public view of these scenic resources must be protected from inappropriately designed development. Also, the inherent scenic qualities of existing developed areas must be protected and where possible restored through the establishment of design standards.

k. Industrial Development and Energy Facilities

Morro Bay is the site of a major electrical energy generating facility. This facility is located at the north end of the Embarcadero and visually dominates the surrounding harbor and downtown tourist commercial area. Other facilities related to the electrical generating plant include a large oil storage tank farm and an off-shore oil loading system. The Texaco bulk plant and marine terminal have recently been demolished. With the exception of the Navy jet fuel storage tanks in the foothills and some miscellaneous light industrial business such as sheet metal shops in the northwestern section of the City, the only other significant industrial land uses within the City are related to the commercial fishing and recreational boating activities. The potential expansion of the existing energy development facilities and the provision of adequate coastal dependent and coastal related industrial development (particularly, commercial fishing operations) will be major issues to be addressed.

MC/cm

ESTIMATED STAFF TIME REQUIREMENTS AND COSTS

SUBCATEGORY	STAFF TIME	COSTS
101 Program Administration	1.750	$ 2,453.50
102 Coordination	1.000	1,402.00
103 Public Participation	1.750	2,453.50
104 Recreation and Visitor-Serving Facilities/Access	2.500	3,505.00
105 Housing	.750	1,051.50
106 Environmentally Sensitive Habitat Areas/Water and Marine Resources	2.500	3,505.00
107 Diking, Dredging, Filling and Shoreline Protective Works	.750	1,051.50
3 Commercial Fishing and Recreational Boating	1.500	2,103.00
109 Agriculture	1.000	1,402.00
110 Hazard Areas	.250	350.50
111 Public Works	1.000	1,402.00
112 Locating and Planning New Development	1.500	2,103.00
113 Coastal Visual Resources and Special Communities	.375	525.75
114 Industrial Development and Energy Facilities	.750	1,051.50
115 Preparation and Certification of the Land Use Plan	3.500	4,907.00
116 Mapping	2.500	3,505.00
117 Preparation of the Phase III Work Program	.250	350.50
TOTAL Months:	23.625	$33,122.25

RELATIVE STAFFING TIME AND COSTS

FESSIONAL TIME:

ff Person	Percentage of Professional Staff Month	Monthly Salary Incl. Benefits	Actual Costs Per Professional Staff Month
artment Heads	5%	$2,131/month	$ 107
stal Planner	70%	$1,550/month	$1,085
nning Aide	25%	$ 840/month	$ 210
			$1,402 x 23 = $32,246

RICAL TIME:

months (15% of 23 professional months) at $1,092/month = $3,822

ESTIMATED TOTAL COSTS - PHASE II

Professional Staff*

Coastal Planner	$25,633.125	
Department Heads	2,527.875	
Planning Aide	4,961.250	
	$33,122.250	$33,122.25
Clerical Staff*	$ 3,822.000	$36,944.25

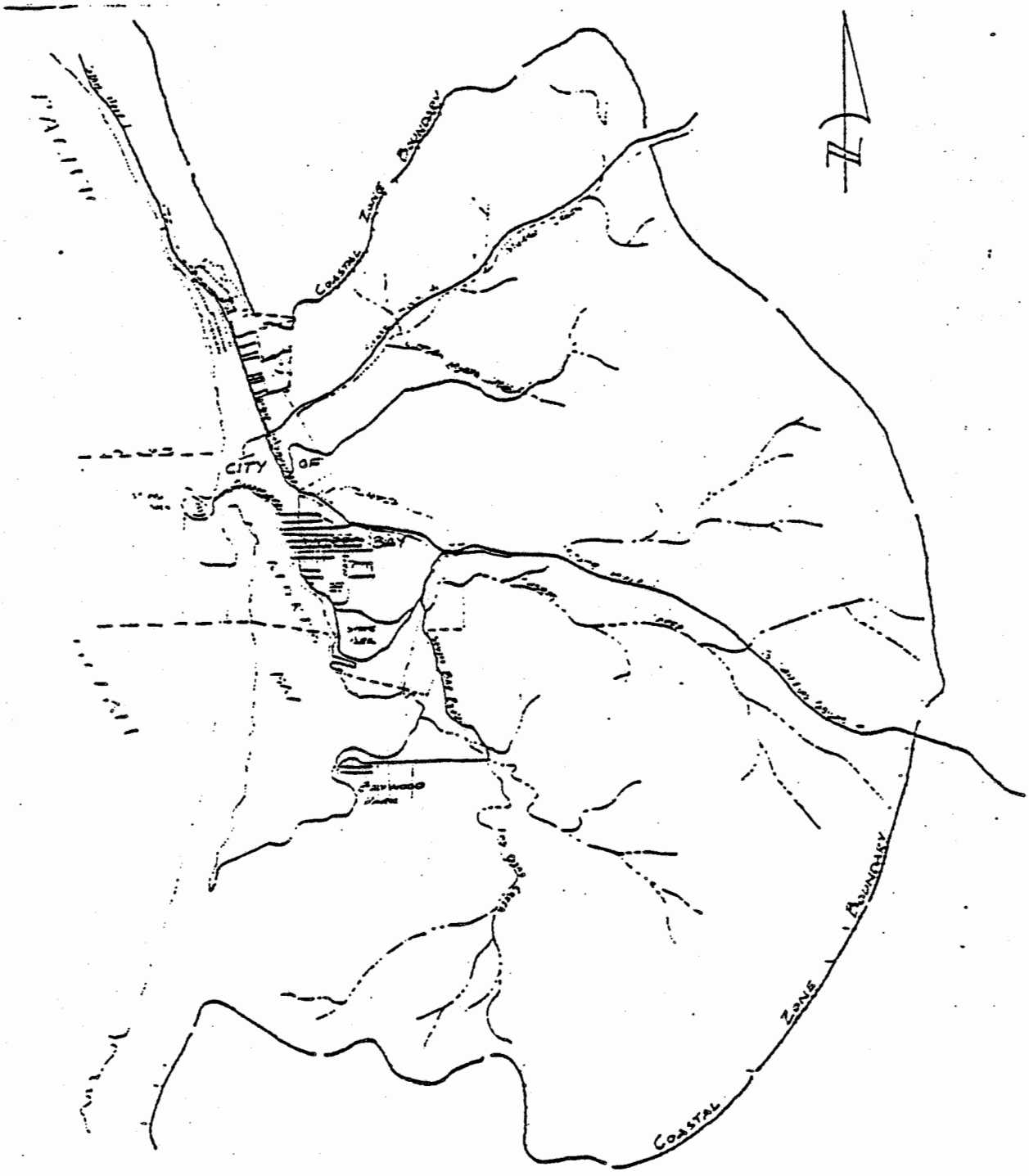
Operating Expenses

Xerox	$ 160.000	
Telephone	480.000	
Travel	500.000	
Postage	250.000	
Notices	350.000	
Materials	250.000	
Printing	1,050.000	
	$ 3,040.000	$39,984.25

TOTAL PHASE II FUNDING REQUEST $39,984.25

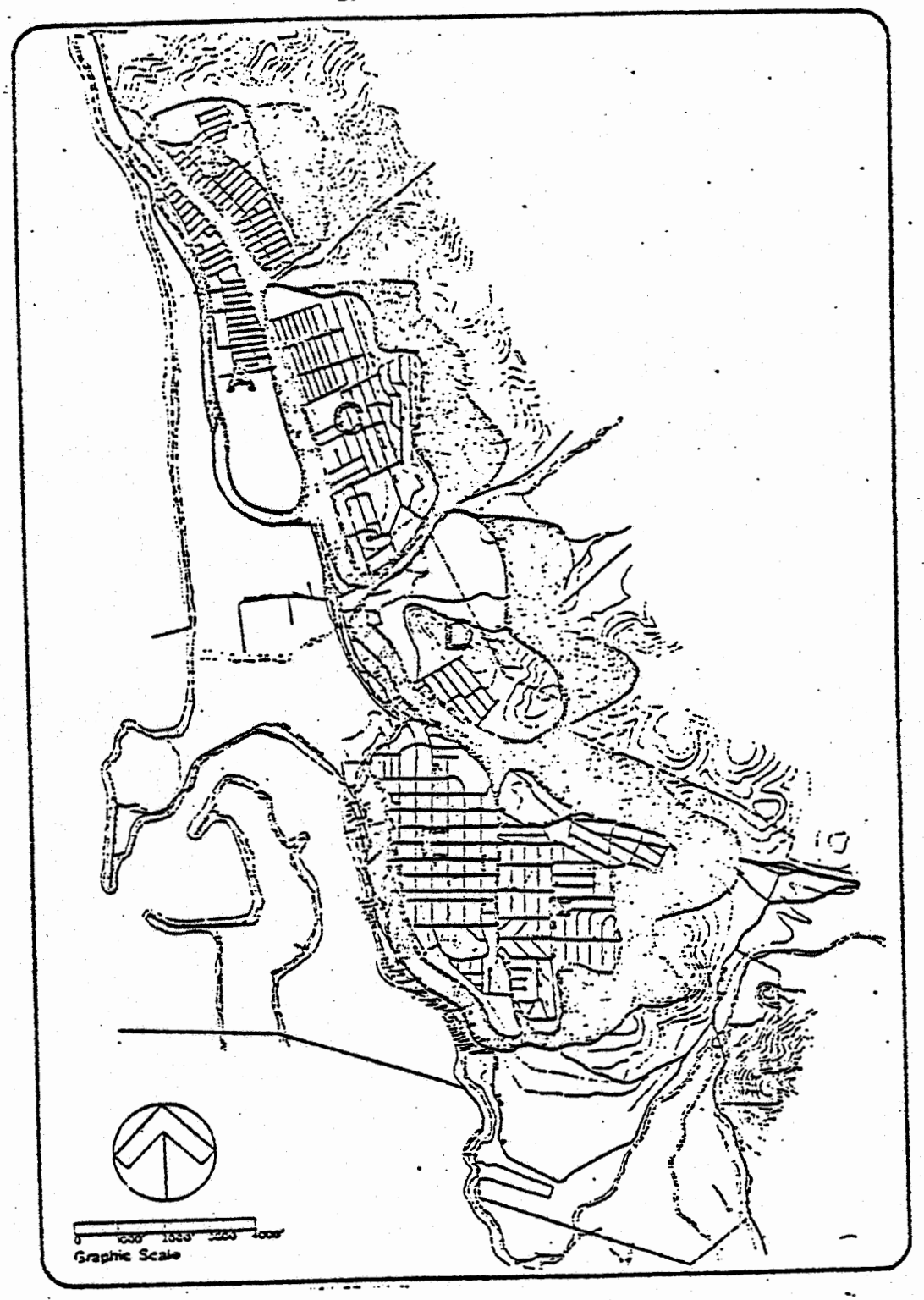
* Includes all benefits.

work Program 5,665.00
#45649.25



Coastal Zone Boundary

Map #1



COASTAL STUDY AREAS

MAP # 2

CHAPTER 3

COASTAL RESOURCES PLANNING AND MANAGEMENT POLICIES

ARTICLE 1

GENERAL

ARTICLE 1

GENERAL

Section 30200.

Consistent with the basic goals set forth in Section 30001.5, and except as may be otherwise specifically provided in this division, the policies of this chapter shall constitute the standards by which the adequacy of local coastal programs, as provided in Chapter 6 (commencing with Section 30500), and, the permissibility of proposed developments subject to the provisions of this division are determined. All public agencies carrying out or supporting activities outside the coastal zone that could have a direct impact on resources within the coastal zone shall consider the effect of such actions on coastal zone resources in order to assure that these policies are achieved.

ARTICLE 2

PUBLIC ACCESS

Section 30210.

In carrying out the requirement of Section 4 of Article X of the California Constitution, maximum access, which shall be conspicuously posted, and recreational opportunities shall be provided for all the people consistent with public safety needs and the need to protect public rights, rights of private property owners, and natural resource areas from overuse.

(Amended by Ch. 1075, Stats. 1978.)

Section 30211.

Development shall not interfere with the public's right of access to the sea where acquired through use or legislative authorization, including, but not limited to, the use of dry sand and rocky coastal beaches to the first line of terrestrial vegetation.

Section 30212.

(a) Public access from the nearest public roadway to the shoreline and along the coast shall be provided in new development projects except where (1) it is inconsistent with public safety, military security needs, or the

protection of fragile coastal resources, (2) adequate access exists nearby, or (3) agriculture would be adversely affected. Dedicated accessway shall not be required to be opened to public use until a public agency or private association agrees to accept responsibility for maintenance and liability of the accessway.

(b) For purposes of this section, "new development" does not include:

(1) Replacement of any structure pursuant to the provisions of subdivision (g) of Section 30610.

(2) The demolition and reconstruction of a single-family residence; provided, that the reconstructed residence shall not exceed either the floor area, height or bulk of the former structure by more than 10 percent, and that the reconstructed residence shall be sited in the same location on the affected property as the former structure.

(3) Improvements to any structure which do not change the intensity of its use, which do not increase either the floor area, height, or bulk of the structure by more than 10 percent, which do not block or impede public access, and which do not result in a seaward encroachment by the structure.

(4) Any repair or maintenance activity for which the commission has determined , pursuant to Section 30610, that a coastal development permit will be required unless the regional commission or the commission determines that such activity will have an adverse impact on lateral public access along the beach.

As used in this subdivision "bulk" means total interior cubic volume as measured from the exterior surface of the structure.

(c) Nothing in this division shall restrict public access nor shall it excuse the performance of duties and responsibilities of public agencies which are required by Sections 66478.1 to 66478.14, inclusive, of the Government Code and by Section 4 of Article X of the California Constitution.

(Amended by Ch. 1075, Stats. 1978.)
(Amended by Ch. 919, Stats. 1979.)

Section 30212.5.

Wherever appropriate and feasible, public facilities, including parking areas or facilities, shall be distributed throughout an area so as to mitigate against the impacts, social and otherwise, of overcrowding or overuse by the public of any single area.

Section 30213.

Lower cost visitor and recreational facilities and housing opportunities for persons and families of low or moderate income, as defined by Section 50093 of the Health and Safety Code, shall be protected, encouraged, and, where feasible, provided. Developments providing public recreational opportunities are preferred. New housing in the coastal zone shall be developed in conformity with the standards, policies, and goals of local housing elements adopted in accordance with the requirements of subdivision (c) of Section 65302 of the Government Code.

Neither the commission nor any regional commission shall either: (1) require that overnight room rentals be fixed at an amount certain for any privately owned and operated hotel, motel, or other similar visitor-serving facility located on either public or private lands; or (2) establish or approve any method for the identification of low or moderate income persons for the purpose of determining eligibility for overnight room rentals in any such facilities.

(Amended by Ch. 1191, Stats. 1979.)
(Amended by Ch. 1087, Stats. 1980.)

Section 30214.

(a) The public access policies of this article shall be implemented in a manner that takes into account the need to regulate the time, place, and manner of public access depending on the facts and circumstances in each case including, but not limited to, the following:

(1) Topographic and geologic site characteristics.

(2) The capacity of the site to sustain use and at what level of intensity.

(3) The appropriateness of limiting public access to the right to pass and repass depending on such factors as the fragility of the natural resources in the area and the proximity of the access area to adjacent residential uses.

(4) The need to provide for the management of access areas so as to protect the privacy of adjacent property owners and to protect the aesthetic values of the area by providing for the collection of litter.

It is the intent of the Legislature that the public access policies of this article be carried out in a reasonable manner that considers the equities and that balances the rights of the individual property owner with the public's constitutional right of access pursuant to Section 4 of Article X of the California Constitution. Nothing in this section or any amendment thereto shall be construed as a limitation on the rights guaranteed to the public under Section 4 of Article X of the California Constitution.

(c) In carrying out the public access policies of this article, the commission, regional commissions, and any other responsible public agency shall consider and encourage the utilization of innovative access management techniques, including, but not limited to, agreements with private organizations which would minimize management costs and encourage the use of volunteer programs.

(Added by Ch. 919, Stats. 1979.)

ARTICLE 3

RECREATION

Section 30220.

Coastal areas suited for water-oriented recreational activities that cannot readily be provided at inland water areas shall be protected for such uses.

Section 30221.

Oceanfront land suitable for recreational use shall be protected for recreational use and development unless present and forseeable future demand for public or commercial recreational activities that could be accommodated on the property is already adequately provided for in the area.

(Amended by Ch. 380, Stats. 1978.)

Section 30222.

The use of private lands suitable for visitor-serving commercial recreational facilities designed to enhance public opportunities for coastal recreation shall have priority over private residential, general industrial, or general commercial development, but not over agriculture or coastal-dependent industry.

Section 30223.

Upland areas necessary to support coastal recreational uses shall be reserved for such uses, where feasible.

Section 30224.

Increased recreational boating use of coastal waters shall be encouraged, in accordance with this division, by developing dry storage areas, increasing public launching facilities, providing additional berthing space in existing harbors, limiting non-water-dependent land uses that congest access corridors and preclude boating support facilities, providing harbors of refuge, and by providing for new boating facilities in natural harbors, new protected water areas, and in areas dredged from dry land.

ARTICLE 4

MARINE ENVIRONMENT

Section 30230.

Marine resources shall be maintained, enhanced, and where feasible, restored. Special protection shall be given to areas and species of special biological or economic significance. Uses of the marine environment shall be carried out in a manner that will sustain the biological productivity of coastal waters and that will maintain healthy populations of all species of marine organisms adequate for long-term commercial, recreational, scientific, and educational purposes.

Section 30231.

The biological productivity and the quality of coastal waters, streams, wetlands, estuaries, and lakes appropriate to maintain optimum populations of marine organisms and for the protection of human health shall be maintained and, where feasible, restored through, among other means, minimizing adverse effects of waste water discharges and entrainment, controlling runoff, preventing depletion of ground water supplies and substantial interference with surface water flow, encouraging waste water reclamation, maintaining natural vegetation buffer areas that protect riparian habitats, and minimizing alteration of natural streams.

Section 30232.

Protection against the spillage of crude oil, gas, petroleum products, or hazardous substances shall be provided in relation to any development or transportation

of such materials. Effective containment and cleanup facilities and procedures shall be provided for accidental spills that do occur.

Section 30233.

(a) The diking, filling, or dredging of open coastal waters, wetlands, estuaries, and lakes shall be permitted in accordance with other applicable provisions of this division, where there is no feasible less environmentally damaging alternative, and where feasible mitigation measures have been provided to minimize adverse environmental effects, and shall be limited to the following:

(1) New or expanded port, energy, and coastal-dependent industrial facilities, including commercial fishing facilities.

(2) Maintaining existing, or restoring previously dredged, depths in existing navigational channels, turning basins, vessel berthing and mooring areas, and boat launching ramps.

(3) In wetland areas only, entrance channels for new or expanded boating facilities; and in a degraded wetland, identified by the Department of Fish and Game pursuant to subdivision (b) of Section 30411, for boating facilities if, in conjunction with such boating facilities, a substantial portion of the degraded wetland is restored and maintained as a biologically productive wetland; provided, however, that in no event shall the size of the wetland area used for such boating facility, including berthing space, turning basins, necessary navigation channels, and any necessary support service facilities, be greater than 25 percent of the total wetland area to be restored.

(4) In open coastal waters, other than wetlands, including streams, estuaries, and lakes, new or expanded boating facilities.

(5) Incidental public service purposes, including but not limited to, burying cables and pipes or inspection of piers and maintenance of existing intake and outfall lines.

(6) Mineral extraction, including sand for restoring beaches, except in environmentally sensitive areas.

(7) Restoration purposes.

(8) Nature study, aquaculture, or similar resource-dependent activities.

(b) Dredging and spoils disposal shall be planned and carried out to avoid significant disruption to marine and wildlife habitats and water circulation. Dredge spoils suitable for beach replenishment should be transported for such purposes to appropriate beaches or into suitable longshore current systems.

(c) In addition to the other provisions of this section, diking, filling, or dredging in existing estuaries and wetlands shall maintain or enhance the functional capacity of the wetland or estuary. Any alteration of coastal wetlands identified by the Department of Fish and Game, including, but not limited to, the 19 coastal wetlands identified in its report entitled, "Acquisition Priorities for the Coastal Wetlands of California", shall be limited to very minor incidental public facilities, restorative measures, nature study, commercial fishing facilities in Bodega Bay, and development in already developed parts of south San Diego Bay, if otherwise in accordance with this division.

For the purposes of this section, "commercial fishing facilities in Bodega Bay" means that no less than 80 percent of all boating facilities proposed to be developed or improved, where such improvement would create additional berths in Bodega Bay, shall be designed and used for commercial fishing activities.

(Amended by Ch. 673, Stats. 1978.)

Section 30234.

Facilities serving the commercial fishing and recreational boating industries shall be protected and, where feasible, upgraded. Existing commercial fishing and recreational boating harbor space shall not be reduced unless the demand for those facilities no longer exists or adequate substitute space has been provided. Proposed recreational boating facilities shall, where feasible, be designed and located in such a fashion as not to interfere with the needs of the commercial fishing industry.

Section 30235.

Revetments, breakwaters, groins, harbor channels, seawalls, cliff retaining walls, and other such construction that alters natural shoreline processes shall be permitted when required to serve coastal-dependent uses or to protect existing structures or public beaches in danger from

e. ... and when designed to eliminate or mitigate adverse impacts on local shoreline sand supply. Existing marine structures causing water stagnation contributing to pollution problems and fishkills should be phased out or upgraded where feasible.

Section 30236.

Channelizations, dams, or other substantial alterations of rivers and streams shall incorporate the best mitigation measures feasible, and be limited to (1) necessary water supply projects, (2) flood control projects where no other method for protecting existing structures in the flood plain is feasible and where such protection is necessary for public safety or to protect existing development, or (3) developments where the primary function is the improvement of fish and wildlife habitat.

ARTICLE 5

LAND RESOURCES

Section 30240.

(a) Environmentally sensitive habitat areas shall be protected against any significant disruption of habitat values, and only uses dependent on such resources shall be allowed within such areas.

(b) Development in areas adjacent to environmentally sensitive habitat areas and parks and recreation areas shall be sited and designed to prevent impacts which would significantly degrade such areas, and shall be compatible with the continuance of such habitat areas.

Section 30241.

The maximum amount of prime agricultural land shall be maintained in agricultural production to assure the protection of the areas' agricultural economy, and conflicts shall be minimized between agricultural and urban land uses through all of the following:

(a) By establishing stable boundaries separating urban and rural areas, including, where necessary, clearly defined buffer areas to minimize conflicts between agricultural and urban land uses.

(b) By limiting conversions of agricultural lands around the periphery of urban areas to the lands w[illegible] the viability of existing agricultural use is alre[illegible] severely limited by conflicts with urban uses and where the conversion of the lands would complete a logical and viable neighborhood and contribute to the establishment of a stable limit to urban development.

(c) By developing available lands not suited for agriculture prior to the conversion of agricultural lands.

(d) By assuring that public service and facility expansions and nonagricultural development do not impair agricultural viability, either through increased assessment costs or degraded air and water quality.

(e) By assuring that all divisions of prime agricultural lands, except those conversions approved pursuant to subdivision (b) of this section, and all development adjacent to prime agricultural lands shall not diminish the productivity of such prime agricultural lands.

Section 30242.

All other lands suitable for agricultural use shall not be converted to nonagricultural uses unless (1) continued or renewed agricultural use is not feasible, or (2) such conversion would preserve prime agricultural land or concentrate development consistent with Section 30250. Any such permitted conversion shall be compatible with continued agricultural use on surrounding lands.

Section 30243.

The long-term productivity of soils and timberlands shall be protected, and conversions of coastal commercial timberlands in units of commercial size to other uses or their division into units of noncommercial size shall be limited to providing for necessary timber processing and related facilities.

Section 30244.

Where development would adversely impact archaeological or paleontological resources as identified by the State Historic Preservation Officer, reasonable mitigation measures shall be required.

ARTICLE 6

DEVELOPMENT

Section 30250.

(a) New residential, commercial, or industrial development, except as otherwise provided in this division, shall be located within, contiguous with, or in close proximity to, existing developed areas able to accommodate it or, where such areas are not able to accommodate it, in other areas with adequate public services and where it will not have significant adverse effects, either individually or cumulatively, on coastal resources. In addition, land divisions, other than leases for agricultural uses, outside existing developed areas shall be permitted only where 50 percent of the usable parcels in the area have been developed and the created parcels would be no smaller than the average size of surrounding parcels.

(b) Where feasible, new hazardous industrial development shall be located away from existing developed areas.

(c) Visitor-serving facilities that cannot feasibly be located in existing developed areas shall be located in existing isolated developments or at selected points of attraction for visitors.

(Amended by Ch. 1090, Stats. 1979.)

Section 30251.

The scenic and visual qualities of coastal areas shall be considered and protected as a resource of public importance. Permitted development shall be sited and designed to protect views to and along the ocean and scenic coastal areas, to minimize the alteration of natural land forms, to be visually compatible with the character of surrounding areas, and, where feasible, to restore and enhance visual quality in visually degraded areas. New development in highly scenic areas such as those designated in the California Coastline Preservation and Recreation Plan prepared by the Department of Parks and Recreation and by local government shall be subordinate to the character of its setting.

Section 30252.

The location and amount of new development should maintain and enhance public access to the coast by (1) facilitating the provision or extension of transit service, (2) providing commercial facilities within or adjoining

minimize the use of [illegible] nonautomobile circulation within the development, (4) providing adequate parking facilities or providing substitute means of serving the development with public transportation, (5) assuring the potential for public transit for high intensity uses such as high-rise office buildings, and by (6) assuring that the recreational needs of new residents will not overload nearby coastal recreation areas by correlating the amount of development with local park acquisition and development plans with the provision of onsite recreational facilities to serve the new development.

Section 30253.

New development shall:

(1) Minimize risks to life and property in areas of high geologic, flood, and fire hazard.

(2) Assure stability and structural integrity, and neither create nor contribute significantly to erosion, geologic instability, or destruction of the site or surrounding area or in any way require the construction of protective devices that would substantially alter natural landforms along bluffs and cliffs.

(3) Be consistent with requirements imposed by an air pollution control district or the State Air Resources Control Board as to each particular development.

(4) Minimize energy consumption and vehicle miles traveled.

(5) Where appropriate, protect special communities and neighborhoods which, because of their unique characteristics, are popular visitor destination points for recreational uses.

Section 30254.

New or expanded public works facilities shall be designed and limited to accommodate needs generated by development or uses permitted consistent with the provisions of this division; provided, however, that it is the intent of the Legislature that State Highway Route 1 in rural areas of the coastal zone remain a scenic two-lane road. Special districts shall not be formed or expanded except where assessment for, and provision of, the service would not induce new development inconsistent with this division.

Where existing or planned public works facilities can accommodate only a limited amount of new development, services to coastal dependent land use, essential public services and basic industries vital to the economic health of the region, state, or nation, public recreation, commercial recreation, and visitor-serving land uses shall not be precluded by other development.

Section 30255.

Coastal-dependent developments shall have priority over other developments on or near the shoreline. Except as provided elsewhere in this division, coastal-dependent developments shall not be sited in a wetland. When appropriate, coastal-related developments should be accommodated within reasonable proximity to the coastal-dependent uses they support.

(Amended by Ch. 1090, Stats. 1979.)

ARTICLE 7

INDUSTRIAL DEVELOPMENT

Section 30260.

Coastal-dependent industrial facilities shall be encouraged to locate or expand within existing sites and shall be permitted reasonable long-term growth where consistent with this division. However, where new or expanded coastal-dependent industrial facilities cannot feasibly be accommodated consistent with other policies of this division, they may nonetheless be permitted in accordance with this section and Sections 30261 and 30262 if (1) alternative locations are infeasible or more environmentally damaging; (2) to do otherwise would adversely affect the public welfare; and (3) adverse environmental effects are mitigated to the maximum extent feasible.

Section 30261.

(a) Multicompany use of existing and new tanker facilities shall be encouraged to the maximum extent feasible and legally permissible, except where to do so would result in increased tanker operations and associated onshore development incompatible with the land use and environmental goals for the area. New tanker terminals outside of existing terminal areas shall be situated as to avoid risk to environmentally sensitive areas and shall use a monobuoy system, unless an alternative type of system can be shown to be environmentally preferable for a specific site. Tanker facilities shall be designed to (1) minimize the total volume of oil spilled, (2) minimize the risk of collision from movement of other vessels, (3) have ready access to the most effective feasible containment and recovery equipment for oilspills, and (4) have onshore deballasting facilities to receive any fouled ballast water from tankers where operationally or legally required.

(b) Because of the unique problems involved in the importation, transportation, and handling of liquefied natural gas, the location of terminal facilities therefore shall be determined solely and exclusively as provided in Chapter 10 (commencing with Section 5550) of Division 2 of the Public Utilities Code and the provisions of this division shall not apply unless expressly provided in such Chapter 10.

(Amended by Ch. 855, Stats. 1977.)

Section 30262.

Oil and gas development shall be permitted in accordance with Section 30260, if the following conditions are met:

(a) The development is performed safely and consistent with the geologic conditions of the well site.

(b) New or expanded facilities related to such development are consolidated, to the maximum extent feasible and legally permissible, unless consolidation will have adverse environmental consequences and will not significantly reduce the number of producing wells, support facilities, or sites required to produce the reservoir economically and with minimal environmental impacts.

(c) Environmentally safe and feasible subsea completions are used when drilling platforms or islands would substantially degrade coastal visual qualities unless use of such structures will result in substantially less environmental risks.

(d) Platforms or islands will not be sited where a substantial hazard to vessel traffic might result from the facility or related operations, determined in consultation with the United States Coast Guard and the Army Corps of Engineers.

(e) Such development will not cause or contribute to subsidence hazards unless it is determined that adequate measures will be undertaken to prevent damage from such subsidence.

(f) With respect to new facilities, all oilfield brines are reinjected into oil-producing zones unless the Division of Oil and Gas of the Department of Conservation determines to do so would adversely affect production of the reservoirs and unless injection into other subsurface zones will reduce environmental risks. Exceptions to reinjections will be granted consistent with the Ocean Waters Discharge Plan of the State Water Resources Control Board and where adequate provision is made for the elimination of petroleum odors and water quality problems.

Where appropriate, monitoring programs to record land surface and near-shore ocean floor movements shall be initiated in locations of new large-scale fluid extraction on land or near shore before operations begin and shall continue until surface conditions have stabilized. Costs of monitoring and mitigation programs shall be borne by liquid and gas extraction operators.

Section 30261.

(a) New or expanded refineries or petrochemical facilities not otherwise consistent with the provisions of this division shall be permitted if (1) alternative locations are not feasible or are more environmentally damaging; (2) adverse environmental effects are mitigated to the maximum extent feasible; (3) it is found that not permitting such development would adversely affect the public welfare; (4) the facility is not located in a highly scenic or seismically hazardous area, on any of the Channel Islands, or within or contiguous to environmentally sensitive areas; and (5) the facility is sited so as to provide a sufficient buffer area to minimize adverse impacts on surrounding property.

(b) In addition to meeting all applicable air quality standards, new or expanded refineries or petrochemical facilities shall be permitted in areas designated as air quality maintenance areas by the State Air Resources Board and in areas where coastal resources would be adversely affected only if the negative impacts of the project upon air quality are offset by reductions in gaseous emissions in the area by the users of the fuels, or, in the case of an expansion of an existing site, total site emission levels, and site levels for each emission type for which national or state ambient air quality standards have been established do not increase.

(c) New or expanded refineries or petrochemical facilities shall minimize the need for once-through cooling by using air cooling to the maximum extent feasible and by using treated waste waters from inplant processes where feasible.

Section 30264.

Notwithstanding any other provisions of this division, except subdivisions (b) and (c) of Section 30413, new or expanded thermal electric generating plants may be constructed in the coastal zone if the proposed coastal site has been determined by the State Energy Resources Conservation and Development Commission to have greater relative merit pursuant to the provisions of Section 25516.1 than available alternative sites and related facilities for an applicant's service area which have been determined to be acceptable pursuant to the provisions of Section 25516.