

Exhibit A

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EXHIBIT A DISCUSSION

PLANNING COMMISSION WORKSHOP OVERVIEW:

Staff has arranged the draft Moss Landing Community Plan (Plan) (see **Exhibit B**) in a format that reflects the current format of the North County Land Use Plan (see **Exhibit G**). The discussions related to water (**Exhibit C**), wastewater (**Exhibit D**), and coastal hazards (**Exhibit E**) will wrap up workshop presentations on the remaining draft Plan policies not yet discussed at a Planning Commission workshop.

County staff has met with the Coastal Commission on all of the policies in this draft plan. Current policy language reflects modifications made through those discussions. Coastal Commission staff is still reviewing a few of the policies.

During this workshop, staff will discuss the draft Plan section by section. When discussing sections containing one of the three topics described in the above paragraph, additional time will be spent to provide further detail.

The draft plan sections are described below:

- Section 5.1 – Background. Explanation of relationship to the 1982 Plan and vision of the Plan update.
- Section 5.2 – Resource Management. Narrative and policies relating to visual, community character, historical, archaeological, tribal cultural, environmentally sensitive habitats, and water resources. Narratives and policies relating to hazards are also contained in this section.
 - Draft Water Policies. Policies contained in Section 5.2.5 of the draft Plan will be presented to the Commission for consideration. See separate discussion in **Exhibit C**.
 - Draft Coastal Hazard Policies. See separate discussion in **Exhibit E**. Staff will present the Commission with the following for consideration:
 - Policies contained in Section 5.2.6.G of the draft plan;
 - Add General Policies to Section 2.4.2 of the North County Land Use Plan;
 - Add subsection D. Coastal Hazards to Section 2.8.3 of the North County Land Use Plan;
 - Add General Policies to Section 4.3.5 of the North County Land Use Plan; and
 - Add two new glossary terms to Appendix B of the North County Land Use Plan.
- Section 5.3 – Public Service System. Narrative and policies relating to transportation and wastewater service are also contained in this section.
 - Draft Wastewater Policies. Policies contained in Section 5.3.3 of the draft Plan will be presented to the Commission for consideration. See separate discussion in **Exhibit D**.
- Section 5.4 – Land Use Development. Narrative and policies relating to land use and the potential of, or specific restrictions to, development are contained in this section.

- Section 5.5 – Recreation and Public Access. Narrative and policies relating to public access and parking facilities are contained in this section.

OVERVIEW OF FULL DRAFT PLAN:

The 2019 draft Plan has been formatted and organized to mirror the NCLUP. This effort was taken to ensure the Plan remains as a chapter (Chapter 5) to the NCLUP and not appear as a separate plan document. Each section is laid out the same way, beginning with a narrative and followed by the relevant policies.

Section 5.1 – Background

This section explains how the Plan update began and how it was accomplished. The value and importance of Moss Landing is explained so the reader is made aware of the necessity of a community plan. As such, an explanation is included of how the policies contained in the Plan are supplemental and work in conjunction with the policies contained in the other Chapters of the NCLUP. A Regional Location map, Plan Boundary and Neighborhood map, and jurisdictional maps are included in this section.

Section 5.2 – Resource Management

This section begins with an introduction to Moss Landing’s resources, both man-made and natural. Not including the introduction, there are five subsections within Resource Management. Section 5.2.2 discusses visual resources and community character of Moss Landing and policies for the protection of these resources are provided. Section 5.2.3 discusses historical, archaeological, and tribal cultural resources unique to the area and the narrative provides context to the policies. Section 5.2.4 discusses environmentally sensitive habitats of the area. As explained in the narrative, existing policies in Chapter 2.3 – Resource Management, Environmentally Sensitive Habitats of the NCLUP provide protection in Moss Landing. No supplemental policies are necessary. Section 5.2.5 covers freshwater and seawater resources. Policies for the protection of these resources, including potable water, are found in this section. Last is Section 5.2.6, which covers flooding, shoreline erosion, climate change, tsunami risk, and noise hazards in the area. Policies relative to erosion, climate change, and noise are in this section.

Topics Not Discussed at Previous Planning Commission Workshops

The policies contained in Section 5.2.5 – Resource Management, Water Resources of the draft Plan have not been introduced to the Planning Commission. Therefore, staff has prepared a separate discussion (**Exhibit C**) to provide background, including community and Coastal Commission recommendations and/or input. This is also the case for the Coastal Hazards in Section 5.2.6 (see **Exhibit E** for that discussion).

Section 5.3 – Public Service System

This section is dedicated to public services in the area, transportation and wastewater. Section 5.3.2 – Transportation includes four subcategories: streets and highways, pedestrian access and bicycle facilities, public transit, and rail service. General and specific policies are contained in this section. Section 5.3.3 discusses wastewater management. The narrative explains the existing wastewater treatment system capacity for Moss Landing and associated policies are provided.

Topics Not Discussed at Previous Planning Commission Workshops

The polices contained in Section 5.3.3 – Public Service System, Wastewater Management of the draft Plan have not been introduced to the Planning Commission. Therefore, staff has prepared a separate discussion (**Exhibit D**) to provide background, including community and Coastal Commission recommendations and/or input.

Section 5.4 – Land Use Development

This section describes eight of the major land use designations followed by special treatment overlays. The Land Use Designation map¹ for the Plan area is found in this section. The land use designations and associated uses are explained as follows: Section 5.4.1 Residential – Medium Density; Section 5.4.2 Commercial – Light Commercial and Recreation and Visitor-Serving Commercial; Section 5.4.3 Industrial – Waterfront Industry and Coastal Heavy Industry; Section 5.4.4 Public/Quasi-Public – Harbor Facilities, Public Facility, Educational–Scientific, and Cemetery; Section 5.4.5 Recreational – Scenic & Natural Resource Recreation and Outdoor Recreation; Section 5.4.6 Agricultural – Agricultural Conservation and Aquaculture Overlay; and Section 5.4.7 Resource Conservation – Wetlands and Coastal Strand. Section 5.4.8 describes the three special treatment areas: North Potrero, Moss Landing Business Park, and The Island. Key, general, and specific land use policies are contained in Section 5.4.9.

Section 5.5 – Recreation and Public Access

Recreation and Public Access contains two subsections: 5.5.1 – Recreation and Public Access and Section 5.5.2 – Parking Facilities. The narratives describe the existing conditions and supporting policies follow.

¹ Figure ML-9. Land Use Diagram contained in the draft Plan needs refinement. Density for Medium Density Residential should be 1 to 4 du/ac, the MLML property along Moss Landing Rd designated as Medium Density Residential should be Educational-Scientific, the Harbor property in the North Harbor area designated Outdoor Recreation should be Recreation Visitor-Serving Commercial, and waters in the harbor areas should be changed to light blue.

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Exhibit B

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2019 DRAFT MOSS LANDING COMMUNITY PLAN

5. *MOSS LANDING COMMUNITY PLAN*

5.1 BACKGROUND

The Moss Landing Community Plan has been prepared to provide a comprehensive planning framework for preservation, improvement and enhancement of Moss Landing (the community) while conserving natural resources and providing public access and recreational opportunities. The findings, policies and recommendations contained in this chapter of the North County Land Use Plan are the result of a cooperative land use planning effort between the Monterey County Resource Management Agency, various public agencies, and members of the community. In January 2009, a Community Plan Update Committee was created to identify the vision for future development in Moss Landing. The Committee found the 1982 Plan generally consistent with existing development but recognized portions of the plan were out of date. The community vision identified by the Committee was to allow development to occur at the intensity allowed by the 1982 Plan, a level they called the Moderate Growth Scenario, by retaining goals, updating policies, ideas and references, and providing clarification where needed.

Since adoption of the 1982 Plan, the community has seen a dramatic increase in marine research facilities, the closure of the old National Refractories operations, and substantial changes in the power plant operations. Recent studies and investigations have demonstrated the potential effects of climate change on the community and the harbor. Using the 1982 Plan as the baseline and Committee recommendations as a starting point, contents were deleted, replaced and refined to address the current circumstances of the community and environment resulting in this Update.

Moss Landing is a small coastal town located south of the City of Santa Cruz and north of the City of Monterey. (See **Figure ML-1**). It is a unique community where old world charm meets new scientific facilities and a sprinkle of industrial uses. Moss Landing has thriving commercial businesses such as a fishing industry, one of a kind restaurants, and eclectic artist/craftsman and antique shops. Access to the Pacific Ocean has provided an opportunity for educational and scientific research facilities to flourish and establish a home. The Moss Landing Harbor contains over 600 slips for commercial and recreational boats. Many of the residents that live in the community grew up in the area, which allows local history and stories to live on. These uses have also shaped the built environment, giving the community its extraordinary character and a culture of its own. The community is made up of a mix of design themes such as historic cannery buildings, nautical features, a piece of the Old West, and the recognizable landmark feature in the area, the 550-foot power plant stacks. Opposite of the built environment is the natural setting, which equally contributes to the community's scenic beauty and character. This setting surrounds community as the Monterey Bay National Marine Sanctuary is located to the west and estuaries are located to the east.

For all these reasons, Moss Landing is important as it supports a wide range of uses, people, flora and wildlife. Therefore, specific policies unique to Moss Landing were developed. In addition to applicable policies contained in the other chapters of the North County Land Use Plan, policies contained within this chapter apply to development within the community plan area. (See **Figure ML-2**). The intent of Community Plan Chapter 5 is to protect the community character, prevent

resource damage, update land use designations to reflect changes in land use, and to allow some land use flexibility for unknown future needs while still being aligned with the vision for how the community will grow and that reflects the community’s priorities and values. In this effort, staff and the community have identified appropriate locations, density, and intensity for existing and proposed land uses.



Figure ML-1. Regional Location

5.1.1 Planning Area and Neighborhoods

The Planning Area is divided into seven neighborhoods—North Harbor, Elkhorn, Island, Dolan, Village, South Harbor, and Heights. **Figure ML-2** shows the community area boundary and location of the Moss Landing neighborhoods.

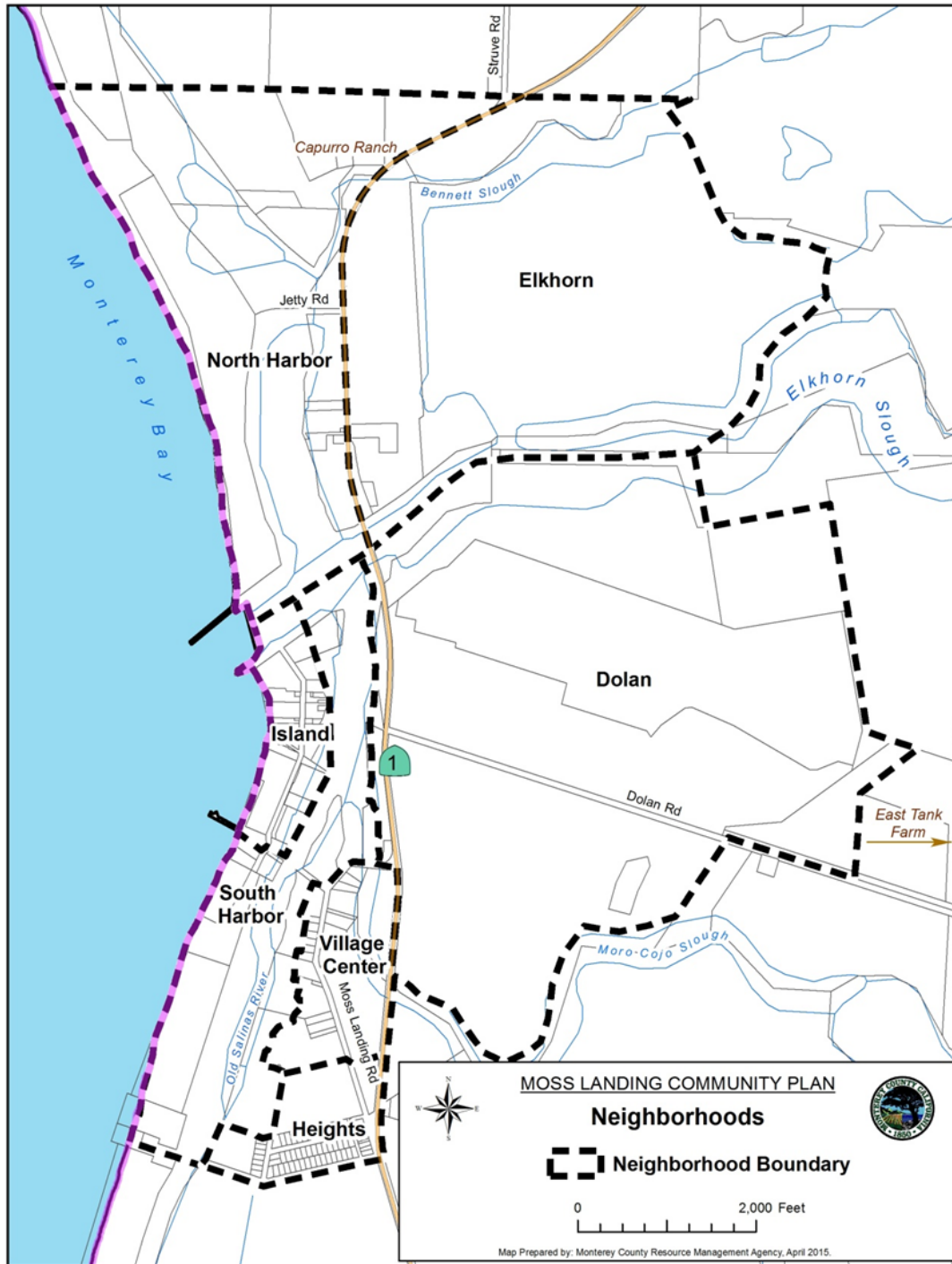


Figure ML-2. Moss Landing Community Boundary and Neighborhoods

5.1.2 Relationship to Other Plans and Jurisdictions

Significant areas in and around Moss Landing are subject to state and/or federal designations in recognition of the significant natural resources. These areas include:

- Monterey Bay National Marine Sanctuary,
- Elkhorn Slough State Marine Conservation Area,
- Elkhorn Slough State Marine Reserve,
- Elkhorn Slough Ecological Reserve,
- Moss Landing State Wildlife Area,
- Moro Cojo Slough State Marine Reserve, and
- California State beaches.

In addition, the following agencies have jurisdiction over certain areas or resources:

- Moss Landing Harbor District,
- National Oceanic and Atmospheric Administration,
- Elkhorn Slough National Estuarine Research Reserve,
- California Fish & Wildlife,
- US Army Corps of Engineers,
- State Parks,
- State University System, and
- US Fish and Wildlife.

These designations and oversight by these agencies offer multiple layers of protection beyond those provided by Monterey County for Elkhorn Slough and other important natural resources in the planning area. **Figure ML-3** shows affected state and federal resources.

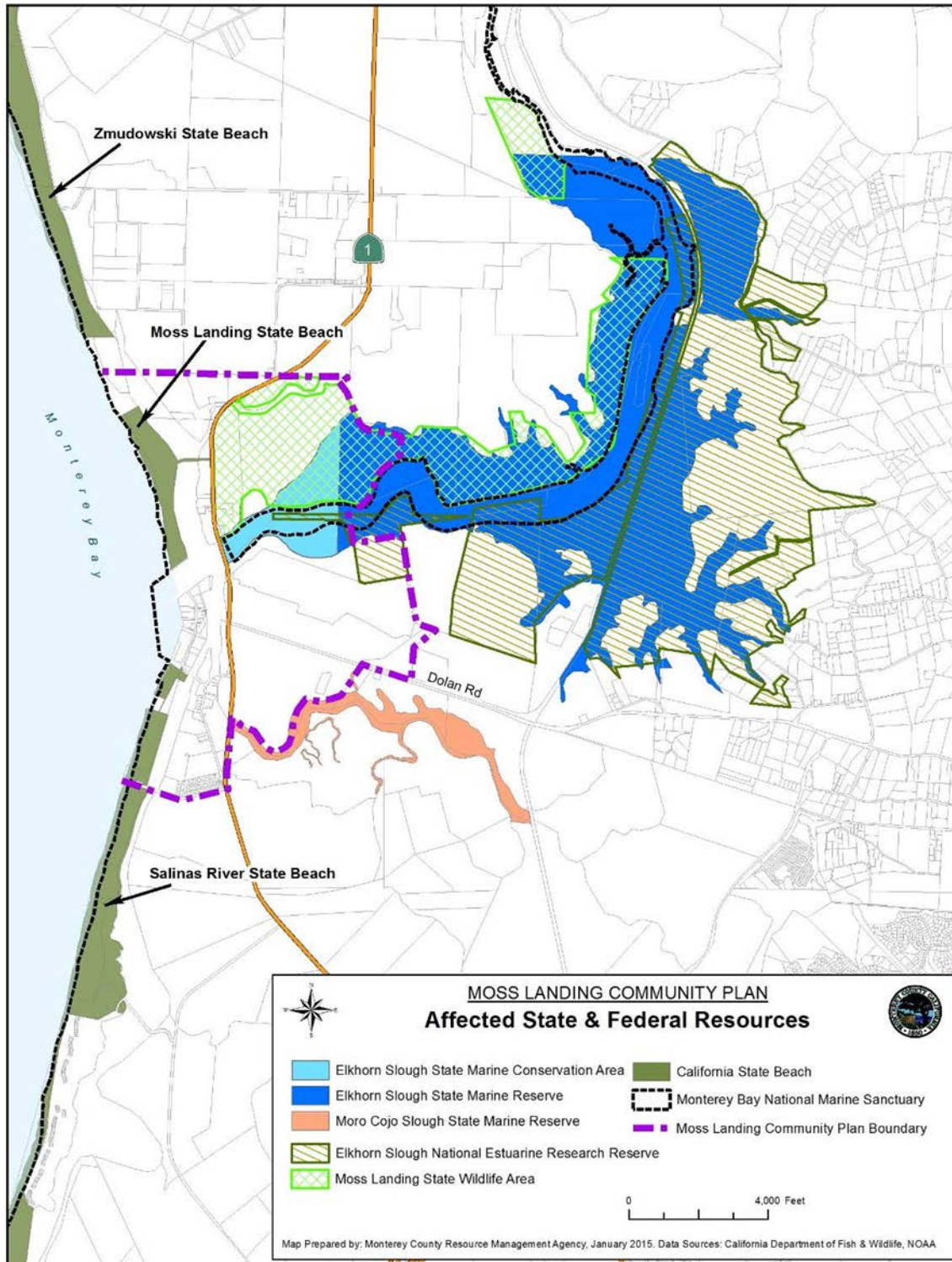


Figure ML-3. State and Federal Resources Map

5.2 RESOURCE MANAGEMENT

5.2.1 Introduction

The community area contains a variety of resources which present a need for effective protection and management. Not only are these resources unique to the area, they are assets to the community and are economically valuable.

Elkhorn Slough, Bennett Slough, Moro Cojo Slough and the Old Salinas River Channel are local natural features considered to be valuable estuaries that contain biologically important habitats. The coastal dunes and harbor areas also present as valuable resources.

Moss Landing's unique community character is made up of a confluence of historic uses dating back to the 1800's, a commercial and recreational fishing port, an eclectic downtown, and educational and research facilities. In addition, the area is rich with archaeological and tribal cultural resources that make Moss Landing unique.

To address the community's desires and maintain the area's unique character, it is important to balance the protection and management of resources with allowing appropriate development and uses which calls for properly locating and designing the built environment. Part of this includes considering North County's potable water limitations and unique hazards (flooding, erosion, and the uncertainty climate change effects) and how these could affect development in Moss Landing.

5.2.2 Visual Resources and Community Character

The special character and unique visual features of the community are derived from both its natural and built environments and how the two co-exist. Beaches and dunes to the west and estuaries to the east form the area's natural setting, providing habitat for an abundance of marine life and shore birds to thrive. When viewed from great distances, Moss Landing is one of the most easily identifiable coastal communities in California; as the 550-foot power plant stacks serve as a landmark feature that unmistakably mark the location of the community from any approach. Other contributors to its character is its status as a historical port and setting for cannery activities. In addition, establishment of educational and scientific research has evolved the community's "current" cultural significance. Recreational opportunities and its collection of antique shops make it a unique destination point for an increasing number of visitors.

In summary, Moss Landing contains a diversity of natural and man-made visual features that contribute to the community's strong vitality and special character. For the benefit of both residents and those who come to work and play, care should be taken to preserve and enhance these important visual resources as the community changes and grows over time.

It is particularly important to recognize that the community itself is composed of distinctly different areas that accommodate the needs of different groups of people pursuing varying activities. As such, the visual resources of these areas are different. The policies that follow

acknowledge this by giving protection to specific natural and cultural resources as well as setting forth broad guidelines to be used when development proposals in the different areas of the community are considered.

A. General Policy

[2017 5.12 & '82 5.6.1.1] The County's objective shall be to conserve the unique visual, cultural, and historic resources of Moss Landing to the greatest extent possible while protecting private property rights. Development shall be consistent with the character of the neighborhood within which they are located.

B. Specific Policies

1. [2017 ML-5.13 & 82' 5.6.3.6] Views of the Moss Landing Community, harbor and dunes from Highway 1 should be protected through regulation of landscaping and siting of new development adjacent to the highway to minimize the loss of visual access.
2. [2017 ML-5.14] Design Guidelines shall be developed for each neighborhood within the Moss Landing Community Plan. All properties located within the Moss Landing Community Plan planning area shall be zoned to include the Design Control ("D") Combining District.
3. [2017 ML-5.19] The County of Monterey shall seek funding to install or retrofit street lights that meet dark sky criteria, provide safe travel, direct lighting such that sensitive resources are not adversely affected and produce minimum glare.
4. [2017 ML-2.25] Exterior lighting shall be limited to full cutoff fixtures that protect marine life and direct light away from aquatic habitat and the sky.

5.2.3 Historical, Archaeological, and Tribal Cultural Resources

A. Historical Resources

Commercial uses in Moss Landing date back to the 1850's, a few years after coming under American rule. Historical maps (circa 1854) show the Sandholdt Road Bridge traversing over the Salinas River, a pier, and several buildings. In 1860, Paul Lezer, the original settler of Moss Landing, acquired 300 acres of land north of the Salinas River to establish the "City of St. Paul" and operate a ferry across Elkhorn Slough. According to "Historical Context Statement for Agricultural Resources in North County Planning Area, Monterey County (PAST Consultants, September 2010)," Moss Landing was built by a New England captain Charles Moss, who officially founded the town of Moss Landing in 1865. Captain Moss constructed a wharf and warehouses to serve as the main shipping point for the Salinas Valley's agricultural goods. The shipping facility was soon eclipsed by railroad service, which arrived in 1871. Approximately 75

years later, in 1947, Moss Landing Harbor began operations. According to the Monterey County Parks Department, three historical properties are listed on the Monterey County Register of Historic Resources. These properties are shown in **Figure ML-4**.

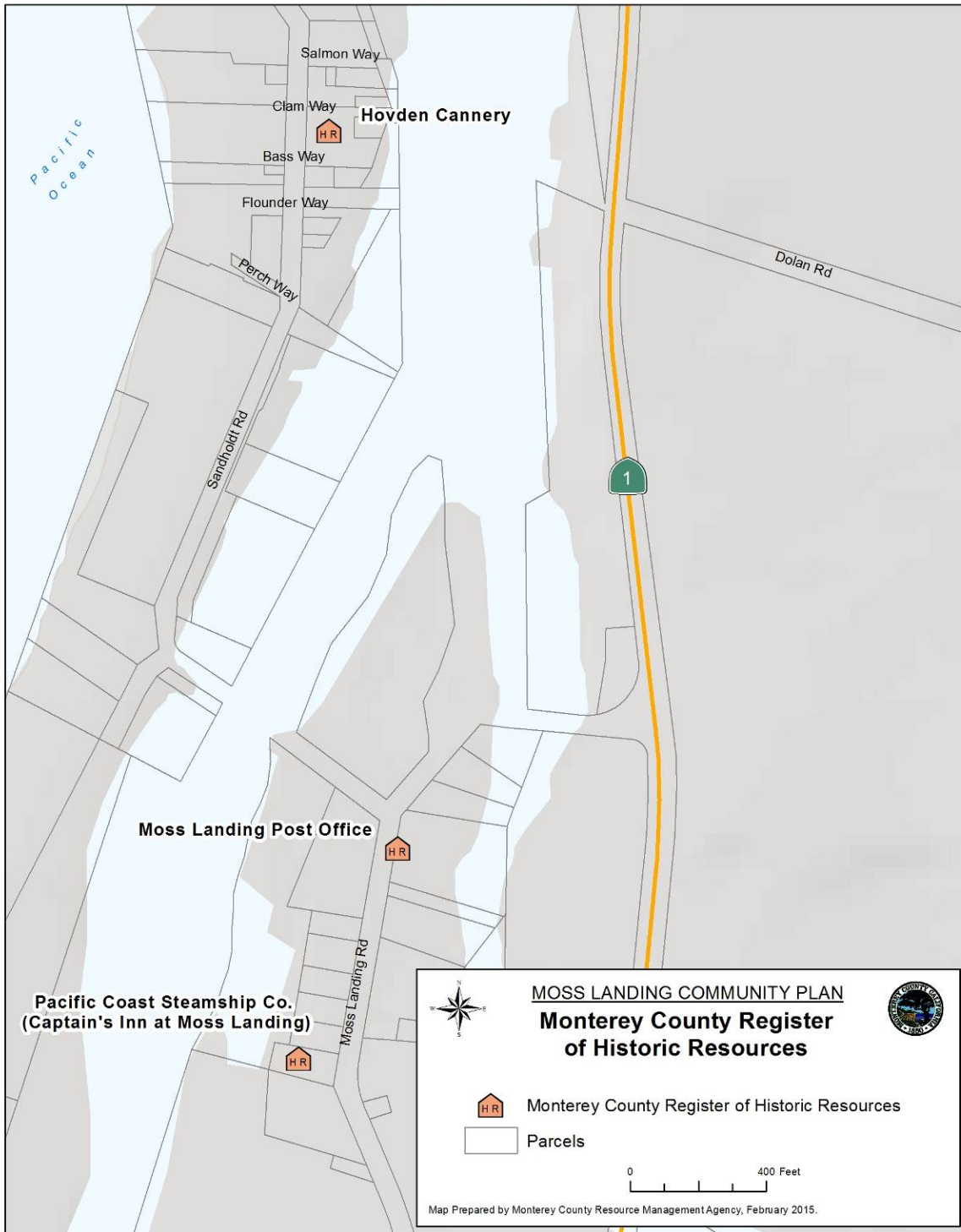


Figure ML-4. Historic Resources

B. Archaeological and Tribal Cultural Resources

Prior to the establishment of Moss Landing as a town, native peoples occupied the area as far back as 4000 BC, with the most intense occupation occurring between 700 BC and 1000 AD. Numerous reports have identified archaeological resources throughout, even after current development. Thus, the entire plan area is considered to have high archaeological sensitivity rich with tribal cultural resources. These resources contribute to the uniqueness of Moss Landing and should be preserved and protected.

C. General Policy

[ML-5.5] The County of Monterey shall conserve the unique cultural, historic, and archaeological resources of Moss Landing to the greatest extent possible while protecting private property rights.

D. Specific Policies

1. [2017 ML-5.9] The County of Monterey shall work with private and public organizations and individuals/entities that have the capacity to properly manage and supervise historic properties to acquire property where the preservation of historical buildings and landmarks is in jeopardy.
2. [ML-5.10] The area is rich in tribal resources. To ensure protection of those resources, all development projects which involve ground disturbance, shall include an on-site tribal representative to monitor all earth-moving activities.

5.2.4 Environmentally Sensitive Habitat Areas

The plan area includes three distinct marine geographic areas: Elkhorn Slough Estuary (tidal lagoon), Moss Landing Harbor (North and South Harbor), and Monterey Bay. Each of these areas contain similar and distinct aquatic biological habitats. Distinct aquatic habitats present within the boundaries of Moss Landing Harbor and Elkhorn Slough include shallow open water, submerged aquatic vegetation, sand/mud/salt flats, fresh/salt/brackish marshes, rocky subtidal and intertidal. Distinct habitats present in Monterey Bay include sandy beach, rocky intertidal and subtidal, and open water areas.

The coastal waters of the plan area are also located within the Monterey Bay National Marine Sanctuary (MBNMS), designated as a federally protected area in 1992. The sanctuary was established for the purpose of research, education, public use, and resource protection.

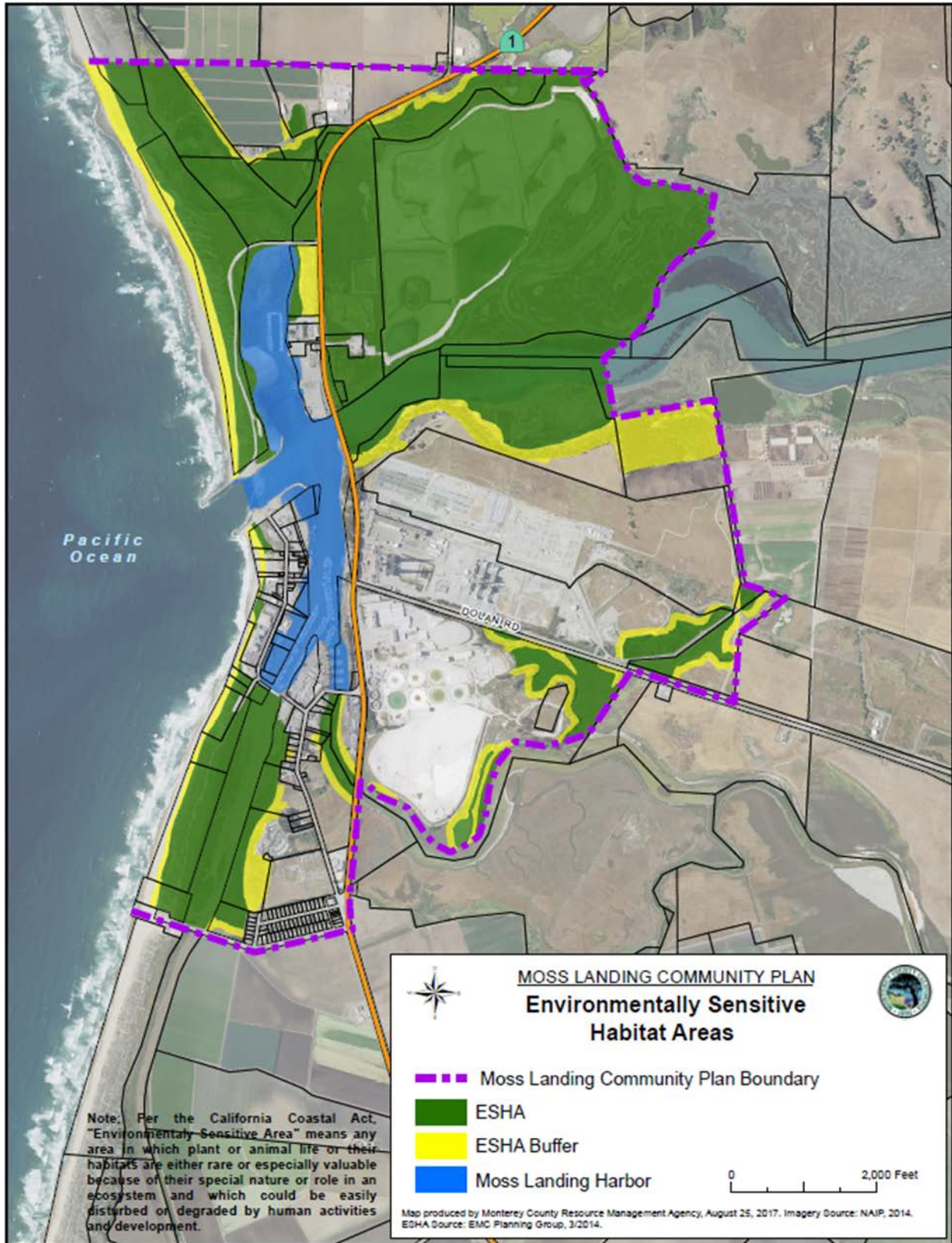
The Central Coast of California experiences a Mediterranean climate with cool, wet winters and warm, dry summers; the Pacific Ocean has a moderating effect on temperatures, producing a

maritime temperature regime with mild temperatures year-round. Windy conditions are common around Monterey Bay, and fog occurs during all seasons, but is most prevalent during summer months. Based on the Watsonville Waterworks weather station data collected from 1948 to 2005, annual average temperatures near the Plan Area range from 45.9 to 67.1 degrees Fahrenheit. Annual average precipitation totals 22.4 inches; approximately 84 percent of this total amount occurs from December through March.

Moss Landing Harbor serves as the marine gateway to the Elkhorn Slough National Estuarine Research Reserve, California's second largest marine estuary. This expansive tidal area is an important habitat for terrestrial and marine species. The coastal estuary is a particularly valuable resource because California has lost more than 75 percent of its coastal marshes.

The California Department of Fish and Wildlife (CDFW), Elkhorn Slough Foundation, and other agencies and organizations protect natural resources and manage many conservation areas within the Plan Area. This includes, but is not limited to, Moss Landing State Beach and Moss Landing Wildlife Area in the northern portion of the Plan Area, and Salinas River State Beach in the southern portion of the Plan Area.

Monterey County has mapped environmentally sensitive habitat areas (ESHA) and ESHA buffer areas in Moss Landing. **Figure ML-5** shows these areas, as of 2010. However, ESHA areas are constantly evolving and specific site studies may be required for development. Policies in Chapter 2.3 of this plan require assessment of the surrounding habitat area at the time a development application is submitted, as the habitat areas may move over time.



ML-5. Environmentally Sensitive Habitat Areas

5.2.5 Water Resources

A. *Freshwater Resources*

North County has significant overdraft and seawater intrusion affects much of the area, which has caused some wells to be abandoned. Studies demonstrate that the situation has not improved as of 2019. Seawater intrusion continues to move inland. A 2015 study demonstrates that the Pressure 180 aquifer under the community area has seawater intrusion. The 2015 study also demonstrates that most of the area underlying the community has seawater intrusion in the Pressure 400 aquifer, with a small portion between Dolan Road and Elkhorn Slough not meeting the chloride limit to be considered seawater.

Two water management agencies oversee the groundwater in North Monterey County: the Monterey County Water Resources Agency and the Pajaro Valley Water Management Agency. The aquifers in North Monterey County consists of several subareas: Pajaro, Springfield Terrace, Highlands (north and south), Salinas Valley Pressure area, and Granite Ridge. The Springfield Terrace, Salinas Valley Pressure, and Highlands South subareas underlie the community area. The majority of the Moss Landing community area is located overlying the Salinas Valley aquifer, with the area north of Elkhorn Slough overlying the Springfield Terrace.

The Springfield Terrace subarea, north of Elkhorn Slough, has significant seawater intrusion. A 1995 hydrogeological study stated that groundwater levels had fallen below sea level, with the groundwater surface falling about five to ten feet from 1979 to 1994.

The Highlands subarea, which is east of Moss Landing, was described in the 1995 report as an area where “aggregate pumping is contributing to chronic storage depletion.” The study stated that groundwater levels had fallen below sea level in many areas of the Highlands subarea, with a pumping trough 10 to 25 feet below sea level paralleling the coast, 2 to 4 miles inland, with Las Lomas at the northern end having the deepest part of the trough¹.

The wells that currently serve the Moss Landing community lie within the Highlands South subarea, just north of Dolan Road about 1.5 miles east of the community. The area between the Highlands subarea and the ocean, including most of the Moss Landing community, are located within the Salinas Valley basin. The Highlands South area identified in the 1995 report is also included in the Salinas Valley Groundwater Basin; therefore, the wells serving Moss Landing are located within the Salinas Valley Groundwater Basin.

While actions have been taken to reduce coastal groundwater pumping, including many supplemental water supply projects since certification of the North County Local Coastal Program in 1988, significant overdraft conditions still exist for North County. This overdraft has led to continuing seawater intrusion. It is uncertain if the Pressure Deep Aquifer, located below the Pressure 180/400, is hydraulically connected to the ocean in Monterey Bay, so it is not

¹ The majority of the Highlands subarea is also part of the 180/400 Foot Aquifer in the Salinas Valley
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known whether pumping from this aquifer would lead to the onset of seawater intrusion into the Pressure Deep Aquifer.

The State of California Sustainable Groundwater Management Act (SGMA) requires that solutions to overdrafted aquifers be identified and implemented. A plan is required to be adopted by 2020 for the Pressure 180/400 Aquifer Subarea, which SGMA identifies as being in critical overdraft. Solutions identified through the SGMA planning process are required to be implemented by 2040.

1. Pajaro/Sunny Mesa Community Services District

Potable water service is provided to the majority of the Moss Landing community by Pajaro/Sunny Mesa Community Services District (PSMCS D), which has a well and water tank located on Avila Road, approximately 1.5 miles east of the community. The well provides sufficient water quantity and quality to the community. However, the system capacity is currently limited by the storage tank size, which may limit development potential for the community.

Available water resources for new development provided by PSMCS D and planned capacity improvements should be discussed. *[This language will be updated after obtaining the latest Water Supply Assessment.]*

2. Other Potable Water Sources

Potable water is also provided for the power plant property through its own water system. An additional well that provides water to the former National Refractory property is also located in the Avila Road area. *[This language will be updated after obtaining the latest Water Supply Assessment.]*

B. Seawater Resources

Several properties within the community have seawater intake or outfall pipelines. These connections have provided cooling water for the power plant, seawater for refractory processes, and marine research uses. The pipelines historically accessed seawater from the ocean, the harbor, or Elkhorn Slough. Discharge (outfall) pipelines require waste discharge permits from the State of California Regional Water Quality Control Board. The former National Refractory site includes an intake and outfall facility. The power plant site includes seawater intake and outfall pipelines. Moss Landing Marine Labs includes an intake pipeline within the pipeline for the former National Refractories property.

C. Specific Policies

1. [ML-4.8] The County of Monterey shall not approve discretionary development permits that exceed the water purveyor's ability to provide potable water.

2. [ML-4.10] The County of Monterey shall encourage strategies, including but not limited to seawater desalination, increased use of recycled water, and conservation measures, to address historic groundwater overdraft and seawater intrusion, preserve river and stream habitats, and produce additional supplies of potable water.
3. [ML-4.11] The County of Monterey shall encourage existing and new development to supplement its supply of water with on-site facilities, including but not limited to the installation of small-scale seawater desalination facilities for coastal dependent/related uses, recycled stormwater and greywater, rainwater collections systems (for landscaping) or other water sources, as made feasible by emerging technologies. Any proposed desalination facility shall be designed to use the best available site, system and technological design, and feasible mitigation measures, to minimize or avoid intake and mortality of all forms of marine life and obtain all other applicable agency permits and/or approvals.
4. [ML-4.9] Historic water use from the same water supply for one property is non-transferable to another property unless consented to by all affected property owners.

5.2.6 Hazards

This coastal community is subject to several hazards. Flooding, coastal erosion, climate change effects, and tsunami are the primary risks for the community. Noise from industrial uses, the fishing industry, harbor traffic, and Highway 1 can be a public health concern.

A. *Flooding*

The community is subject to flooding from both the ocean and from inland drainage areas. Much of the community is low-lying, particularly the downtown area and areas adjacent to the sloughs, harbor, and Old Salinas River. A recent climate change study projects increased risk in the future from both ocean effects (e.g., sea level rise, coastal storm flooding) and from increased flooding from inland watersheds.

The areas within Moss Landing that are subject to flooding are shown in **Figure ML-6**. According to the Federal Emergency Management Agency (FEMA), almost all of Moss Landing lies in the 100-year flood hazard zone. The exceptions include the Moss Landing Power Plant, much of the Moss Landing Business Park, and an area north of Potrero Road that includes residential property, the cemetery, and Moss Landing Marine Laboratories.

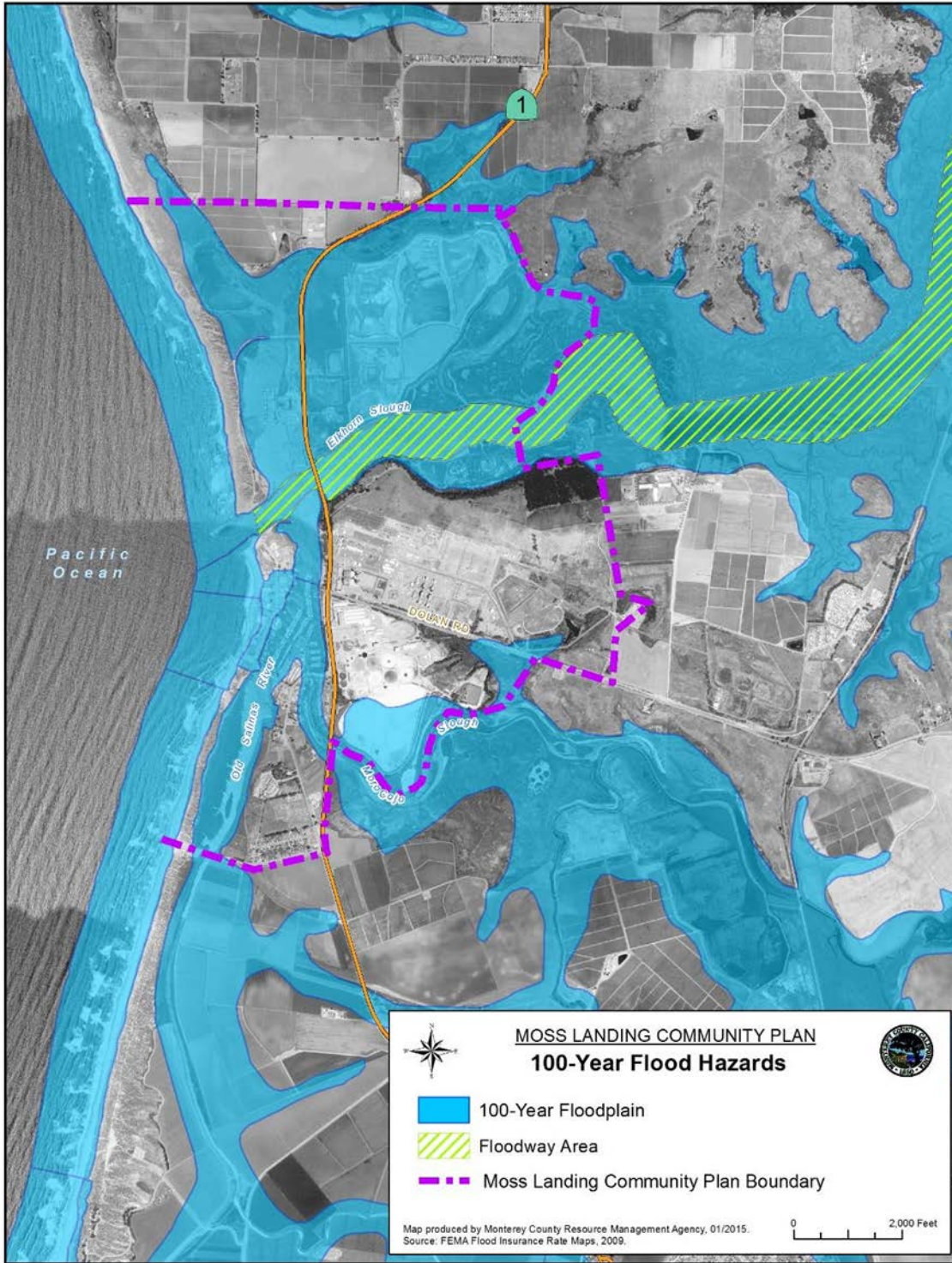


Figure ML-6. Flood Hazards Map

B. Shoreline Erosion

Shoreline erosion issues related to land use are largely confined to the Island, which is the only developed portion of the community located directly on the ocean waterfront.

According to a 2007 study (Griggs) for MBARI, addressing the Island area, the historical position of the vegetation line on the Moss Landing spit is a useful indicator of long-term shoreline erosion patterns. For the purposes of the study, Griggs compiled a record of the vegetation line on the Moss Landing spit using aerial photographs taken over a 74-year period. Then using this record, the study established the “most severe erosion conditions” that were evident in the photographic history. Griggs mapped the extent of these conditions to establish a recommended setback line for new construction on the spit using Sandholdt Road as a reference point. Griggs summarized the conclusions of the vegetation line analysis as follows:

- The vegetation line on the spit (the position reached by maximum wave run-up) varied between 38 and 100 feet from mean high tide in the 74-year history of aerial photographs.
- The vegetation line varied depending on weather patterns, with the vegetation line moving seaward in the relatively calm La Niña period (i.e., 1965 to 1974) and moving landward in the stormier El Niño period (i.e., 1976 to 1984). Since 1998, when severe storms resulted in significant shoreline retreat, the vegetation line has generally advanced seaward.
- The distance between Sandholdt Road and the vegetation line is the narrowest on the southern portion of the spit where beach retreat has been arrested by the seawall constructed in this area.
- The shoreline has been gradually advancing at the sandy point in the vicinity of Perch Way and retreating slightly toward the northern end of the spit.

Climate change effects will alter the rate and timing of coastal erosion.

C. Climate Change

With the community lying between the Pacific Ocean and sloughs, and its low elevation, property within the community is vulnerable to the effects from climate change, including sea level rise, coastal storm flooding, rising tides, and fluvial (inland) flooding. Infrastructure within and around the community is also at risk from these effects.

According to the Intergovernmental Panel on Climate Change (IPCC) and the California Natural Resources Agency (CNRA), sea level has risen about seven inches over the last century due to global melting of land-based ice and thermal expansion. According to a report prepared for the County of Monterey in June 2017 more changes related to climate change can be expected by the year 2060 and on to the end of the century (2100):

- Average annual precipitation may show little change, but more intense wet and dry periods can be expected with more floods and more droughts.
- Flood peaks will become higher and natural spring/summer runoff will become lower.
- Sea levels in the Central Coast Region may rise by six to 28 inches by mid-century and 16 to 62 inches by the end of the century. (The estimated 62-inch rise in sea level corresponds to the high estimate for the year 2100).

Rising sea levels in the Central Coast Region are likely to affect coastal recreation resources such as beaches, wharves, and campgrounds. Sea level rise is also expected to affect vulnerable populations along the coast through the immediate effects of flooding and temporary displacement and longer-term effects of permanent displacement and disruption of local tourism. Sea level rise also will affect the provision of basic services through disruption of linear infrastructure. Impacts to Highway 1 could affect regional transportation, access to Moss Landing, and access to tourism areas. Finally, communities that depend on groundwater basins within the coastal zone may be affected by increasing saltwater intrusion driven by sea level rise.

D. Tsunami Risk

The community area abuts Monterey Bay and the Pacific Ocean, so inundation from tsunami is possible. Tsunamis are typically triggered by earthquakes, local or distant, and can also be triggered by larger underwater landslides. A submarine landslide in the Monterey Canyon offshore of the community is considered capable of producing a significant tsunami on Monterey Bay. Large tsunamis can result in significant damage and loss of life.

On March 11, 2011, Moss Landing Harbor was damaged by a tsunami that caused approximately \$1.75 million in damages. According to Moss Landing Harbor District, the water surged and receded about seven feet in a matter of minutes, slamming the docks against the pilings in two directions resulting in almost 200 damaged pilings and 20,000 cubic yards of extra sediment in the harbor.

Large portions of the community are areas of potential tsunami wave movement. According to State Planners, a wave height of up to three meters (9.8 feet) should be considered when planning shoreline structures in the Monterey Bay area.

E. Noise

Primary sources of noise for the community are the industrial areas and their land uses, harbor uses and infrastructure, waterfront industrial uses, and traffic along Highway 1.

F. Specific Policies - Erosion Hazard

1. [2019 Policy 2.14] The County of Monterey supports structural armoring (i.e., bulkheading or rip rap) or other measures where necessary to prevent erosion, protect

the Harbor shoreline and to incorporate where feasible public access into any armoring project.

2. [Updated 1982 MLCP Policy 5.3.3.3] Bulkheading or other measures to prevent erosion and to maximize use of available shoreline should be provided along the west bank of the South Harbor.
3. [Updated 1982 MLCP Policy 5.3.3.8] Retaining walls, bulkheads, or other appropriate erosion control measures should be developed along the eastern bank of the North Harbor as a means of preventing further erosion and improving berthing capacity.

G. *Specific Policies - Climate Change Hazard*

1. [ML-5.1] Development shall be designed and constructed to avoid effects from sea level rise and climate change hazards over the anticipated life of the development. Development shall assure stability and structural integrity of the development without reliance on shoreline protective devices, substantial alteration to natural landforms along bluffs and cliffs or otherwise harm coastal resources in a manner inconsistent with LCP policies or Coastal Act public access policies, and not contribute significantly to erosion, geologic instability, or destruction of the site or surrounding areas. Minor and/or ancillary development, including public trails, benches, gazebos, patios, raised decks and platforms and other similar uses, may be located seaward of a bluff or shoreline setback line provided that such development does not: 1) use a foundation that can better serve as a retaining or protection device or 2) require landform alterations.

If development cannot be located and designed in a manner that meets the state and local coastal hazard avoidance and minimization requirements over the full anticipated life of the development, the development may nevertheless be approved provided it meets all the following criteria:

- a. The proposed development is the least environmentally damaging alternative that is sited and designed to avoid/minimize impacts to coastal resources and avoids/minimizes effects from coastal hazards to the extent feasible;
- b. The approval is subject to conditions requiring removal of the development and/or other adaptation measures when specific thresholds are met to ensure that the development does not: a) interfere with the continued existence of adjacent environmentally sensitive habitat areas or recreation areas, b) substantially impair public trust resources, c) become structurally unstable, or d) pose increased risks to life and/or property or otherwise create a public nuisance;
- c. The proposed development is consistent with the public access and recreation policies of the Coastal Act and this LCP;

- d. A hazard assessment must demonstrate that the development appropriately minimizes risks to life and property and ensures structural stability for the life of the project; and
- e. Minimize risks to life and property to the maximum extent feasible.

Development proposed in coastal hazard areas shall, as a condition of approval, record a deed restriction describing the hazard, the limitations of rights to protect the property from hazards, and describe restoration requirements.

- 2. [ML-5.2] Maintain the long-term viability of Moss Landing Harbor and coastal-dependent and coastal-related uses as long into the future as is economically feasible. The County of Monterey shall, in cooperation with the community and affected agencies, plan the appropriate steps to protect (dune restoration, beach replenishment, vegetation planting, armoring, etc.) or develop adaptation strategies against the effects of climate change hazards.

For the rest of the community, shoreline protective devices and other shoreline altering development shall be allowed only when all coastal resource impacts are avoided, or if unavoidable, are appropriately and proportionately mitigated.

- 3. [ML-5.3] Monterey County shall, in cooperation with Elkhorn Slough Foundation, Elkhorn Slough National Estuarine Research Reserve, and other affected agencies and the community, plan the appropriate steps for managed retreat implementation to accommodate a migrating shoreline caused by sea level rise while promoting the conservation of beach, dune, slough, and other natural habitats. Such planning shall also include measures to ensure that increases in sediment load do not compromise harbor operations.
- 4. [ML-5.4] The County of Monterey shall work with the Moss Landing Harbor District and state and federal agencies to install and maintain a warning system, including adding nearby tide gauges, and signing for storm hazards and tsunami evacuation and education.
- 5. [New Policy 8] Shoreline Management Plan. The County shall prepare a Shoreline Management Plan. The plan shall function as a tool to help implement coastal protections, maximize public access, and protect coastal resources along the shoreline. The plan shall be prepared in coordination with relevant local, regional, and/or state agencies for the purpose of protecting coastal resources, as well as ensuring the resilience of coastal public infrastructure, and evaluate the following:
 - a. Refining adaptation triggers for actions to address coastal hazard impacts for different areas and assets in Moss Landing, including monitoring beaches for coastal hazard impacts such as erosion and changes in beach widths in order to identify trigger points for various adaptation strategies.

- b. Site Reuse. Considering appropriate uses for sites previously occupied by relocated assets, including parks, open space/natural areas, and other predominantly passive land uses.
- c. Transfer of Development Rights (TDR). Considering a TDR program to restrict development in areas that are vulnerable to coastal hazards and allow the transfer of development rights to parcels with less vulnerability to hazards.
- d. Coastal Hazard Overlay Zone. Establishing a Coastal Hazard Overlay Zone to address safety from flood and sea level rise related hazards, and recommend remedial actions. Establishing a program to inform owners of real estate in the Coastal Hazard Overlay Zone about coastal hazards or property vulnerabilities, including information about known current and potential future vulnerabilities to coastal hazards, and disclose permit conditions related to coastal hazards to prospective buyers prior to closing escrow.

The Shoreline Management Plan shall be adopted by the Coastal Commission through the Local Coastal Program amendment process and may be amended as appropriate.

H. Specific Policies - Noise Hazard

- 1. [New Noise Policy] Proposed development resulting in new noise levels shall incorporate site planning and design elements necessary to minimize noise impacts on surrounding land uses and reduce indoor noise to an acceptable level.
- 2. [ML-5.20] The County of Monterey shall require new residential development, including the demolition/rebuild of habitable structures but excluding remodels, within 400 feet of the centerline of Highway 1 to prepare an acoustical report containing design recommendations to maintain interior noise levels at 45 decibels (dBA) day-night average sound level (Ldn) or less.

5.3 PUBLIC SERVICE SYSTEM

5.3.1 Introduction

This section describes existing public infrastructure: transportation/circulation, including pedestrian access, and wastewater facilities. Policies addressing constraints such as the level of service of Highway 1 and improvements to County roads, the lack of bus service to the community, wastewater facility improvements and maintenance, and maintenance of service facilities are provided. Potable water service is discussed in Section 5.2.5 of this plan.

5.3.2 Transportation

The primary transportation emphasis of the Coastal Act is to preserve highway capacity for coastal access and coastal dependent land uses. In this context the plan describes improvements to Highway 1 and recommends a reduction in the number of access points from the highway to minimize hazardous and congested conditions. Parking facilities are discussed in Section 5.5.2 of this plan.

A. Street and Highway Classifications

1. Highway 1

Highway 1 (also known as State Route 1) is a major state highway that runs in a north/south direction along the Pacific Coast. Highway 1 is a 2 lane roadway between the Salinas Road interchange and the Highway 1/156 interchange and Chapter 3.1 of this plan calls for widening this section of the roadway to a four lane divided highway. Due to the constraints and safety issues, existing access points to Highway 1 shall be consolidated and limited to Jetty Road, Dolan Road, Moss Landing Road, North Harbor and Potrero Road.

2. County Roads

The County roads shown on the land use plan map are Jetty Road, Moss Landing, Dolan Road and Potrero Road. These are shown as two-lane roadways with the access improvements to Highway 1 discussed above. In order to minimize the access points to Highway 1 in the North Harbor area, a frontage road with a single access point should be developed to serve the yacht club and present and future commercial uses.

3. Issues and Constraints

The primary issue with circulation within the plan area is traffic congestion along the Highway 1 corridor, on both the north-bound and south-bound lanes. Much of the traffic is contributed by regional commuter traffic, very little is as a result of travelers to and from the community. However, the community and visitors alike are directly impacted by this traffic and its associated hazards. Constraints of internal roads within the community limit bike-ability and walkability, as roadway widths are inconsistent and lack sidewalks and storm drains.

4. Planned Improvements

The County is currently studying interim safety improvements to the Highway 1/ Dolan Road intersection. Several alternative configurations are under consideration, including additional lanes in the immediate area of the intersection, and signalization, or partial signalization, of the intersection.

Additional long-term transportation improvements addressing access, mobility, health and safety are planned for, and should continue to be planned for, in the vicinity of the plan area. These

improvements are identified by the Transportation Agency of Monterey County (TAMC) in their Regional Transportation Plan and the California Transportation Plan overseen by Caltrans.

B. Pedestrian Access and Bicycle Facilities

The developed part of Moss Landing is approximately 1.75 square miles in size, and the distance between the Village Center located along Moss Landing Road and the outer limits of development is approximately 0.75 miles. Thus, walking and biking should be encouraged as the central community area is small in scale. However, the lack of sidewalks on Moss Landing Road require caution on the part of pedestrians and drivers. There has been extensive input from the community concerning pedestrian safety and the lack of connectivity between the residential area and downtown. The County supports requiring installation of sidewalks along Moss Landing Road as part of future developments. In addition to increasing pedestrian safety, it enhances the downtown area which will continue to be the primary focal point of visitor oriented commercial development. **Figures ML-7** and **ML-10** provide additional illustration of existing and proposed access opportunities for planned facilities. Public access and improvements to and along the shoreline within the plan area are described in Chapter 6 and are shown on Figure 6.

1. Planned Improvements

The Monterey Bay Sanctuary Scenic Trail (MBSST) is planned as a bicycle and pedestrian route connecting Pacific Grove to Santa Cruz. The Moss Landing section of the trail is planned along the west side of Highway 1, turning onto the north end of Moss Landing Road. MBSST will provide a pedestrian link in the plan area and will be incorporated into the Pacific Coast Trail.

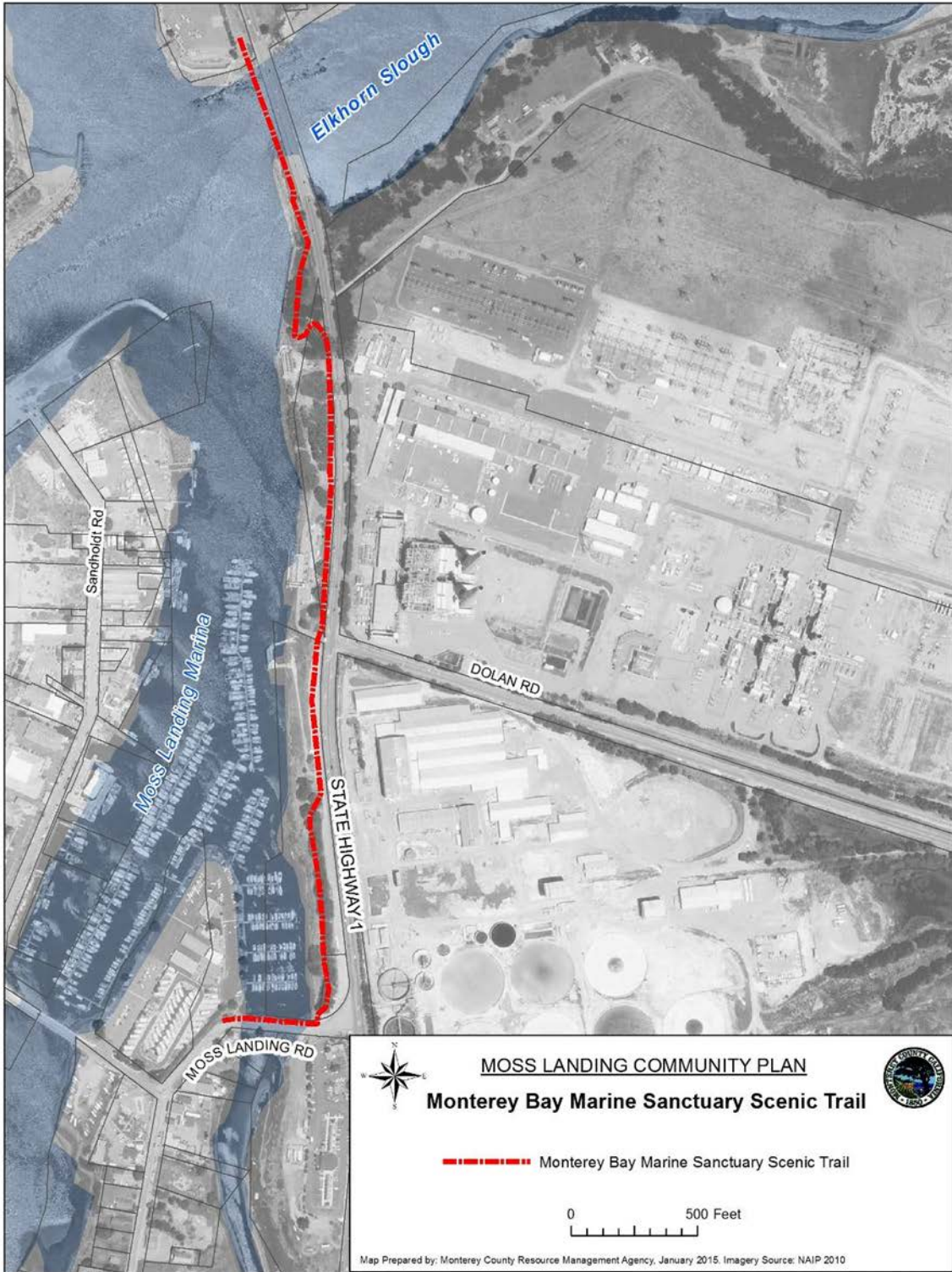


Figure ML-7. Monterey Bay Sanctuary Scenic Trail Map

C. Public Transit

Public transit is provided in the plan area by Greyhound and Monterey-Salinas Transit (MST). Local public transit stops served by MST are located on the west side of Highway 1 near Dolan Road, and at the Jetty Road/Highway 1 and Potrero Road/Highway 1 intersections. Commercial, recreational and industrial facilities are not currently served in Moss Landing. The community identified major safety hazards as crossing Highway 1 is necessary due to the existing stop locations. Designation of new stops and improved scheduling would provide better service to the residents of the community and visitors alike.

D. Rail Service

There are two rail spurs within the plan area, both access the industrial properties on the east side of Highway 1. Currently, these spurs are not in use. However, they would be valuable assets as part of a multimodal access plan for the area.

E. General Policies

1. [ML-3.13] The County of Monterey shall participate in initiatives for regional transportation planning, improved rail service, expanded transit service, demand reduction, and providing signage and other travel instructions that implement the Moss Landing Community Plan.
2. [ML-3.2] The County of Monterey shall identify funding to construct and maintain a balanced, multimodal transportation network, consistent with TAMC and Caltrans Plans, that meets the needs of the community and all users of the streets, roads, and highways for safe and convenient travel. The Land Use Advisory Committee shall be involved with providing input for transportation plans.

F. Specific Policies

1. [ML-3.3] The County of Monterey shall require all feasible traffic generation reduction measures of any new and/or expanded industrial use(s) and/or facility that would generate traffic on the segment of Highway 1 between Castroville and Salinas Road. Development in the heavy industrial areas shall not be allowed until needed improvements are made to the Dolan Road and Highway 1 intersection.
2. [ML-3.4] The creation of new direct driveway access onto Highway 1 shall be prohibited. Wherever possible, access to Highway 1 from commercial facilities should be consolidated.

3. [ML-3.5] The County of Monterey shall work with TAMC to select the preferred transportation improvement(s) identified in the Moss Landing Community Plan and include in the Regional Transportation Plan.
4. [ML-3.8] The County of Monterey shall develop a plan and funding strategy for the improvement and maintenance of Moss Landing Road and Sandholdt Road as a pedestrian connection corridor. The plan for this corridor shall include improved on-street parking, bicycle facilities, and sidewalks; including extending sidewalks and bicycle facilities to connect to the Heights residential neighborhood. Where the right of way is constrained, bicycle and pedestrian facilities are prioritized over on-street parking. The corridor shall also include the Monterey Bay Sanctuary Scenic Trail. The improvement plan shall be included in the Monterey County Capital Improvement Program.
5. [ML-3.11] The County of Monterey shall work with transportation agencies to provide improved transit service to Moss Landing, including the re-routing of Monterey-Salinas Transit buses along Moss Landing Road and the construction of new bus stops along that corridor to provide access to the re-routed buses.
6. [ML-6.7] The County of Monterey shall work with Monterey-Salinas Transit to improve bus scheduling to allow more frequent transit service to the state beaches and Moss Landing's village center.
7. [ML-3.12] The County of Monterey shall, in coordination with railroad and property owners, work to retain a railroad branch line and spurs that serve Moss Landing, along with its necessary supporting facilities.

5.3.3 Wastewater Management

On November 6, 1984, the Monterey County Board of Supervisors approved the Moss Landing County Sanitation District (MLCSD) Sewer Allocation Plan for the design and construction of a wastewater collection system to replace existing failing septic systems in Moss Landing. The MLCSD provided wastewater service to the Struve Road Area, North Harbor, Island, downtown, and the Heights. The wastewater system was designed to accommodate a flow of 105,000 gallons per day (gpd) based on engineering studies, input from potential users, and the limiting capacity of the treatment facilities of the Castroville County Sanitation District (CCSD), which later merged with MLCSD and took over wastewater service. A sewer allocation plan was implemented in tandem with the 1982 Moss Landing Community Plan to ensure that the community's sewer treatment capacity would be equitably distributed among Moss Landing ratepayers. The Plan allocated sewer service to each service area based upon existing land use and expected future growth, including future priority uses.

Subsequently, the Monterey Regional Water Pollution Control Agency (now Monterey One Water) opened its regional wastewater treatment plant near Marina, providing a greatly expanded sewer treatment capacity to the region, including Moss Landing. As the rationale for the original sewer allocation plan fell away with the opening of the regional wastewater treatment plant in

Marina, planners and Moss Landing community members who initiated work on the update of the Moss Landing Community Plan in 2008 began an effort to retire the sewer allocation plan.

A. Wastewater Treatment System Capacity

After the regional wastewater treatment plant was in operation, the Castroville Treatment Plant was replaced with Monterey One Water's Moss Landing Regional Pump Station and wastewater capacity service to Moss Landing was increased to 309,000 gpd. The CCSD remains as the service provider in Moss Landing. **Figure ML-8** shows the current CCSD service areas that are located in the Moss Landing Community Plan area and an additional site at Struve Road/Highway 1.

Although sewer capacity increased, the service area did not. The Moss Landing Power Plant and Moss Landing Business Park are not currently included in the urban service area and instead dispose of effluent using on-site septic systems. If future development occurs on these sites they would need to annex into Monterey One Water's district service area and connect to the CCSD wastewater system. In addition, the collection and pumping system would need to be analyzed for capacity and rehabilitation requirements.

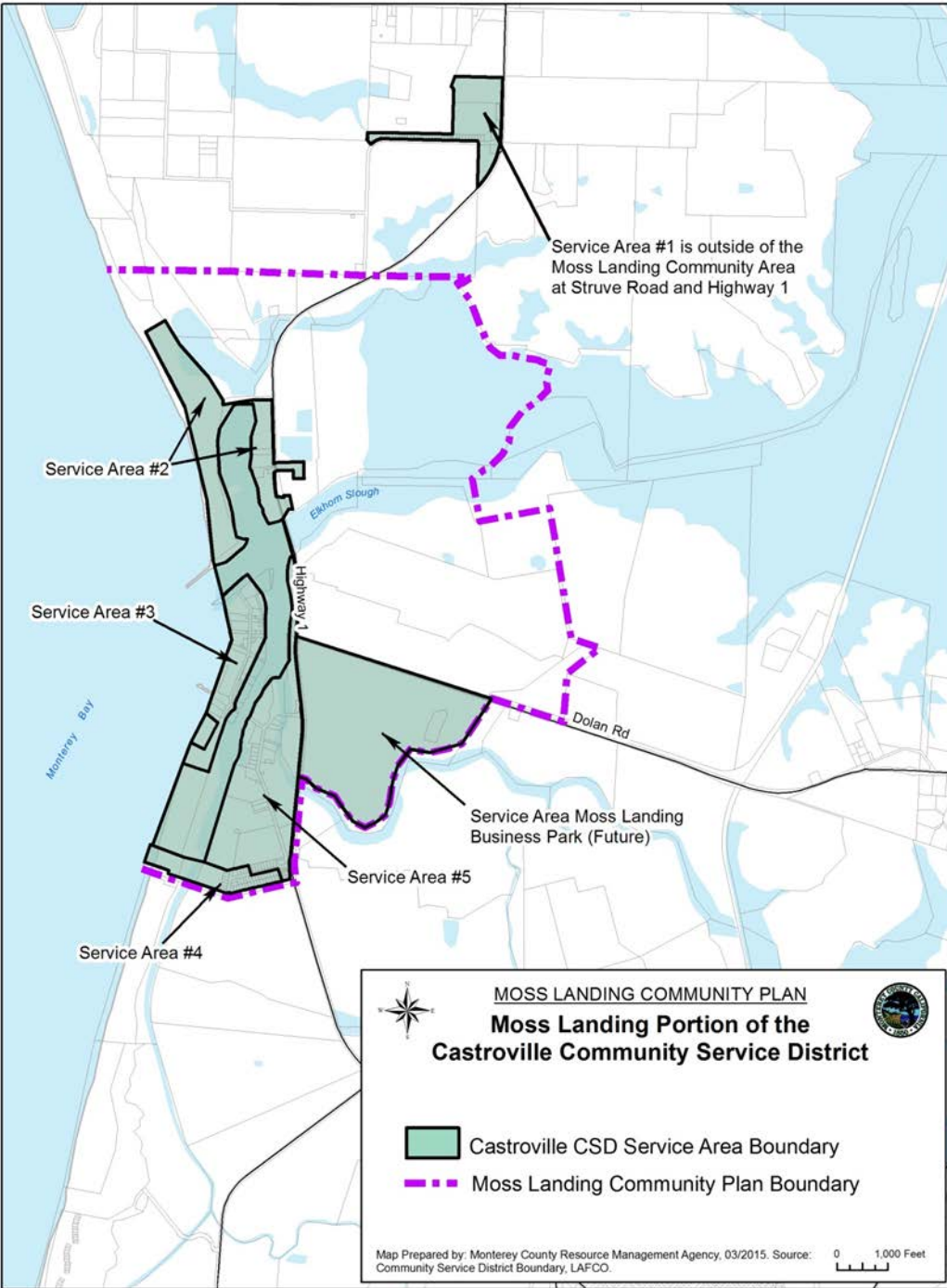


Figure ML-8. Castroville Community Services District Service Map

B. Specific Policies

1. [ML-4.1] Development at the Moss Landing Business Park (MLBP) that exceeds existing onsite wastewater treatment system (OWTS) capacity shall require to connect to the wastewater collection system as a condition of project or plan approval. Such

system improvements shall be funded at the sole expense of the Moss Landing Business Park and installed on or before the time that such development comes on line that could exceed OWTS capacity. Sewer conveyance system improvements shall ensure that operations at the Moss Landing Business Park do not significantly limit the existing or future sewer conveyance system capacity otherwise required to accommodate development anticipated by the Moss Landing Community Plan outside of the business park.

2. [ML-4.5] The County will work with the Castroville Community Services District to retire the Moss Landing Sewer Allocation Plan in favor of a traditional service system that ensures equitable service to all Moss Landing assesses and/or rate payers, including undeveloped and under-developed properties, in line with regional sewer conveyance and treatment capacities.
3. [ML-4.6] The County of Monterey shall ensure that any replacement of the allocation system guarantees the preservation of rights of each parcel to previously granted sewer allotments.

5.4 LAND USE & DEVELOPMENT

The Land Use Plan for the Moss Landing Community illustrates the geographic locations of the land use designations based on existing land uses and development, as well as the planned future buildout of the community. (See **Figure ML-9**). Thirteen land use designations, one overlay designation, and three Special Treatment Areas have been created for the Moss Landing Community Plan Area. The boundaries between land uses shown on the Land Use Diagram are intended to be exact in most locations, particularly where land is developed now. In undeveloped or un-subdivided areas, boundaries are approximate. The intended effect of the land use designations, the location of these designations, and the uses allowed within each, are set forth below.

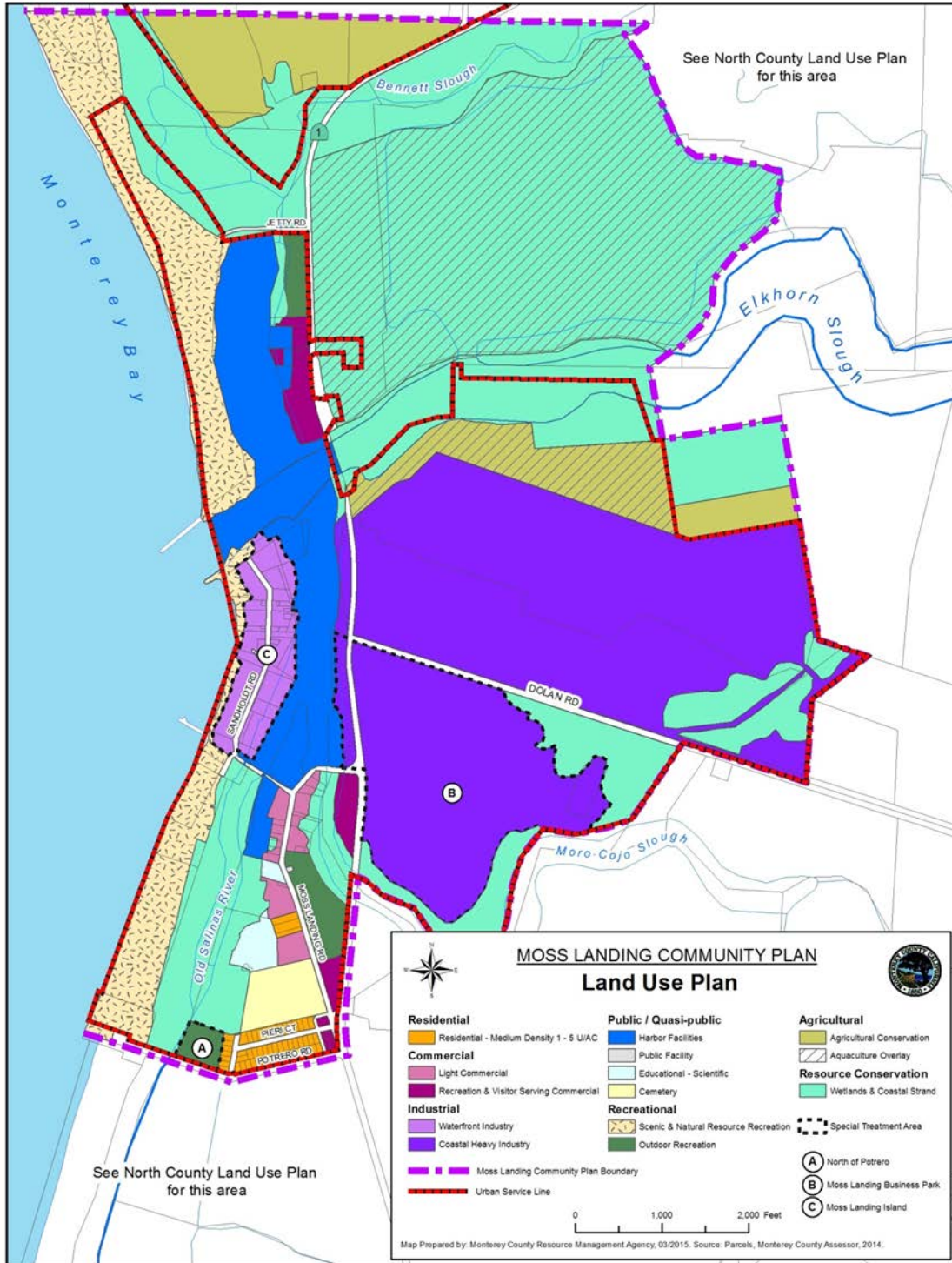


Figure ML-9. Land Use Diagram

5.4.1 Residential – Medium Density (1 to 4 Dwelling Units per Gross Acre)

Very little residential development currently exists within the Moss Landing Community Plan. Locations without environmental or topographical constraints to accommodate the County's housing needs are limited in Moss Landing. Medium density housing is the only residential category in the plan area and are based on the currently existing residential development.

Residential -Medium Density (1-4 dwelling units/acre) Land Use designation areas are located within the Heights Neighborhood north of Potrero Road and between Pieri Court and Laguna Place.

5.4.2 Commercial

There are two (2) types of commercial land use designations: 1) Recreation and Visitor-Serving Commercial; and 2) Light Commercial. The Coastal Act gives priority to visitor-serving commercial uses but at a lower priority than coastal dependent industry uses. In addition to the policies set forth for Recreation and Visitor-Serving Commercial Uses, the Recreation and Visitor-Serving Commercial policies and guidelines provided in North County Land Use Plan Section 4.3.6.E.4 shall also be applied.

A. Light Commercial

The Light Commercial Land Use designation area is located within the Village Center Neighborhood on both sides of Moss Landing Road. This designation provides the opportunity to mix commercial and residential uses and accommodate a broad range of light commercial uses. Antique shops, the Moss Landing Post Office and historical buildings such as the Pacific Coast Steamship Company (Captain's Inn at Moss Landing), lend a special character to this area and should be preserved, maintained and if necessary rehabilitated. Opportunities for providing a motel, a small neighborhood grocery store, low-cost rental housing units, and small-scale desalination facilities that produce water for on-site use only are allowed on undeveloped or underdeveloped parcels in these areas. Appropriate design and setback standards should be applied as a means of providing relief from "strip" development that can be an aesthetic nuisance to the community.

B. Recreation and Visitor-Serving Commercial

The primary purpose of this designation is to accommodate and allow a broad range of recreation and visitor serving uses. This term is used to describe uses that serve primarily visitors however is appropriate to also serve and accommodate those who live and work in the community. Although an absolute distinction between visitor-serving and neighborhood type commercial uses is difficult to make, visitor- serving uses would include restaurants, motels, service stations and antique shops. Small-scale desalination facilities provided for on-site use only would also be appropriate in this designation.

The plan designates four (4) areas for Recreation Visitor-Serving Commercial uses west of Highway as listed below:

- 1) The North Harbor area not including the areas designated as Harbor Facilities or Wetlands & Coastal Strand. The current uses include harbor facilities, parking facilities and unimproved land located near Jetty Road.
- 2) The South Harbor area west of Highway 1 and east of the Moro Cojo Slough. The current uses for this area include restaurants, a coffee shop, and produce stand.
- 3) The History and Heritage Center property located in the Heights Neighborhood, east of Moss Landing Road and west of Highway 1. (See **Figure ML-2** for the Moss Landing Neighborhoods Diagram). The Center currently includes permits to allow retail sales, a cheese factory, 30-unit motel, a restaurant and on-site parking.
- 4) Eight parcels located in the Heights Neighborhood east of Allen Street, west of Moss Landing Road and north of Potrero Road. The current uses at these properties include a restaurant, antique shop, liquor store and fishermen's supply store.

5.4.3 Industrial

The Moss Landing Community Plan establishes two designations for industrial uses: Waterfront Industry and Coastal Heavy Industry. The industries located in Moss Landing are generally dependent for their existence upon a location near the coastline, and as such are considered "coastal dependent". These industries include commercial fishing, aquaculture, energy facilities and manufacturing activities and are located within the Island Neighborhood, properties east of Highway 1, and a stretch of land between the south harbor and west of Highway 1. Coastal dependent industries are given priority by the Coastal Act (CA §30255) over other land uses on or near the coast. The intent of this plan is to encourage coastal dependent industrial facilities to expand within the existing sites, and be allowed reasonable growth consistent with the protection of the area's natural resources. Impacts to sensitive natural habitats that cannot be avoided by the future expansion of these facilities must be mitigated to less than significant to the maximum extent feasible.

A. Waterfront Industry

The primary purpose of this designation is to maintain a strong commercial fishing base and other maritime activities within the Moss Landing neighborhood called: "The Island." (see the narrative in Section 5.4.8.C and Policies 5.4.9.I.1 through 6 for an expanded description of allowed uses and development considerations for the "The Island Special Treatment Area"). Existing commercial fishing industries include canneries and fish processing companies, boat storage and repair facilities, marine supply stores, and other related facilities (e.g., fueling stations, private launching ramps, used boat sales businesses). In addition to commercial fishing industries, the Island contains marine research, engineering, and education facilities as well as a restaurant.

The plan recognizes an existing need for limited support uses within the Island such as a fishermen's dormitory, cafe, restaurant, etc. This plan provides the flexibility to allow commercial uses provided that these uses are compatible with the priority use of commercial fishing or provide the necessary goods and services that benefit those who work within the Island.

The Island has seen considerable growth in marine research and education over the last 30 years. Existing marine research and education facilities include office complexes, storage buildings, boat docks and storage, and laboratory facilities and classrooms.

Currently, several companies engaged in commercial aquaculture base their existing operations within the Island and use the Elkhorn Slough as a propagation area. These companies have existing buildings that house offices, laboratories, indoor growing tanks and other processing equipment within the Island. The plan encourages these uses by including them among the appropriate uses in the "Waterfront Industry" land use designation.

B. Coastal Heavy Industry

Located within the Moss Landing Community Plan Heavy Industry Land Use Area are two (2) energy-related facilities: the Moss Landing Power Plant and the Moss Landing Switch Yard, and one (1) industrial business park: the Moss Landing Business Park.

1. Moss Landing Power Plant

Moss Landing Power Plant is an energy generation facility that is bounded by Moss Landing Harbor to the west (including a narrow strip of land between the Harbor and Highway 1), Moss Landing Switch Yard to the north, agricultural land to the east and Dolan Road to the south. The facility burns natural gas delivered via underground pipelines. It also has the capability to draw seawater from two intake areas in Moss Landing Harbor, for cooling purposes. The cooling water is returned to the ocean via an existing discharge system that runs under the harbor and the Island neighborhood out into Monterey Bay. The facility also has a cooling water discharge system that extended north into Elkhorn Slough that is currently not in use. The marine terminal which includes the two tall smoke stacks and a fuel oil pipeline was discontinued when the power plant converted from fuel oil to natural gas in the 1990s. Recent permit approvals on this property have allowed the establishment of a Battery Energy Storage System for energy storage as part of its operation.

2. Moss Landing Switch Yard

Moss Landing Switch Yard is bounded on the south by Moss Landing Power Plant and on all other sides by agriculturally zoned land. The facility connects the power plant with the regional and interstate power distribution system. Similar to the Moss Landing Power Plant, the switch yard filed an application to allow establishment of a Battery Energy Storage System for energy storage as part of the operation.

3. Moss Landing Business Park

The Moss Landing Business Park is located south of Dolan Road, east of Highway 1 on approximately 182.6 acres and includes a narrow stretch of land approximately 7.7 acres located between the South Harbor and the west side of Highway 1. Historically the business park site east of Highway 1 was used for manufacturing purposes, specifically for the production of magnesia and refractory brick by using nearby resources including seawater from the ocean and dolomite from the Natividad Quarry. Today the business park property located east of Highway 1 near Dolan Road is being used for industrial offices, industrial shops, storage, and commercial cannabis activities. (see “The Moss Landing Business Park Special Treatment Area” narrative in Section 5.4.8.B below and Policies 5.4.9.H.1 and 2).

5.4.4 Public/Quasi-Public

There are four public/quasi-public uses provided in this plan: Harbor Facilities, Public Facilities, Educational-Scientific, and Cemetery. These areas are located west of Highway 1 within the North Harbor, South Harbor, Village Center, and Heights Neighborhoods and are further discussed below.

A. Harbor Facilities

The primary purpose of this designation is to accommodate and allow harbor uses. In addition to harbor property owned by the Moss Landing Harbor District (“District”), the District leases the Moro Cojo Slough portion of the harbor for boat berths. Appropriate harbor uses include docks, fueling facilities, offices, yacht clubs, picnic areas, recreational vehicle parks, dredge re-handling areas, potable water systems to supply docked boats, residential use of docked boats, water systems, marine research, education, maritime activities, harbor related commercial activities, and ancillary uses. This designation applies to:

- 1) Harbor District Office Property located north of the Moss Landing Road and Sandholdt Road intersection. Existing uses include but are not limited to the Harbor District Office, a parking lot, restrooms, storage, showers, laundry facilities, recreational vehicle park, dock space, staging areas, a harbor maintenance facility, charter service providers, and eating facilities.
- 2) A Portion of Property South of the Sandholdt Bridge and East of the Old Salinas River. Existing uses within this area include dry storage.
- 3) A Portion of Improved Property Surrounding the Elkhorn Yacht Club in the North Harbor. Existing uses within this area include a boat launching ramp, dry storage areas, and restroom facilities for non-yacht club members.
- 4) The In-Water Harbor Areas: All submerged lands and in-water harbor facility areas. Existing uses include but are not limited to loading docks, piers, boat berths, boat slips, dredging and residential use of docked boats.

Moss Landing Harbor District (A Special District)

Moss Landing is perhaps best known as a commercial fishing port and home port for research vessels operated by the Monterey Bay Aquarium Research Institute and Moss Landing Marine Laboratories. Moss Landing is also a popular tourist destination, where people come for restaurant dining, nature and whale-watching tours, sport fishing charters, and kayaking access into the Elkhorn Slough. In 1947 the Moss Landing Harbor District (“District”) was formed pursuant to the Federal Harbors and Navigation Code to operate and maintain the Moss Landing Harbor and ownership of harbor lands is deeded to the District by the State Lands Commission.

The Moss Landing Harbor lands encompass approximately 85 acres, not including the submerged lands of the harbor itself, and the District maintains approximately 610 boat slips within the Harbor. The Moss Landing Harbor District is the largest special district in Monterey County and is governed by a five-member board. Designated as a year-round port of safe refuge, Moss Landing Harbor provides safe, reliable refuge and marine services to seafarers from around the world.

For the entire Moss Landing Harbor, demand for commercial and recreational boat berths and related facilities far exceeds the available supply in the existing harbor area. Efforts to make optimal year round use of available berthing and support facilities, particularly in the South Harbor, are constrained by peaks created by the cyclical nature of the fishing industry upon which the planning process can have little effect.

Nonetheless, some of the physical constraints on maximizing the use of existing facilities can be addressed by land use planning and harbor management measures. In the South Harbor for example, the ability to intensify boat repair and fish processing activities will be considerably improved when bulkheading work along the western shoreline of the south harbor is completed. The limited supply of dry storage areas and underutilization of other areas that could be used for dry storage is a further constraint on efficient use of existing facilities. Constraints in the North Harbor include bank erosion, which has prevented maximum utilization of this area for harbor-related purposes. Expansion is limited ultimately by basin dimensions. However, when retaining walls are developed and dredging is completed along the shoreline, additional slips or other harbor support uses may be possible.

B. Public Facility

The primary purpose of this designation is to accommodate a range of public uses including: sewer and water pump stations and administrative, management, and maintenance facilities. One small parcel located on Moss Landing Road has been given this designation. Currently it is being used as a Wastewater Facility owned and operated by Monterey One Water, previously known as Monterey Regional Water Pollution Control Agency.

C. Educational - Scientific

The primary purpose of this designation is to accommodate and allow education and scientific uses. Appropriate uses include: educational facilities, marine laboratories, small-scale desalination facilities for on-site use only, and ancillary uses. Two facilities given this

designation are the Moss Landing Marine Lab campus and the school district office building on Moss Landing Road both within the Village Center Neighborhood. Future redesign and expansion of Moss Landing Marine Labs shall not be permitted to encroach upon sensitive dune habitats south of the existing site and east of the Old Salinas River.

D. Cemetery

The primary purpose of this designation is to accommodate and allow cemetery uses. Appropriate uses in this designation include cemeteries and ancillary uses. The Moss Landing Cemetery is shown on the plan map on the west side of Moss Landing Road within the Heights Neighborhood.

5.4.5 Recreational

There are two types of recreational land uses: Scenic & Natural Resource Recreation and Outdoor Recreation. These land use areas possess recreational land use value and can provide for recreational opportunities for the public, including low- and moderate-income persons.

A. Scenic & Natural Resource Recreation

The primary purpose of this Land Use Designation is to accommodate and allow scenic and natural resource recreation uses within the Moss Landing State Beach areas of the Community Plan. Low-intensity recreational and educational uses that are compatible with the natural resources of the area and require a minimum level of development, accommodate basic user needs, and necessitate minimal alteration of the natural environment are appropriate in this designation. Uses may include general beach use, surfing, pedestrian trails, hiking, fishing, picnicking, nature studies and horseback riding. Ancillary facilities contemplated in this designation are limited to improved parking, restrooms, and fish cleaning facilities at Moss Landing State Beach.

B. Outdoor Recreation

The primary purpose of this designation is to accommodate and allow outdoor recreation uses located in two areas within the Community: 1) Property located north of the History and Heritage Center, west of Highway 1 and east of Moss Landing Road; and 2) within a 4.7-acre parcel located north of Potrero Road, east of the Old Salinas River and west of the Heights Neighborhood's residential development. (see "North Potrero Road Special Treatment Area" narrative in Section 5.4.8.A and Policy 5.4.9.J.1). Moderate-intensity recreational use with accompanying facilities compatible with the recreational and natural resources of the site are appropriate. In addition to the uses permitted in the Scenic & Natural Resource Recreation category, appropriate facilities include children play structures, tent and recreation vehicle campgrounds, improved restrooms, fish cleaning facilities, interpretive/visitor centers, viewing platforms, and other low-intensity uses.

5.4.6 Agricultural

Preservation of agricultural lands is the second highest priority of the Coastal Act. It is ensured in this plan by designating all lands in agricultural production, or suitable for such use, as “Agricultural Conservation” and by allowing aquaculture uses in these areas where appropriate as discussed below.

A. Agricultural Conservation

The primary purpose of this land use designation is to accommodate and allow agricultural uses. Agriculture, agriculture-related uses, and housing ancillary to the agricultural use sited on the less agriculturally viable areas of the parcel are appropriate uses in this designation. There are two (2) Agricultural Conservation Land Use designated areas located in Moss Landing including: 1. North of Bennett Slough and west of Highway 1; and 2. South of Elkhorn Slough and north of the Moss Landing Power Plant and Moss Landing Switch Yard properties. These areas should be provided maximum protection against development to maintain consistency with the agricultural policies of Section 2.6 of the North County Land Use Plan.

B. Aquaculture Overlay

Aquaculture, is defined in the California Aquaculture Development Act (Public Resources Code Section 825 et seq.) as, "...The culture and husbandry of aquatic organisms, including but not limited to fish, shellfish, mollusks, crustaceans, kelp, and algae." It is an agricultural industry that is growing rapidly in many parts of the world.

Aquaculture is shown as an appropriate Land Use Overlay for certain areas located near the Elkhorn Slough and Bennett Slough and is compatible with the Resource Conservation and Agricultural Conservation Land Use Designations within Moss Landing. Aquaculture facilities in these areas are limited to non-structural development such as ponds or basins, piers, walkways, or minor storage facilities for tools. Aquaculture processing facilities/buildings is a higher intensive use and therefore would be appropriately located in the Industrial Land Use designated areas and not within the Aquaculture Land Use Overlay. Refer to policies contained in Section 2.7 – Aquaculture of Chapter 2.

5.4.7 Resource Conservation

Protection of sensitive resources, plant communities and animal habitats are emphasized in this land use designation. The Resource Conservation areas within the Moss Landing Community area contain Wetlands and Coastal Strand resource areas as discussed below.

A. Wetlands and Coastal Strand

The primary purpose of this designation is to protect and conserve wetland and coastal strand resources. Only very low intensity uses and supporting facilities compatible with protection of the resource, including low-intensity recreation, education and research, are allowed. In certain

designated areas, aquaculture is also appropriate. This designation is used in various parts of the planning area, including Bennett Slough, Elkhorn Slough, Moro Cojo Slough, and the Old Salinas River, and in wetland areas immediately east of the heavy industrial uses along Dolan Road.

5.4.8 Special Treatment Area Overlays

The "Special Treatment" designation is intended to facilitate a comprehensive planned approach towards developing specifically designated areas intended for intense levels of development or that require special consideration due to their proximity to unique or valuable resources. There are three (3) special treatment area overlays in Moss Landing including: The Island, North Potrero and Moss Landing Business Park.

A. North Potrero Special Treatment Area

The North Potrero Special Treatment Area is provided for one parcel located north of Potrero Road, east of the Old Salinas River and west of the Heights Residential Neighborhood. The intent of this overlay is to establish the parameters for development within the area to address concerns related to the site's proximity to unique or valuable natural resources directly west and north of the site and to the residential neighborhood to the east of the site. This overlay designation is used in combination with the Outdoor Recreation designation.

B. Moss Landing Business Park Special Treatment Area

The Moss Landing Business Park Special Treatment Area covers the Moss Landing Business Park Property located south of Dolan Road, east of Highway 1, on approximately 182.6 acres and includes a narrow stretch of approximately 7.7 acres of land located between the South Harbor and the west side of Highway 1. The intent of this overlay is to establish the parameters for development of the Moss Landing Business Park, including restricting the development intensity of the site. Development of the site requires the approval of a comprehensive General Development Plan that describes proposed circulation improvements and their location, categories of proposed land uses and their location, and an estimate of potential development intensity for each proposed use. The General Development Plan should address the coastal dependent/related/priority nature of proposed uses (including the use of seawater in industrial operations), potential land use conflicts between different categories of use, and the protection of unique natural resources on and around the site.

C. The Island Special Treatment Area

The Island Special Treatment Area is located on the westernmost spit of land that extends south from the mouth of Moss Landing Harbor to approximately the Sandholdt Bridge. The intent of this Special Treatment Area is to accommodate growth in marine research, engineering, and education, in a manner that compliments, maintains, and strengthens Moss Landing's traditional harbor activities, commercial fishing base, and maritime industries. This overlay designation is used in combination with the "Waterfront Industry" designation.

5.4.9 Land Use Policies

In addition to the Land Use policies contained in Chapter 4 of this plan, development within the Moss Landing Community Plan area must also be consistent with the applicable land use policies listed below.

A. Key Policy

[5.5.1 from '82] Existing coastal dependent and related industries in Moss Landing have local, regional, statewide and, in some cases, national significance. Accordingly, the county shall encourage maximum use and efficiency of these facilities, and to allow for their reasonable long-term growth consistent with maintaining the environmental quality and character of the Moss Landing Community and its coastal resources.

B. General Policies

1. [2019 ML-2.17 CCC] Use of existing and proposed land-based facilities that support commercial boating should not jeopardize the protection of public access.
2. [1982 Policy 5.3.2.1] Commercial fishing facilities shall be protected and, where feasible, upgraded. Commercial fishing shall have priority for berthing space in the South Harbor, and recreational boating facilities shall not interfere with the needs of the commercial fishing industry.
3. [2019 ML-2.11] The County of Monterey supports the development of appropriate recreation uses and visitor-serving uses in the harbor area and the improvement of public recreational boating facilities.
4. [2019 ML-2.12] The County of Monterey encourages the use of existing piers for water access and recreational purposes when compatible with commercial fishing uses.
5. [1982 Policy 5.3.3.6] The Sandholdt Pier should be rebuilt to accommodate public access, commercial fishing and other appropriate maritime commercial uses.
6. [1982 Policy 5.3.3.13] Additional public restroom facilities should be provided in the North Harbor area.
7. [1982 Policy 5.3.3.4] The capacity of dry dock storage areas should be increased when needed and new dry storage areas should be developed. Measures should be taken to ensure that grading and surfacing work performed to provide additional capacity will not adversely affect water quality in the harbor.
8. [1982 Policy 5.3.3.2] Legal remedies should be investigated to prevent berthing of unseaworthy boats in the harbor and abandonment of boats in dry storage areas.

9. [2019 ML-2.1] Infrastructure improvements necessary to accommodate new development shall not be the financial responsibility of the existing community and shall be funded by the developer.
10. [2019 ML-2.9]The County supports Caltrans studying the feasibility of constructing and maintaining a pedestrian connection across Highway 1 south of Elkhorn Slough. Such connection shall be funded through Community fair share contributions and other local, State and Federal funding.
11. [ML-3.1] New or expanded development shall provide adequate parking, either on or off site, and safe access, including necessary turning lanes, acceleration lanes, and signing.

C. *Specific Policy - Commercial*

1. [2019 ML-2.2 CCC] Development in Light Commercial and the Recreation and Visitor-Serving Commercial land use designations shall be allowed (depending on water and wastewater availability and in accordance with protection of coastal resource policies) in accordance with the following provisions:
 - a. Permit a total of up to 150 overnight accommodation units. Hotel and Motel units shall be provided by several smaller establishments not exceeding 30 units each. Hotel and Motel units shall not be concentrated in any area of the community. Bed and Breakfast facilities shall be limited to no more than ten guest rooms. Up to 30 units of the 150 total units may be allowed within the Waterfront Industry land use designation.
 - b. Encourage improvement of existing commercial facilities.
 - c. Design and locate new commercial facilities to minimize traffic impacts and avoid natural resource impacts to the greatest extent feasible.
 - d. Encourage the development of lower cost commercial recreation and visitor-serving facilities.
 - e. Encourage mixed use commercial development that includes housing units.
 - f. Encourage development of commercial uses that provide necessary goods and services to coastal dependent industries and local recreational uses.

D. *Specific Policy - Industrial*

1. [2019 ML-2.5]The County of Monterey shall require the approval of a General Development Plan prior to considering future expansion, improvement, or other development of industrial facilities within the Moss Landing Community Plan.

E. Specific Policies - Public/Quasi Public

1. [2019 ML-2.13 CCC] The County of Monterey supports use of harbor facilities to allow appropriate maritime activities, such as commercial fishing, recreational boating, and visitor-serving activities consistent with the conservation of the area's wetlands, dunes and other coastal resources.
2. [1982 Policy 5.3.3.5] Provision of an additional boat fueling facility should be considered.
3. [Updated 1982 Policy 5.3.3.7] An additional boat launching ramp or hoist should be provided in the harbor area.

F. Specific Policy - Recreational

1. [2019 ML-6.4 CCC] Low and moderate cost recreation and visitor-serving facilities shall be prioritized.

G. Specific Policies - Resource Conservation

1. [2019 ML-2.8 CCC] The County of Monterey shall not permit construction of new water discharge outfalls in all sloughs. The County supports limiting expansion or reuse of existing, cooling water discharge outfalls in all Sloughs to protect natural resources. If the existing discharge rate from any existing facilities (e.g., the Power Plant) is to be increased, environmental studies shall be undertaken to determine the effect.
2. [2019 ML-2.22 CCC] Prior to acting on any proposal that relates to wetlands and/or sensitive habitat restoration projects located within the Elkhorn Slough watershed or have potential effects on the sloughs or Old Salinas River channel within the community, the County shall provide written notice and consult with the Moss Landing Harbor District.

H. Specific Policies – Moss Landing Business Park Special Treatment Overlay

1. [ML-2.10] Total structural development in the Moss Landing Business Park Special Treatment Area shall be limited to 2,000,000 square feet of floor area of structure(s) or 36,000 gpd wastewater, whichever is more restrictive. Above ground seawater tanks are not included in the square footage limitation.
2. [2019 ML-NEW1] Development within the Moss Landing Business Park Special Treatment Area shall be subject to the following:
 - a. Uses are limited to coastal-dependent uses, coastal-related industrial uses, and the following coastal priority uses: Natural Resource Preservation and Protection, and Agricultural Uses (including research, commercial cannabis activity and aquaculture).

- b. Residential (other than caretakers' units) and Commercial development is not allowed.
- c. Direct motor vehicular access to the area located west of Highway 1 is not allowed from Highway 1 or Moss Landing Road.
- d. Approval of a comprehensive General Development Plan that analyzes the following:
 - i. Proposed circulation improvements and their location;
 - ii. Categories of proposed land uses and their location;
 - iii. An approximation of the proposed potential development intensity for each proposed use;
 - iv. The coastal dependent/related/priority nature of proposed uses (including the use of seawater); and
 - v. Potential land use conflicts between different categories of use, and the protection of unique natural resources on and around the site.
- e. Development of industrial operations that can reuse waste heat or other effluent streams from industrial facilities within the Moss Landing Community, or that utilize coastal resources, as part of their processes is encouraged.

I. Specific Policies - The Island Special Treatment Overlay

1. [Modified replacement of draft 2017 Policy 2.23 with 1982 Policy 5.6.3.1] The highest priority should be given to preserving and maintaining all fish handling and processing facilities within the Island Special Treatment Area. According to both the State Lands Commission Charter for the Moss Landing Harbor District and the Coastal Act mandate, it is imperative that commercial fishing activities be protected.
2. [2019 Policy No. NCLUP-ML-NEW2, 1st Part] The Island Special Treatment Area shall accommodate growth in marine research, engineering, and education, in a manner that complements, maintains, and strengthens Moss Landing's traditional harbor activities, commercial fishing base, and maritime industries while being consistent with applicable coastal resource protection policies and safety hazards policies.

Areas of parcels identified within a coastal hazard area at any time during the projected life of a proposed project shall generally be considered unsuitable for development. In coastal hazard areas, low intensity or open space uses will be encouraged as the most appropriate land uses. Any area where development is not allowed, or restricted to minor

and/or ancillary development, due to coastal hazards shall be placed in a conservation easement or rezoned to a district that similarly limits development.

3. [2019 Policy No. ML-New2, 2nd Part] The County of Monterey will develop a Waterfront Industry Zoning District that allows uses related to these industries subject to the following:
 - a. Aquaculture-related uses are encouraged that emphasize the development of aquaculture concepts that can be exported to less physically constrained locations.
 - b. A maximum of one full-service restaurant shall be allowed. Other small-scale commercial establishments (e.g., fishing and boating supplies and coffee huts) that support the commercial fishing industry are also allowed.
 - c. New residential uses are not allowed.
 - d. Allowed uses shall include commercial fishing industries; marine education, research, and engineering; boat storage and repair; and commercial and recreational boating uses and support facilities including fisherman dormitories.
4. [1982 Policy 5.3.3.1] Encourage the conversion of underutilized or unused parcels on the Island to land uses that are supportive of the commercial fishing industry, marine research and education, and aquaculture.
5. [2019 ML-2.15 CCC] The County of Monterey supports the development of public parking/access at a location near the northwest end of the Island consistent with the protection of coastal resources.
6. [2019 ML-2.24 CCC] Monterey County shall require new development on the Island to provide either on-site parking or a dedicated off-site parking facility consistent with protection of coastal resources. Shared parking may be considered where it can be reserved for the use through conditions of approval.

J. Specific Policy - North Potrero Road Special Treatment Area

1. [2019 ML-New3] Development of the property located at APN 133-201-010-000 (North of Potrero Road, east of Old Salinas River and west of the Heights Residential Neighborhood) shall be compatible with existing resources and the adjacent land uses. The County supports the use of the site for habitat restoration and/or enhancement.

5.5 RECREATION AND PUBLIC ACCESS

A major reason for the passage of the Coastal Initiative (Proposition 20) in 1972 was to ensure preservation of access to the coast and protection of coastal recreation resources. One of the principal goals of the Coastal Act of 1976 is to "maximize public access to and along the coast

and maximize public recreational opportunities in the coastal zone consistent with sound resource conservation principles and constitutionally protected rights of private property owners".

At Moss Landing State Beach, problems with sand blowouts, littering, fires in the dunes, crowded parking conditions, congestion along Jetty Road, and illegal camping, limit the aesthetic appreciation and quality of the recreational experience. Uncontrolled access to fragile sand dunes has resulted in trampling of dune vegetation and severe damage to the dunes themselves. Similar problems exist at Salinas River State Beach and the sand dunes south of the Marine Labs.

Overall, the lack of adequate management and public facilities at the two state beaches is a pressing problem in urgent need of correction. Improved parking facilities and restrooms are needed at both beaches. Other facilities needed at Moss Landing State Beach include fish cleaning tables, fire pits and bicycle racks. Finally, the lack of adequate public transit service to the two state beaches limits the degree to which either facility can be used and appreciated by those dependent upon public transit services.

Opportunities for public access to the Island Beach are limited by inadequate parking, as well as by the developed character of this area. Improved public access and low intensity recreational use also are needed(?) in Bennett and Elkhorn Sloughs. The Moro Cojo Slough, by virtue of its proximity to Highway 1, represents a potential recreational opportunity that could be appreciated by the public in addition to the areas above. **Figure ML-10** shows the Public Access and Recreation Plan.



Figure ML-10. Public Access and Recreation Map

5.5.1 Recreation and Public Access Policies

The following Recreation and Public Access policies supplement the more general coastal public access policies contained in the North County Land Use Plan (Chapter 6 “Public Access”). Therefore, any proposed development within the Moss Landing Community must be reviewed in accordance with the applicable North County Land Use Plan and Moss Landing Community Plan policies that govern the Moss Landing Community Area.

A. Key Policies

1. [ML-6.3 & 82’ 5.4.1] The Moss Landing community contains a variety of sandy beaches, dunes, estuaries and wetland habitats which offer diverse recreational opportunities. In the spirit of the Coastal Act, public access to these areas shall be provided. However, conservation of the sensitive natural resources of the coastline is an even higher priority. The County’s policy is to encourage an optimal level of development of recreation and public access opportunities consistent with the conservation of coastal resources.
2. [New Policy Suggested by CCC Staff] Development of the Monterey Bay Sanctuary Scenic Trail (which is a piece of the larger California Coastal Trail) through the Moss Landing Community Plan area is a high priority and shall be constructed and completed in a manner that balances maximum public pedestrian and bicycle access, protection of coastal resources (including but not limited to sensitive habitats, water quality, and visual resources), educational and interpretive opportunities, and integration with Harbor and other coastal-dependent operations.

B. General Policy

1. [5.4.2 from ’82] General policies on shoreline access and development of recreation and visitor-serving facilities contained in other chapters of this plan are incorporated by reference in the Moss Landing Community Plan. These policies emphasize permanent protection of major access points and property management by appropriate public agencies. New access and recreation areas should be guided by detailed management plans, and the rights of residents and property owners should not be jeopardized by irresponsible public access. Low and moderate cost recreation and visitor-serving facilities are preferred to higher cost facilities.

C. Specific Policies

1. [2019 ML-6.8] The County of Monterey shall review development projects and public agency planning documents to seek opportunities to increase public access to Bennett Slough, Elkhorn Slough, and Moro Cojo Slough and the sand dunes south of the Moss Landing Marine Laboratories, consistent with coastal resource protection policies.
2. [2019 ML-6.9] Controlled public access to Moro Cojo Slough and Bennett Slough shall be explored. Provision of boardwalks constructed of permeable materials should be favored over foot trails where the potential for impacts to wetland habitat exists.

3. [2017 ML-3.9] The County of Monterey shall work with property owners and California State Parks to provide beach access in the area immediately south of Sandholdt Bridge that is accessible to persons with disabilities, and in other areas owned by State Parks.
4. [ML-3.10] The County of Monterey shall require new development on the Island to incorporate new, maintain existing, or make improvements to existing, public access as necessary.

5.5.2 Parking Facilities

Locations for improved parking facilities are shown on **Figure ML-10** for the Plan area. It is recommended that parking areas located along Jetty Road be limited consistent with the protection of coastal resources. Consistent with public access policies in Chapter 6 of the North County Land Use Plan, parking improvements shall be made only upon completion of more detailed management plans for the area by the State Department of Parks and Recreation. Care should be taken during construction of parking facilities at the Jetty Road curve, to avoid filling the Bennett Slough wetlands or disrupting wildlife and shorebird habitat.

Parking improvements are proposed for the South Harbor area. The existing Caltrans Park and Ride facility is shown on the west side of Highway 1 and south of Dolan Road. Future parking is also shown at the Southwest corner of Moss Landing Road North and Highway 1. Lastly, general upgrading of the existing parking area at Salinas River State Beach just north of Potrero Road is also needed.

A. Specific Policy

1. [2017 ML-6.12] The County of Monterey, in collaboration with property owners, shall work to provide an appropriate number of parking spaces based on a detailed management plan that considers coastal resource limitations along Jetty Road.

NORTH COUNTY LAND USE PLAN POLICY INSERTIONS

(Not part of the draft MLPC)

Section 2.8.3: Insert the following new “Hazards” subsection:

D. Coastal Hazards

1. The County shall monitor the latest sea level rise and climate change information. The information gathered should address multiple time frame horizons (e.g., 2030, 2050, and 2100) as well as multiple sea level rise scenarios, as appropriate.
 - a. The County shall obtain the most current government issued floodplain/coastal hazards information that affects the most vulnerable areas of North County.
 - b. The County shall join or facilitate collaborative climate change adaptation efforts with local, regional, state, and federal entities to promote restoration or enhancement of natural ecosystems, such as coastal wetlands and sandy beaches.
2. Maintain the integrity and adaptability of essential public facilities that are vulnerable to ~~natural~~ coastal hazards. Locate new essential public facilities outside of ~~natural~~ coastal hazard areas. The County shall identify County owned infrastructure that could be compromised by coastal hazards. Replacement, reconstruction, or relocation of public infrastructure shall be designed and constructed to avoid effects from coastal hazards for the planned life of the infrastructure. Needed infrastructure improvements or relocation shall be included in the County’s applicable Capital Improvement Program.
3. Where full adherence with all LCP policies, including setbacks and other hazard avoidance measures, preclude a reasonable economic use of the property as a whole, minimum economic use and/or development of the property shall be allowed necessary to avoid an unconstitutional taking of private property without just compensation.
4. Incorporate an emergency response plan addressing climate change hazards impacts within the Monterey County Office of Emergency Services’ Hazards Mitigation Plan in an effort to reduce loss of life and property by lessening/mitigating the impacts caused by climate change hazards.

Section 2.4.2: Amend the “General Policies” Section to add the following:

7. Shoreline protective devices, including revetments, breakwaters, groins, seawalls, cliff retaining walls, and other such construction that alters natural shoreline processes, shall be permitted when required to serve coastal-dependent uses, protect existing principal structures or public beaches, or eliminate or mitigate adverse impacts on local shoreline sand supply, and when there is no feasible, less environmentally damaging alternative. Any such structures shall be sited to avoid sensitive resources, if feasible, and adverse

impacts on all coastal resources shall be mitigated. Alternatives considered under this alternative should include relocation of the threatened development, beach nourishment, non-structural drainage and native landscape improvements, or other similar non-structural options.

Section 4.3.5: Amend the “General Policies” Section to add the following:

10. Development meeting the threshold of a replacement structure shall be brought into conformance with all coastal resource protection policies.
11. Subdivisions and lot line adjustments shall not result in parcels where development would be located in areas vulnerable to coastal hazards except where the new lot(s) would be permanently protected for open space, public access, or other similar purposes consistent with the LCP.
12. Encourage property owners to reduce greenhouse gas emissions by using sustainable measures (e.g., weatherizing techniques and solar panels), when compatible with the community character, coastal viewsheds and the protection of coastal resources.

Section 6.3.1: Modify Public Access General Policy No. 1 as follows:

Major access areas, whether in public or private ownership shall be permanently protected for long-term public use. They shall be improved where necessary and managed properly. Major access locations are:

- (1) Giberson Road - access to Zmudowski State Beach
- (2) Jetty Road - access to Bennett Slough and Moss Landing State Beach
- (3) Sandholdt Road - access to "The Island" beaches and ~~North~~ South Harbor
- (4) Moss Landing Marine Lab - access to beach
- (5) Potrero Road - access to Salinas River State Beach
- (6) Monterey Dunes Way - access to Salinas River State Beach
- (7) Kirby Park - access to Elkhorn Slough

Appendix B: Add the Following Glossary Terms:

- 10.5 **Coastal Hazards:** An area that includes, but is not limited to, episodic and long-term shoreline retreat and coastal erosion, high seas, ocean waves, storms, tsunami, coastal flooding, landslides, bluff and geologic instability, high liquefaction, and the interaction of same, and all as impacted by sea level rise.
- 69.5 **Shoreline Protective Devices:** Structures along the shoreline that are used to protect development against coastal hazards, including but not limited to seawalls, revetments,

gunite, sheet piles, breakwaters, groins, bluff retention devices, retaining walls, and pier/caisson foundation and/or wall systems.

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Exhibit C-1

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EXHIBIT C-1

DISCUSSION RELATED TO GROUNDWATER AND BACKGROUND INFORMATION ON HYDROGEOLOGICAL STUDIES AND REPORTS

Groundwater

The Salinas Valley Groundwater Basin (SVGB) is comprised of eight subbasins. The 180/400-Foot Aquifer Subbasin lies at the northern end of the Salinas Valley, which includes the area under most of the Moss Landing Community Plan, contains multiple hydrogeologically distinct confined or “pressure” aquifers, including the Pressure 180-Foot and the Pressure 400-Foot Aquifers, historically the most heavily exploited of the subbasin’s aquifers. The names of the aquifers refer to their approximate depth below ground level.

The thickness of the Pressure 180-Foot Aquifer Subbasin varies from 50 to 150 feet in the Salinas Valley, with an average of approximately 100 feet. The Pressure 180-Foot Aquifer Subbasin may be in part correlative to older portions of Quaternary terrace deposits or the upper Aromas Red Sands, important water-bearing units north of the Salinas Valley. More recent studies suggest strata associated with the Pressure 400-Foot Aquifer Subbasin exists not only in the 180/400-Foot Aquifer Subbasin, but also in the lower Forebay Aquifer Subbasin, which lies south of Gonzales. The Pressure 400-Foot Aquifer Subbasin has an average thickness of 200 feet and consists of sands, gravels, and clay lenses. The upper portion of this aquifer may be correlative with the Aromas Red Sands and the lower portion is associated with the upper part of the Paso Robles Formation. The Pressure 180-Foot Aquifer Subbasin is separated from the Pressure 400-Foot Aquifer Subbasin by an extensive zone of fine sediments, predominantly blue clays, called the 180/400-Foot Aquitard, which ranges in thickness from 10 to 70 feet (California Department of Water Resources 2004).

An additional aquifer (formerly referred to as the 900-Foot Aquifer and now known as the Pressure Deep Aquifer) below the Pressure 400-Foot Aquifer Subbasin is present in the northern Salinas Valley, with stratigraphically equivalent units extending south into the Forebay Aquifer (central Salinas Valley). This deeper aquifer consists of alternating layers of sand-gravel mixtures and clays (up to 900 feet thick), rather than a distinct aquifer and aquitard.

Seawater Intrusion

An imbalance between the rate of groundwater withdrawal and recharge has resulted in overdraft conditions in the Salinas Valley Groundwater Basin, which has allowed seawater from Monterey Bay to intrude inland into fresh water aquifers: approximately six miles in the Pressure 180-Foot Aquifer Subbasin (**Figure 1a**) and approximately two miles in the Pressure 400-Foot Aquifer Subbasin (**Figure 1b**). The recent drought has caused additional intrusion as described at the public hearings in July and November 2017 described above. Since 1949, an average of 10,000 acre-feet of seawater per year has intruded into the 180/400 Foot Aquifer Subbasin. Projects initiated by the Monterey County Water Resources Agency (MCWRA) and its predecessors, including construction of two reservoirs, the Castroville Seawater Intrusion Project (CSIP) and the Salinas Valley Water Project (SVWP), were designed and constructed to help attain a

hydrologically balanced groundwater basin and halt the long-term trends of seawater intrusion (Cardno ENTRIX 2013).

MCWRA aims to halt seawater intrusion by bringing the Salinas Valley Groundwater Basin into balance through a three-part strategy: developing surface water sources to replace groundwater, stopping groundwater pumping at the coast, and moving surface water to the northern portions of the Salinas Valley to reduce pumping. Construction of the Nacimiento and San Antonio reservoirs was a key part of this strategy. CSIP and SVWP are two recent projects, of many, implemented by MCWRA to further implement the strategy, by reducing coastal pumping. SVWP was approved in 2003 and construction was completed in January 2010 (Monterey County Water Resources Agency, 2010). The two major components of the SVWP are the modification of the Nacimiento Dam spillway and construction of an inflatable diversion dam on the lower Salinas River.

The Salinas Valley Water Project increases summer flows and groundwater recharge along the Salinas River, except during prolonged drought periods, and the diverted river flows are blended with the recycled water for the CSIP project. The modeling developed for the SVWP predicts a rise in lower Salinas Valley groundwater levels for at least 35 years following SVWP implementation (United States Army Corps of Engineers and Monterey County Water Resources Agency 2001, Figures 5.3-13 through 5.3-17). Coastal groundwater quality monitoring occurs annually during the peak pumping season. Samples are collected twice per season at 96 agricultural wells and 35 dedicated monitoring wells and analyzed for general minerals. Chloride concentration is used as a proxy for indicating seawater intrusion with several other geochemical tools used for verification and validation. The 500 mg/L chloride concentration contours are used to develop seawater intrusion maps in odd numbered years.

Salinas Valley Water Project implementation began in 2010 and groundwater levels were shown to rise, while the rate of seawater intrusion initially appeared to have slowed to a halt for a couple years. Since that time, as of 2017, a drought resulted in lowering water levels and updated seawater intrusion maps reflect more recent basin conditions. A July 2017 report to the Monterey County Board of Supervisors, Board of Supervisors of the Water Resources Agency, and the Water Resources Agency Board of Directors showed increased seawater intrusion compared to the maps developed at the beginning of the recent five-year drought. In November 2017, new maps were presented to the Board of Supervisors as part of a report that showed increased seawater intrusion in recent years in the Pressure 180-Foot and Pressure 400-Foot Aquifer Subbasins. These short-term data periods do not yet provide any certainty about the efficacy of the SVWP in stabilizing water levels or seawater intrusion in the longer term. In general, a study period of at least ten years is needed to determine what benefits are being provided by the SVWP. A longer timespan may be necessary when the study period includes a prolonged drought, as the most recent studies include.

The projects described above are the foundation of the projects to halt seawater intrusion; though more are necessary and are currently being worked on. Additional projects include: a) the Salinas River Stream Maintenance (which helps with flood control, though it also removes vegetation from the channel that uses water, thus not allowing the water to be delivered to the coast), b) the Monterey County Resource Conservation District Arrundo removal project (same premise as previous project; Arrundo is presumed to transpire somewhere between 40,000 and 60,000 acre-feet of water per year), c) the Interlake Tunnel Project, and d) the SVWP Phase II, which is currently scheduled to be on line in 2026.

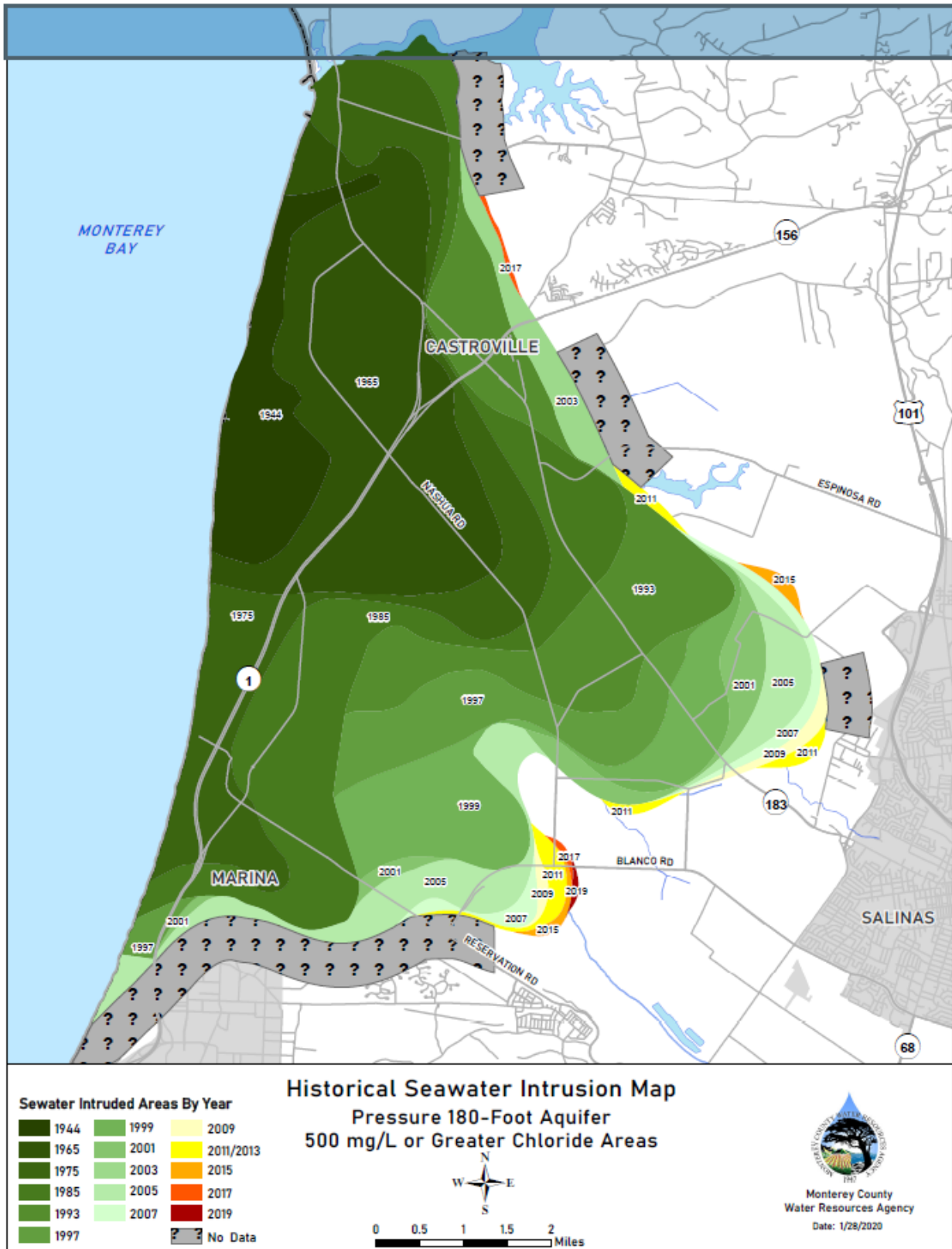


Figure 1a. Historical Seawater Intrusion Map – Pressure 180 Foot Aquifer

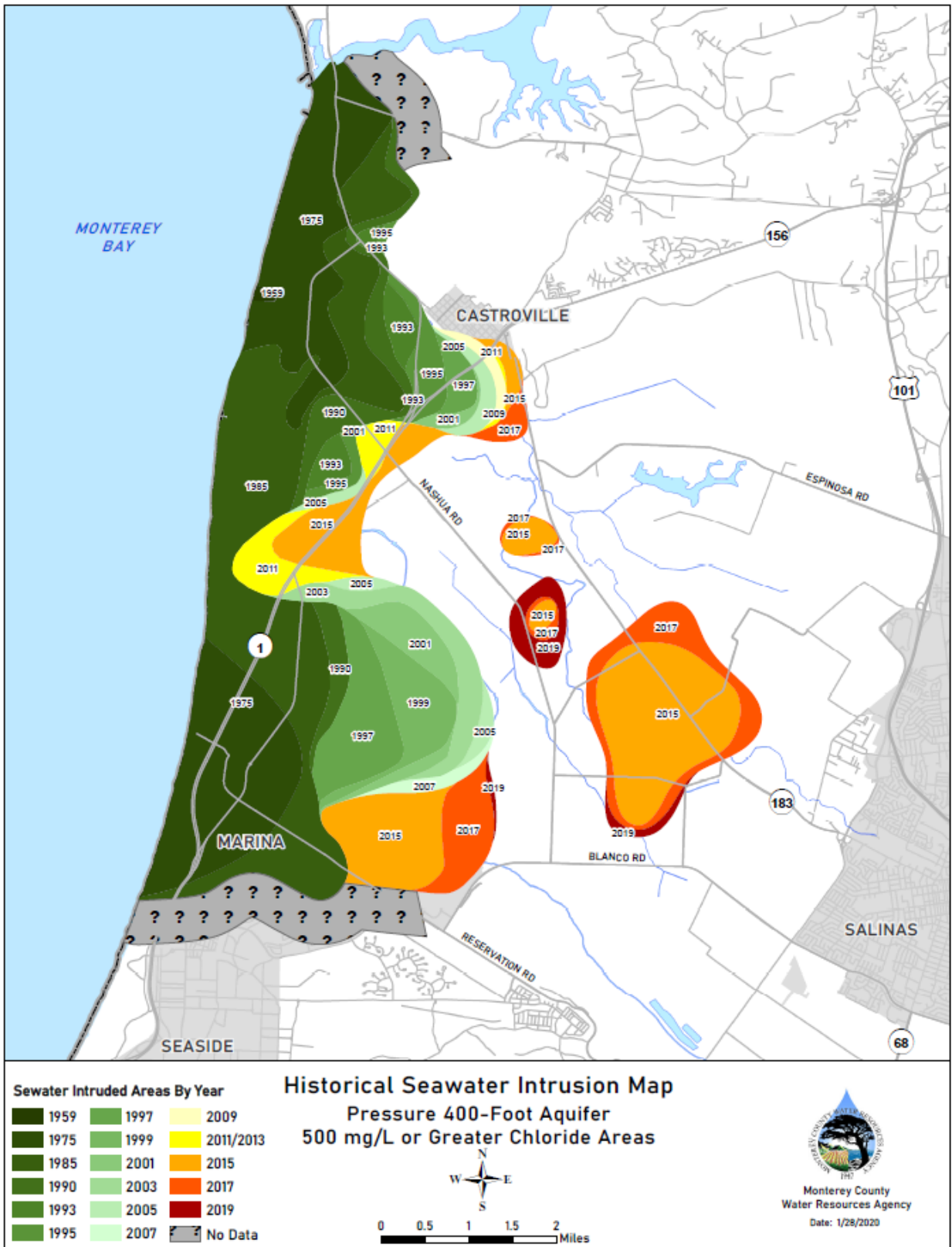


Figure 1b. Historical Seawater Intrusion Map – Pressure 400 Foot Aquifer

Groundwater Studies

1995 North Monterey County Hydrogeologic Study (Fugro West, Inc.)

A comprehensive hydrogeologic study prepared for the Monterey County Water Resources Agency (<https://www.co.monterey.ca.us/home/showdocument?id=19566>) that looked specifically at North County¹ and concluded the following:

“Previous reports have documented the study area to have been in a state of chronic overdraft since the 1950’s. This finding is confirmed by this report...The chronic overdraft of the [area] has (sic) resulted in falling water levels and the degradation of groundwater by sea water. Excessive nitrogen loading has rendered ground water nonpotable in many areas. Supplemental water supplies for the area have been recommended since the 1950’s. However, the delivery of water to the area has always been judged to be too expensive...Without a supplemental supply and distribution system, water supply problems in the area will need to addressed (sic) by demand management.” (Page 101)

The conclusion section of this study as quoted above is attached as **Exhibit C-2**.

The 1995 study is the most recent study that focuses specifically on North County in a comprehensive manner. To summarize, agriculture accounts for about 85 percent of the groundwater in North County. At projected buildout (under the 1982 LUP and the 1982 County General Plan), the study calculated that agriculture would use 82 percent of the groundwater, but with most of the future demand coming from additional agriculture.

The Springfield Terrace subarea, north of Elkhorn Slough, has significant seawater intrusion problems. The 1995 study stated that groundwater levels had fallen below sea level, with the groundwater surface falling about five to ten feet from 1979 to 1994.

The Highlands subarea, which is east of Moss Landing, is described as an area where “aggregate pumping is contributing to chronic storage depletion.” The study stated that groundwater levels had fallen below sea level in many areas of the Highlands subarea, with a pumping trough 10 to 25 feet below sea level paralleling the coast, 2 to 4 miles inland, with Las Lomas at the northern end having the deepest part of the trough².

The wells that currently serve the Moss Landing community lie within the Highlands subarea, just north of Dolan Road about 1.5 miles east of the community. The area between the Highlands subarea and the ocean, including most of the Moss Landing community, are located within the Salinas Valley basin. The Highlands South area identified in the 1995 report is also included in the Salinas Valley Groundwater Basin, 180/400 Foot Aquifer Subbasins; therefore, the wells serving Moss Landing are located within the Salinas Valley Groundwater Basin.

The 1995 study was done analyzing buildout parcel by parcel. While the groundwater modeling took a conservative approach, overestimating water demand, the author stated that this was not important to the analysis as the overdraft was substantially greater. Since the study was

¹ The Moss Landing community area overlies both the North County aquifers described in this section and the Salinas Valley Groundwater Basin.

² The majority of the Highlands subarea is also part of the 180/400 Foot Aquifer in the Salinas Valley

conducted, two significant changes in water demand should be considered: first, as explained above, residential buildout as established in the Land Use Plan cannot occur. Secondly, the County adopted an ordinance that prohibits accessory dwelling units and the Coastal Commission has essentially halted approval of any residential subdivisions. The potential for residential growth in North County was significant at the time of the LUP certification, with a potential for an additional 4,085 residential units at build out, as outlined in CIP Section 20.144.140.B.3.a.

The Coastal Implementation Plan (CIP) established a requirement that stated the following: “2,043 new lots or units may be created after certification of the LUP in June 1982.” This allowed a 50 percent buildout of the potential buildout of the North County coastal zone, which was “permitted as the first phase of new development which limits groundwater use to the safe yield level. Additional development beyond this first phase shall require a Local Coastal Program amendment.” This section of the CIP went on to calculate the number of units constructed and number of vacant lots that existed when the CIP was certified. The resulting amount of development allowed after July 1987 was calculated at 1,351 new lots or units. This amount was calculated to “exclude development of a single-family dwelling on a vacant lot of record.” Development of a single family dwelling on a vacant lot was included in the calculation to determine the number of units remaining after the period between 1982 and 1987 (CIP certification).

The County tracked the number of residential units for the purposes of this section of the CIP. The number of units has not reached the CIP limit, but needs to be recalculated based on subdivisions that did not get recorded, either through property owner inaction or those that were denied on appeal by the Coastal Commission. The County passed an amendment to Title 20, the Coastal Zoning Ordinance, that does not allow accessory dwelling units in the North County Coastal Zone, in 2015.

Another factor, with even greater water demand reduction than precluding potential residential buildout, is the supply of supplemental water from numerous water supply projects. A project called the Salinas Valley Reclamation Project came on line in 1997. The Castroville Seawater Intrusion Project (CSIP) project began delivering water to farmers in 1998. The Pajaro Water Projects (PWP) has provided recycled water since 2009. The Salinas Valley Water Project (SVWP) began operations in 2010. The Salinas River Diversion Facility provides supplemental water (treated Salinas River water) to the CSIP project for irrigating agricultural land. Thousands of acres of coastal agricultural land, which formerly relied on groundwater from wells, are now irrigated through recycling of wastewater through the CSIP, PWP, and SVWP. The CSIP project provides irrigation water to 12,000 acres for farming in North County. Pajaro Valley Water Management Agency’s programs provide supplemental water to 5,000 acres of farmland in the Pajaro Valley.

The best comprehensive information for North Monterey County remains the 1995 Fugro West report. While the report is over 20 years old, the overdraft situation has not improved. As explained throughout this background section, North County has significant overdraft and seawater intrusion affects much of the area and has caused wells to be abandoned. Subsequent studies described below demonstrate that the situation has not improved. Seawater intrusion continues to move inland.

2015 Groundwater Study – Brown and Caldwell

<https://www.co.monterey.ca.us/home/showdocument?id=19586>

As a result of amendments to the 2010 General Plan adopted in 2013 stemming from settlement of litigation over the 2010 Monterey County General Plan, in July 2014, the County began a five-year comprehensive water resources assessment of Zone 2C of the Salinas Valley Groundwater Basin, which is the majority of the Basin. A primary objective of the assessment is to assess the general health of the groundwater basin with regards to its ability to provide a sustainable supply of water for land use activities projected to the year 2030 to meet County General Plan obligations. The County may extend some of the analyses to the year 2045 to meet the planning horizon for the Sustainable Groundwater Management Act.

Through the development of an integrated comprehensive hydrogeologic model, the investigation does the following:

- Evaluate existing seawater intrusion and groundwater level data on an annual basis throughout the five-year study period (2014-2018)
- Evaluate the total water demand for existing and future uses projected to the years 2030 and 2045 through the development of an integrated groundwater/surface water model of the basin
- Assess and provide conclusions regarding the degree to which the total water demand for uses are likely to be reached or exceeded for the years 2030 and 2045
- Evaluate and provide conclusions regarding future trends and expected changes in groundwater elevations and the extent of seawater intrusion based on historical data and data produced during the study.
- Review potential climate change impacts and incorporation of climate model results into groundwater/surface water model.

As part of the assessment, the County has entered into a cooperative agreement with the U.S. Geological Survey (USGS) to configure and calibrate an integrated comprehensive hydrogeologic model to assess the general health of the groundwater basin. A preliminary version of this model has been calibrated through the historical hydrologic period 1967-2014 (SVIHM-2014). Additional updates and calibrations are scheduled throughout the five-year assessment for 2015, 2016, 2017, and 2018.

An interim report documenting groundwater conditions in the Salinas Valley was published in 2015 (Brown and Caldwell, 2015--
<https://www.co.monterey.ca.us/home/showdocument?id=19586>). The 2015 Study provided summary information on the Salinas Valley Water Project (SVWP), which went into operation in 2010. Between 2009 and 2011, monitoring data indicated that the groundwater levels (relative to sea level) had increased and the rate of seawater intrusion had decreased. Although it was too soon to draw hard conclusions, the groundwater model being developed as part of the five-year study could be used to, in part, evaluate the impacts on Zone 2C of the SVWP. Zone 2C is an administrative boundary that makes up the majority of the Salinas Valley Groundwater Basin. The study is evaluating seawater intrusion, groundwater levels, total water demand for all existing and future uses designated in the General Plan for the year 2030, and assessing and providing conclusions regarding the degree to which the total water demand for all uses is likely to be met by available supplies. If the study concludes that the total water demand for all uses is

likely to exceed available supplies, such that groundwater elevations are going to decline by 2030, or that the seawater intrusion boundary will advance inland by 2030, the study will make recommendations on additional measures the County could take to address any or all of those conditions. These measures may include, but are not limited to, conservation measures or another phase of the SVWP.

The 2015 report is part of a longer-term study to understand and determine the effectiveness of water supply projects and conservation measures; to identify if additional actions are needed to halt seawater intrusion; and to provide tools for sustainable long-term management of the basin. The 2015 report identified key factors that affect groundwater levels. Drawdown and recharge of the groundwater basin are highly dependent on rainfall in the basin and its tributary watersheds. Drawdown is also highly dependent on groundwater pumping. The 2015 interim report identified that water levels continue to decline, but also that groundwater pumping has also been declining (Brown and Caldwell, 2015, Figure 4-6a).

The Salinas Valley Groundwater Basin (SVGB—**Figure 2**) has an approximate storage volume of 16.4 million acre-feet, with a calculated capacity of 19.8 million acre-feet (Brown and Caldwell, 2015, Table 4-4). From 1944 to 2013, individual year storage changes in the basin varied greatly, with drawdowns of up to 256,000 acre-feet and increases of up to 217,000 acre-feet in a high recharge year. These variations resulted in a net cumulative storage loss for the entire period 1944 to 2013 for all of Zone 2C of approximately 559,000 acre-feet. Water releases from Nacimiento and San Antonio reservoirs, the two south county reservoirs, began in 1958 and 1966, respectively, so some of the cumulative loss occurred prior to reservoir releases. The net cumulative change in storage in Zone 2C for the 70-year period averages out to a drawdown of 8,000 acre-feet per year. During the period when the reservoirs were operating, the average annual decrease for Zone 2C was about 6,000 acre-feet per year. Seawater intrusion adds an additional deficit of 11,000 to 18,000 acre-feet per year. The current calculated deficit for the Zone 2C area (much of the Salinas Valley) is calculated to be 17,000 to 24,000 acre-feet per year.

A factor that substantially affects storage is groundwater pumping. Ninety percent of groundwater use is from pumping; the other 10% is evapotranspiration by vegetation. The highest yearly total of groundwater pumping was approximately 620,000 acre-feet in 1962. The pumping rate began reducing in the 1970s and the average rate for the period 1982-2013 was about 500,000 acre-feet per year. In 2013, pumping was 509,000 acre-feet for Zone 2C.

Location within the Salinas Valley Groundwater Basin also affects the groundwater resource. For the 180/400 Foot Aquifer and East Side Aquifer Subbasins, seawater intrusion is one of the primary effects from any drawdowns in these areas. Lowering of groundwater levels also results in deepening of wells and higher pumping costs for any of the areas. The Forebay Aquifer and Upper Valley Aquifer are the only subareas that had cumulative surpluses in some years, meaning that groundwater levels were higher than in 1944 during those years. The Moss Landing Community Plan area is served by a well located in the area overlying the 180/400 Foot Aquifer Subbasins (**Figure 3—blue dot east of community**); while the subbasin includes seawater intrusion, as explained above, the well serving the community does not have salinity levels that show seawater intrusion in the area of the well.

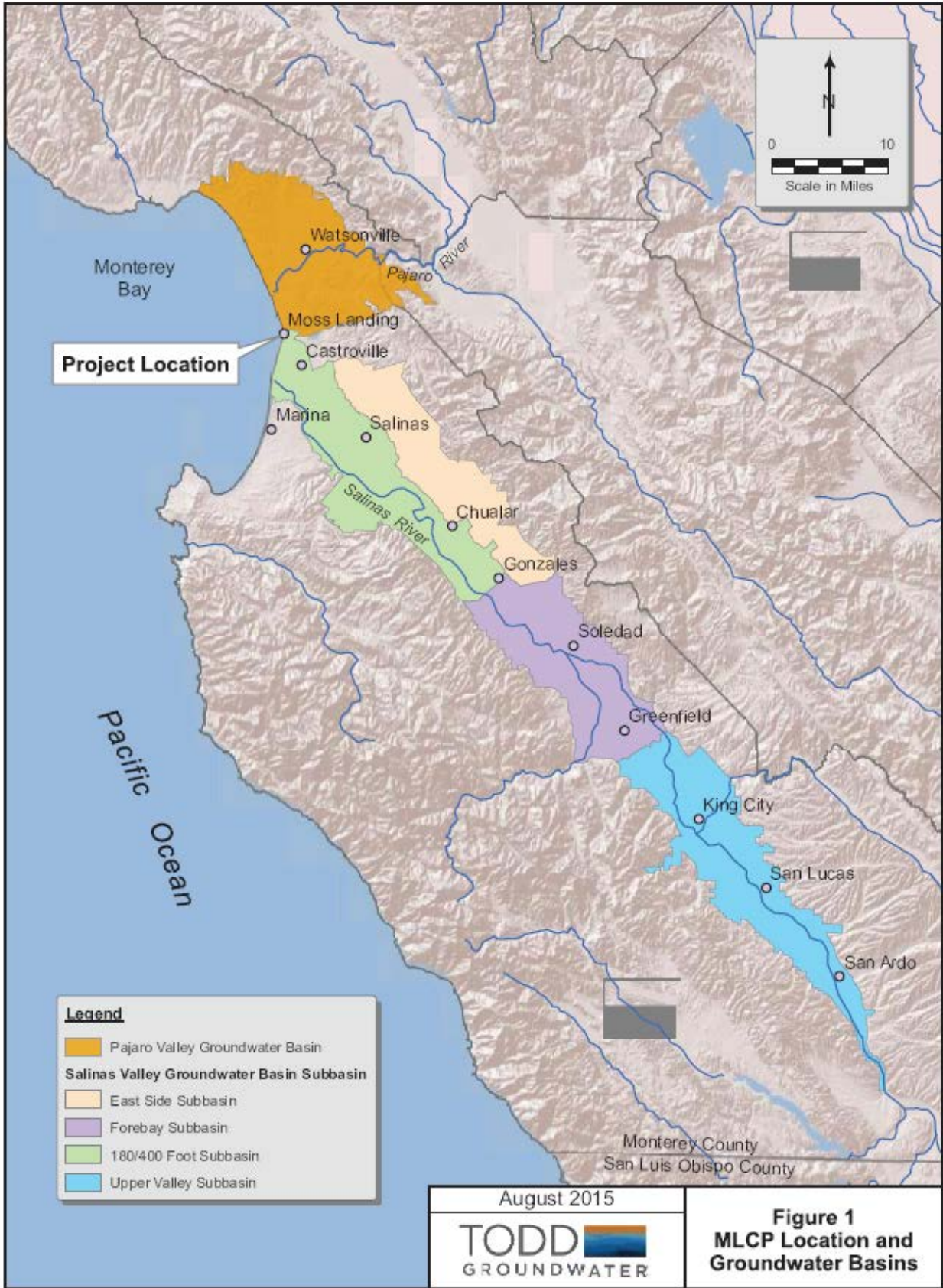


Figure 2. MLCP Location and Groundwater Basins



Figure 3. PSMCSD and MLCP Boundaries

Board of Supervisors, Board of Supervisors of the Water Resources Agency, and the Water Resources Agency Board of Directors Public Hearing, July 2017; November 2017 Board of Supervisors, Board of Supervisors of the Water Resources Agency Public Hearing

A July 2017 Monterey County Water Resources Agency (MCWRA) report was provided to a joint public hearing of the Monterey County Board of Supervisors, Board of Supervisors of the Water Resources Agency, and the Water Resources Agency Board of Directors. The report described data gathering processes that led to the development of groundwater level contour maps. The report summarized that the MCWRA collects groundwater level data in the SVGB to monitor the health of the basin and to evaluate the success of MCWRA projects. Groundwater level and quality data have been collected in the basin since 1947. Currently, MCWRA collects these data through four programs:

- Monthly Program, approximately 90 wells are measured each month
- Annual Program, approximately 350 wells are measured each fall
- August Trough, approximately 130 wells are measured on a single Sunday in August
- Pressure Transducers are installed in 23 wells through the basin collecting hourly measurements

The data measurements from these locations are used by the MCWRA every other year (odd years) to develop groundwater level contour maps, including the following maps. At the joint public hearing described above, MCWRA provided the most recently developed maps:

- 2015 August Trough Contours
 - Map 1: Pressure 180-Foot Aquifer and East Side Shallow
 - Map 2: Pressure 400-Foot Aquifer and East Side Deep
- 2015 Fall Contours
 - Map 3: Pressure 180-Foot Aquifer, East Side Shallow, Forebay Aquifer, and Upper Valley Aquifer
 - Map 4: Pressure 400-Foot Aquifer and East Side Deep

At the conclusion of the July 2017 hearing, Water Resources Agency staff offered to provide additional information on next steps at a subsequent meeting. The Board of Supervisors and the Board of Supervisors of the Water Resources Agency had additional public hearings in November and December, 2017, related to updates on the effects of seawater intrusion on the Pressure aquifers. The updates provide new information in a report (Special Report 17-01) related to the latest information on seawater intrusion and identified potential steps that the Board of Supervisors, the Water Resources Agency, or the Salinas Valley Basin Groundwater Sustainability Agency (GSA) can take.

The Water Resources Agency has notified County staff that actions being contemplated focus on the Pressure aquifers in the northern part of the Salinas Valley.

Sustainable Groundwater Management Act of 2014

In the fall of 2014, the California legislature adopted, and the Governor signed into law, three bills (SB 1168, AB 1739, and SB 1319) collectively referred to as the Sustainable Groundwater Management Act (“SGMA”) that initially became effective on January 1, 2015, and have been amended from time-to-time thereafter. The stated purpose of SGMA, as set forth in California Water Code Section 10720.1, is to provide for the sustainable management of groundwater basins at a local level by providing local groundwater agencies with the authority, and technical and financial assistance necessary, to sustainably manage groundwater.

SGMA requires the designation of Groundwater Sustainability Agencies (GSAs) for the purpose of achieving groundwater sustainability through the development and implementation of Groundwater Sustainability Plans (GSPs) for all medium and high priority basins as designated by the California Department of Water Resources (DWR). SGMA also requires that basins have a designated GSA by no later than June 30, 2017, and an adopted GSP by no later than January 31, 2020, if designated a high or medium priority basin that is in critical overdraft; and no later than January 31, 2022, if designated a high or medium priority basin but not in critical overdraft.

The Salinas Valley Groundwater Basin, denominated Basin No. 3-004 (Basin), extends south into San Luis Obispo County. In Monterey County, the Basin consists of the following designated subbasins/aquifers: 1) 180/400 Foot Aquifer (No. 3-004.01); 2) East Side Aquifer (3-004.02); 3) Forebay Aquifer (3-004.04); 4) Upper Valley Aquifer (3-004.05); 5) Langley Area (3-004.09); 6) the newly designated Monterey subbasin (3-004.10) (formerly the non-adjudicated portion of the Seaside Area and the Corral de Tierra Area); 7) the adjudicated Seaside subbasin (3-004.08); and 8) a portion of the Paso Robles Area (3-004.06). The Basin is a combination of high and medium priority subbasins, with the 180/400 Foot Aquifer and the Paso Robles Area designated in critical overdraft (*California Groundwater, Bulletin 118, Interim Update 2016*, California Department of Water Resources 2016). Jurisdictions within Monterey County have formed the GSAs.

The Salinas Valley has six groundwater subbasins. The 180/400 Foot Aquifer Subbasins are at the lower level of the Salinas Valley aquifers and Moss Landing south of Elkhorn Slough overlies these aquifers. The wells that serve the community utilize the 180/400 Foot Aquifer Subbasins.

The Salinas Valley Basin Groundwater Sustainability Agency, which has jurisdiction over the 180/400 Foot Aquifer Subbasin for the purposes of SGMA, has prepared a Draft Groundwater Sustainability Plan (GSP) for these aquifers that must be adopted in a final form by 2020 (<https://svbgsa.org/groundwater-sustainability-plan/180-400-ft-aquifer/>). The Draft GSP for the 180/400 Foot Aquifer Subbasins, underlying most of Moss Landing and from which the wells that serve the community provide water, has been prepared, adopted by the Groundwater Sustainability Agency, and is undergoing public review and input at the state level. The following summarizes some of the key components of the GSP that relates to groundwater sustainability measures outlined in the draft plan.

The Draft GSP proposes a fee structure designed to promote conservation and voluntary pumping reductions from a determined sustainable use level. Individual groundwater pumpers

may choose to switch to less water-intensive crops, implement water use efficiencies, fallow a portion of their land, or transition to non-groundwater sources. Alternatively, if reducing pumping is not the best economic option, a pumper may instead opt to pay the overproduction surcharges and supplementary fees. The draft plan proposes a transitional period to give water users time to transition to a sustainable pumping level if they so choose. If they exceed the assigned sustainable pumping level after the transitional period, they would pay overproduction surcharges and supplementary fees, which would be used to fund water supply/conservation projects.

Programs outlined in the current Draft GSP for the 180/400 Foot Aquifer Subbasins include the following:

- Retire irrigated land or pumping allowance from willing sellers (section 9.3.2)
- Outreach and Education for Agricultural Best Management Practices (section 9.3.3)
- Reservoir Reoperation (section 9.3.4)
- Restrict Pumping in CSIP area (sections 9.3.5 and 9.4)
- Support and Strengthen MCWRA Restrictions on Additional Wells in the Deep Aquifer (section 9.3.6)

The Draft GSP has a list of four major types of projects that can be developed to supplement the Subbasin’s groundwater supplies or limit seawater intrusion (section 9.4):

1. In-lieu recharge through direct delivery of water to replace groundwater pumping
2. Direct recharge through recharge basins or wells
3. Indirect recharge through decreased evapotranspiration or increased infiltration
4. Hydraulic barrier to control seawater intrusion

The draft GSP details projects being considered to increase groundwater levels in the 180/400 Foot Aquifer Subbasins, including nine priority projects (section 9.4.4) and four alternative projects (section 9.4.5). The priority projects are identified as being more cost effective with the alternative projects anticipated to be less cost effective. Section 9.5 identifies other groundwater management activities that could be utilized.

Priority Projects

Priority Project #	Project Name	Water Supply	Project Type
1	Invasive Species Eradication	Groundwater	Indirect Recharge
2	Optimize CSIP Operations	Recycled Water	In Lieu Recharge
3	Modify M1W Recycled Water Plant	Recycled Water	In Lieu Recharge
4	Expand Area Served by CSIP	Recycled Water	In Lieu Recharge
5	Maximize Existing SRDF Diversion	Salinas River	In Lieu Recharge
6	Seawater Intrusion Pumping Barrier	N/A	SWI Barrier
7	11043 Diversion Facilities Phase I: Chualar	Salinas River	Direct Recharge
8	11043 Diversion Facilities Phase II: Soledad	Salinas River	Direct Recharge
9	SRDF Winter Flow Injection	Salinas	Direct Recharge

Alternative Projects

Project #	Project Name	Water Supply	Project Type
1	Desalinate Water from the Seawater Barrier Extraction Wells	Brackish Groundwater	In Lieu Recharge
2	Recharge Local Runoff from Eastside Range	Stormwater	Direct Recharge
3	Winter Potable Reuse Water Injection	Recycled Water	In Lieu Recharge
4	Seasonal Water Storage in 180/400 Aquifer	Salinas River	In Lieu Recharge

The Draft GSP closes in Section 9.6 with the following summary:

“The water charges framework is specifically designed to promote pumping reductions. Should adequate pumping reductions not be achieved to mitigate all overdraft, funds collected through the water charges framework will support recharge of imported water, either through direct recharge or in-lieu means. Therefore, the water charges framework in association with the projects and management actions listed in this chapter will mitigate overdraft through a combination of pumping reduction and enhanced recharge.

The historical Subbasin overdraft estimated in Chapter 6 is 12,600 acre-feet per year; the projected 2030 overdraft is 8,100 acre-feet per year, and the projected 2070 overdraft is 8,600 acre-feet per year without changes required by an adopted GSP. This overdraft can be mitigated by either reducing pumping or recharging the basin, either through direct or in-lieu means, with additional water supplies. The priority projects include more than ample supplies to mitigate existing overdraft, as presented in Table 9-5.

Table 9-5. Total Potential Water Available for Mitigating Overdraft

Project Potential Yield (AF/yr.)	
Invasive Species Eradication	6,000
Optimize CIP	5,500
Modify Monterey One Water Plant	1,100
Expand CSIP Area	9,900
Maximize Existing SRDF	11,600
Seawater Intrusion Barrier	-11,000 ¹
SRDF Winter Flows	17,700
Total	-58,201

¹ The seawater intrusion barrier extracts 22,000 acre-feet per year, half of which comes from the inland side of the barrier “

Exhibit C

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EXHIBIT C

WATER RESOURCES DISCUSSION

The Water Resources discussion below is intended to provide background information to help the Planning Commission understand the history and factors related to water resources within Moss Landing Community, particularly in relation to the groundwater supply. Summaries of more recent groundwater studies and their findings since the adoption of the 1982 Land Use Plan, including the 1995 Hydrogeologic Study (Fugro West, Inc.) conducted for the North Monterey County area, is provided in attachment **Exhibit C-1 and C-2**. Lastly, as staff has provided for previous Planning Commission workshops, a detailed discussion for each proposed water resource policy is also included.

North County Local Coastal Program

The 1982 North County Land Use Plan (NCLUP) provides a brief description of the groundwater situation in North Monterey County in Section 2.5, Water Resources. The major aquifer in North County is the Aromas Sand Aquifer, which had a storage capacity of approximately 80 times the gross water demand during the time the NCLUP was drafted. The Aromas Sand Aquifer interfaces with the 180 foot and 400 foot aquifers in Salinas Valley. Below the Aromas Sand Aquifer is the Purisima Aquifer, which was identified as “largely untapped.”

The summary discussion in NCLUP Section 2.5 describes a groundwater overdraft of approximately 15,500 acre-feet per year in North County, based on a 1977 Hydrogeologic Study. A study conducted in 1980 confirmed an overdraft in the Aromas Sand Aquifer and estimated an annual overdraft in its study area to be approximately 1,500 to 8,000 acre-feet per year. Because of the “depth of the water-bearing Aromas Sands, its high storage capacity, and the overall complexity of geologic and hydrologic considerations, the long-term safe yield of the aquifer is difficult to estimate.” The summary also identifies the granite ridge aquifer, at the eastern side of the coastal area, as having “little storage capacity and is presently experiencing serious localized overdrafts.” The section identifies that a subdivision moratorium was established and would remain in effect until a long-range solution could be found. This moratorium was implemented through establishment of the B-8 zoning district for portions of the North County Inland Area, but not for the Coastal Zone, as a number of policies and regulations in the Coastal Zone control growth where resources are limited.

North County Land Use Plan Section 2.5 also discusses significant issues related to water quality including: salts, heavy metals, nitrates (septic systems and agriculture), bacteria, erosion and sedimentation, and saltwater intrusion. The last paragraph of the NCLUP Section 2.5 summary is reproduced here:

“It is evident that continued overdraft in the North County will lead to increasing saltwater intrusion and lower water tables. In some areas, water shortages may occur. Managing the demand for water generated by agricultural use and residential and commercial development within the limits of attainable long-term water supply sources will be a major challenge for the area in the coming years. Additional information is urgently needed to help determine the long term safe yield of North County aquifers. The opportunities for obtaining

a surface water supply should also be investigated. Potential sources of imported water include the San Felipe project or construction of a dam on the Arroyo Seco River. Canals or tunnels would have to be constructed to deliver water to North County. A dam project on the Arroyo Seco River would also provide the potential to increase recharge to the Salinas Valley aquifers.”

The potential water supply projects specifically identified in the paragraph above are not planned and are not likely to be constructed at this time. However, the Salinas Valley Basin Groundwater Sustainability Agency (SGMA) has prepared a Draft Groundwater Sustainability Plan (GSP) for the 180/400 Foot Aquifer Subbasins, underlying most of Moss Landing and from which the wells that serve the community provide water. The GSP includes programs to promote conservation and voluntary pumping reductions from a determined sustainable use level. At this time, solutions identified in the GSP have not been implemented to bring the basin into balance and seawater intrusion is still occurring in North Monterey County. For more details related to the existing setting in North Monterey County, see Exhibit C-1.

Water-related Growth Limiting Policies & Regulations

NCLUP Policy 2.5.3.A.2 sets a cap on growth in the North County Coastal Zone to limit ground water use to the safe-yield level¹. The policy established a limit that allowed half the anticipated buildout in North County to proceed under the policy. The policy further states that the County may further reduce the amount of development allowed; the County has not taken such an action.

In implementing the policy in the certified Coastal Implementation Plan, the County developed a count of vacant residential parcels and also a potential number of additional residential units that could be created through subdivision or through additional units on residential property (beyond the first residential unit on a parcel). That calculation resulted in a potential of 4,085 additional residential units for NCLUP buildout. The policy then required that the limit be set at half that amount, or 2,043 units after 1982. The County tracked the number of units under this unit cap, which was never exceeded.

The Coastal Commission, over the last approximately 10-15 years, took the position that subdivisions could not proceed under this policy and appealed almost every residential subdivision approved in North County. Only one of those projects was approved by the Coastal Commission, the Rancho Los Robles subdivision project in Las Lomas in 2017 (PLN970159). This project was found consistent with the policy, while all other North County subdivisions were not, including the Rancho Roberto and Mayr subdivisions, both of which were denied in 2017. The effect of Coastal Commission appealing residential subdivisions, along with the County’s ordinance prohibiting accessory dwelling units in the North County Coastal Zone (Ordinance No. 5283 adopted in 2015), resulted in no substantive, if any, residential growth other than the construction of single family dwellings on vacant parcels.

¹ The definition of “Safe Yield” is included in the CIP Section 20.144.020.EEEE, which directly refers to the definition of “Sustained Yield”. CIP Section 20.144.020.VVVV defines “Sustained Yield” or “Long-Term Sustained Yield” as the yield that a renewable resource can produce continuously over the long-term at a given intensity of management without impairment of the resource and other associated resources.

All of the subdivisions approved by the County were determined to be under the cap set for residential subdivisions. Findings were included in the resolutions determining that each project, when considered with all other approved projects, was under the cap allowed by Policy 2.5.3.A.2 and CIP Section 20.144.140.B.3.a. The cumulative count of existing residential units is lower than what was identified in the analysis for some of the earlier subdivision approvals. The cumulative numbers were created as the County approved each project; however, some projects were never constructed or their maps were never recorded for reasons such as property owners choosing not to move forward with their projects or projects were appealed and/or denied by the Coastal Commission.

The buildout cap found in Coastal Implementation Plan Section 20.144.140.B.3.a, as stated above, only addresses residential units. Policy 2.5.3.A.2 itself does not state that it is applicable to only residential uses, but the cap imposed by this policy has only been applied to residential development through the CIP regulations. Other policies that protect groundwater and natural resources are considered for all land uses, so groundwater resources for non-residential land uses are protected through these other policies. In addition, discretion to approve or deny projects based on potential groundwater impacts is preserved as any intensification of water use is required to be considered through a discretionary permit process (Coastal Development Permits). These other policies (listed below) and their corresponding regulations (CIP Sections 20.144.070 and 20.144.140), the discretionary permit process, and the environmental review process pursuant to the California Environmental Quality Act ensure that groundwater and other potable water issues are disclosed and considered for all residential and non-residential development proposals.

Existing NCLUP Water Resources Policies

These policies are referenced in the draft policy tables below. The NCLUP is attached as **Exhibit G** and can be accessed at <https://www.co.monterey.ca.us/government/departments-i-z/resource-management-agency-rma-/planning/land-use-regulations>

Key Policy

2.5.1-The water quality of the North County groundwater aquifers shall be protected, and new development shall be controlled to a level that can be served by identifiable, available, long term-water supplies. The estuaries and wetlands of North County shall be protected from excessive sedimentation resulting from land use and development practices in the watershed areas.

General Policy

2.5.2.3-New development shall be phased so that the existing water supplies are not committed beyond the safe long term yields. Development levels that generate water demand exceeding safe yield of local aquifers shall only be allowed once additional water supplies are secured.

Specific Policies

2.5.3.A.1-The County's Policy shall be to protect groundwater supplies for coastal priority agricultural uses with emphasis on agricultural lands located in areas designated in

the plan for exclusive agricultural use.

2.5.3.A.2-The County's long-term policy shall be to limit ground water use to the safe-yield level. The first phase of new development shall be limited to a level not exceeding 50% of the remaining buildout as specified in the LUP. This maximum may be further reduced by the County if such reductions appear necessary based on new information or if required in order to protect agricultural water supplies. Additional development beyond the first phase shall be permitted only after safe-yields have been established or other water supplies are determined to be available by an approved LCP amendment. Any amendment request shall be based upon definitive water studies, and shall include appropriate water management programs.

2.5.3.A.3-The County shall regulate construction of new wells or intensification of use of existing water supplies by permit. Applications shall be regulated to prevent adverse individual and cumulative impacts upon groundwater resources.

2.5.3.A.4-Water conservation measures should be required in all new development and should also be included in Agricultural Management Plans. These measures should address siting, construction, and landscaping of new development, should emphasize retention of water on site in order to maximize groundwater recharge, and should encourage water reclamation.

2.5.3.A.5-The moratorium imposed by the County on lot division in the Granite Ridge area should be maintained until the water supply issues are resolved. (Note: The moratorium is not applicable in the Coastal Zone)

2.5.3.B.6-The problem of saltwater intrusion should be studied and reasonable measures undertaken to retard or halt its advance.

Draft Water Resource Policies

There are four draft Moss Landing Community Plan (Plan) water resource policies discussed below. Section 5.2.5 – Resource Management, Water Resources of the draft Plan provides a narrative that sets up the existing conditions of the area. This narrative will be updated after the Water Supply Assessment for the Plan has been completed. Once adopted, development within the Plan area would be subject to the NCLUP policies identified above and the water resource policies in the Plan.

The 2017 draft policy language was discussed amongst staff, with the public during the community meetings, and with Coastal Commission staff for input and comment. Where appropriate, 2017 policies have been deleted, modified, or remain the same. Since these policies were not introduced at a previous Planning Commission workshop, additional discussion is provided below. Each draft policy is discussed in the following format:

1. The heading identifies the draft policy as numbered in the draft Plan (**Exhibit B**) and if applicable, includes in parentheses, reference to the 2017 draft policy number and/or 1982 policy number it originated from.

2. The entire draft policy language is provided in quotes and *italicized*.
3. Explanation of policy intent.
4. A summary table identifying applicable NCLUP policies, 1982 Moss Landing Community Plan policies that would be replaced, and applicable 2009 subcommittee recommendations.
5. A summary of Community, County staff, and Coastal Commission staff input/recommendations.

Please note that 2017 draft Policy ML-4.7 has been deleted.

Draft Policy No. 5.2.5.C.1 (formerly 2017 Policy ML-4.8)

“The County of Monterey shall not approve discretionary development permits that exceeds the water purveyor’s ability to provide potable water.”

The intent of this policy is to recognize that the Pajaro/Sunny Mesa Community Services District does not have the necessary infrastructure to provide service to allow the community to be built out according to the provisions of the draft Community Plan. The policy would require that proposed development not be allowed unless the water district constructs needed infrastructure, or alternative methods of supplying water are provided to allow the development proposal to proceed.

Water system capacity is determined through a combination of well capacity and storage capacity. In other words, a well with less yield but with a larger storage capacity can serve the same number of customers as a well with more yield but a smaller storage tank. The Community is served by a well and 180,000 gallon water tank. In discussions with the Pajaro/Sunny Mesa Community Services District (PSMCS D), the system will not be able to accommodate build out of the community plan without increasing one or both of those facilities. The PSMCS D does not have current plans to expand the system. A Water Supply Assessment is being prepared by the County to provide information to PSMCS D and for the County’s environmental document being prepared for the Community Plan Update.

<p>1982 NCLUP Policy (See full text of existing NCLUP policies in discussion above.)</p>	<p>Key Policy 2.5.1 – Protect groundwater quality and limit development.</p> <p>General Policy 2.5.2.3 – Phase development to not commit beyond safe yield.</p> <p>Specific Policies 2.5.3.A (1-4) – Protect groundwater for coastal priority uses; limit groundwater use to safe yield; regulate construction of wells or intensification of land use; and require water conservation.</p> <p>Specific Policy 2.5.3.B.6 – Study saltwater intrusion and take reasonable methods to halt its advance.</p>
<p>1982 MLCP Policy</p>	<p>N/A</p>
<p>2009 Recommendation</p>	<p>No. 19 – Develop an approach to address the demand for water to support</p>

(See complete language in Exhibit H.)	<p>short and long term growth in relation to ground water overdraft. A staged development plan may be necessary until alternative sources of water are established.</p> <p>No. 20 – Develop and implement new and innovative methods of water conservation and recovery. Encourage incentive programs for existing structures, rainwater capture, and enhanced freshwater wetlands integrated with County’s storm water runoff plan. Efficient strategies for desalinization should be pursued. Saltwater intrusion should be minimized. Explore alternative methods of meeting the water needs such as wave powered desalinization, solar distillations etc.</p>
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Community Recommendation Narrative – Staff’s recommendation at the Community meeting was to curtail development if the water district finds that it could not provide water for any given project. The community wanted to ensure that development not requiring a discretionary permit could proceed and to make the policy more concise. Projects that do not require a discretionary permit tend to be either small or a change of use that is substantially the same as the existing use (e.g., change in retail use to another commercial use with similar intensity and character).

Staff’s Recommendation Narrative – Staff presented the Coastal Commission with the option to either delete the 2017 Policy ML-4.8 or replace the language with a clear policy statement, as suggested by the community. The policy language presented above reflects the input from the community and Coastal Commission staff.

Coastal Commission Staff Recommendation Narrative – Coastal Commission staff found the replacement language acceptable as the intent of the policy is clear.

Draft Policy No. 5.2.5.C.4 (formerly 2017 Policy ML-4.9)

“Historic water use from the same water supply for one property is non-transferable to another property unless consented to by all affected property owners.”

The intent of this policy is to allow water use transfers to a different property through a public permit process. Implementing policy regulations would ensure the proper process is followed.

1982 NCLUP Policy	N/A
1982 MLCP Policy	N/A
2009 Recommendation	N/A

Community Recommendation Narrative – Staff had recommended that the 2017 version of the policy be replaced with more direct language. Some of the community wanted any transfers to another property limited to situations where the properties involved are under common ownership. They also made some changes to the policy language to emphasize that it must be

from the same water supply. No consensus on this policy was achieved at the community meeting.

Staff’s Recommendation Narrative – Staff presented Coastal Commission staff with revised policy language based on suggestions from the Community meeting. The revised language states that water is generally non-transferable unless all property owners involved in the transaction have consented. The transfer would be analyzed as part of the permit process, including appropriate environmental review of the transfer. Permit conditions of approval would require measures to ensure that the water use and location of use is adequately documented, including retiring of water credits.

Coastal Commission Staff Recommendation Narrative – Coastal Commission staff found the replacement policy language acceptable. However, they recommended staff clarify what happens to water rights from old property. Details related to the procedures and retiring water “credits” will be part of the regulations in the CIP.

Draft Policy No. 5.2.5.C.2 (formerly 2017 Policy ML-4.10)

“The County of Monterey shall encourage strategies, including but not limited to seawater desalination, increased use of recycled water, and conservation measures, to address historic groundwater overdraft and seawater intrusion, preserve river and stream habitats, and produce additional supplies of potable water.”

This policy is intended to encourage utilizing larger scale strategies, as opposed to the on-site methods identified in Policy 5.2.5.C.3, to reduce reliance on groundwater pumping for water supply.

<p>1982 NCLUP Policy (See full text of existing NCLUP policies in discussion above.)</p>	<p>Key Policy 2.5.1 – Protect groundwater quality and limit development.</p> <p>General Policy 2.5.2.3 – Phase development to not commit beyond safe yield.</p> <p>Specific Policies 2.5.3.A (1-4) – Protect groundwater for coastal priority uses; limit groundwater use to safe yield; regulate construction of wells or intensification of land use; and require water conservation.</p> <p>Specific Policy 2.5.3.B.6 – Study saltwater intrusion and take reasonable methods to halt its advance.</p>
<p>1982 MLCP Policy</p>	<p>N/A</p>
<p>2009 Recommendation (See complete language in Exhibit H.)</p>	<p>No. 19 – Develop an approach to address the demand for water to support short and long term growth in relation to ground water overdraft. A staged development plan may be necessary until alternative sources of water are established.</p>

	No. 20 – Develop and implement new and innovative methods of water conservation and recovery. Encourage incentive programs for existing structures, rainwater capture, and enhanced freshwater wetlands integrated with County’s storm water runoff plan. Efficient strategies for desalinization should be pursued. Saltwater intrusion should be minimized. Explore alternative methods of meeting the water needs such as wave powered desalinization, solar distillations etc.
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Community Recommendation Narrative – Staff recommended retaining the 2017 draft policy language at the community meeting. The community asked whether Policies 4.10 and 4.11 should be combined. They also provided some clarifying language to the policy.

Staff’s Recommendation Narrative – Staff presented the Coastal Commission with the 2017 policy language, pointing out that the intent relates to actions that can be taken at a regional scale to support the potable water needs of the community.

Coastal Commission Staff Recommendation Narrative – Coastal Commission staff found the 2017 ML-4.10 draft language acceptable.

Draft Policy No. 5.2.5.C.3 (formerly 2017 Policy ML-4.11)

“The County of Monterey shall encourage existing and new development to supplement its supply of water with on-site facilities, including but not limited to the installation of small-scale seawater desalination facilities for coastal dependent/related uses, recycled stormwater and greywater, rainwater collections systems (for landscaping) or other water sources, as made feasible by emerging technologies. Any proposed desalination facility shall be designed to use the best available site, system and technological design, and feasible mitigation measures, to minimize or avoid intake and mortality of all forms of marine life and obtain all other applicable agency permits and/or approvals.”

This policy is intended to encourage utilizing on-site methods to reduce reliance on groundwater pumping for water supply. This policy is distinguished from 5.2.5.C.2 by encouraging smaller scale, on-site water systems.

<p>1982 NCLUP Policy (See full text of existing NCLUP policies in discussion above.)</p>	<p>Key Policy 2.5.1 – Protect groundwater quality and limit development.</p> <p>General Policy 2.5.2.3 – Phase development to not commit beyond safe yield.</p> <p>Specific Policies 2.5.3.A (1-4) – Protect groundwater for coastal priority uses; limit groundwater use to safe yield; regulate construction of wells or intensification of land use; and require water conservation.</p> <p>Specific Policy 2.5.3.B.6 – Study saltwater intrusion and take reasonable</p>
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	methods to halt its advance.
1982 MLCP Policy	N/A
2009 Recommendation (See complete language in Exhibit H.)	<p>No. 19 – Develop an approach to address the demand for water to support short and long term growth in relation to ground water overdraft. A staged development plan may be necessary until alternative sources of water are established.</p> <p>No. 20 – Develop and implement new and innovative methods of water conservation and recovery. Encourage incentive programs for existing structures, rainwater capture, and enhanced freshwater wetlands integrated with County’s storm water runoff plan. Efficient strategies for desalination should be pursued. Saltwater intrusion should be minimized. Explore alternative methods of meeting the water needs such as wave powered desalination, solar distillations etc.</p>

Community Recommendation Narrative – Some of the community recommended considering combining this policy with 2017 Policy ML-4.10. They also provided some clarifying language to the policy.

Staff’s Recommendation Narrative – Staff presented the Coastal Commission with a slight modification of the 2017 based on suggestions at the community meeting. The intent of this policy relates to actions that can be taken onsite for a development project. Staff modified the draft language as suggested by Coastal Commission staff.

Coastal Commission Staff Recommendation Narrative – Coastal Commission staff found the revised language generally acceptable but questioned if County had a prohibition on onsite desalination. They pointed out issues with smaller desalination facilities, as single entities would be operating/maintaining instead of a water purveyor. Commission staff recommended the policy clarify that on-site desalination be limited to coastal dependent/related uses only. Environmental Health Bureau states that the current county code requires public ownership for a desalination facility, but that they are not adverse to the type of facility allowed by this policy and could amend the ordinance to allow such facilities.

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Exhibit D

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EXHIBIT D WASTEWATER DISCUSSION

This discussion will provide historical background information on wastewater services in Moss Landing and explain the current conditions of the facilities as well as how wastewater service would be provided for buildout allowed by the draft MLCP. This discussion will provide the Commission with how the 2017 MLCP draft wastewater policies should apply.

Service Provider Background

August 17, 1976, the Moss Landing County Sanitation District (MLCSD) was formed and on October 26, 1976, LAFCO approved its formation via Resolution No. 76-23. The Monterey County Board of Supervisors served as the Ex-Officio Board of Directors and staffing was provided by Monterey County Public Works Department. In 1978 the MLCSD acted to join and annex into the Monterey Regional County Sanitation District. In 2011, the Castroville Community Services District (CCSD) began operating MLCSD's wastewater collection system under a contract with the County. On June 30, 2014, MLCSD ceased as a separate entity and formerly consolidated with the Castroville Community Services District (CCSD) on July 13, 2015.

Moss Landing County Sanitation District Sewer Allocation Plan

On November 6, 1984, the Monterey County Board of Supervisors approved the Moss Landing County Sanitation District Sewer Allocation Plan in response to a bond approved and funded by the Environmental Protection Agency and the State Water Resources Board for the design and construction of a wastewater collection system. The Bond was a USDA loan to be paid back with user fees, not a tax assessment. The system was designed to accommodate a flow of 105,000 gallons per day (gpd), based on engineering studies, input from potential users, and the limiting capacity of the treatment facilities of the Castroville County Sanitation District. The allocation plan was adopted as Appendix 3 to the County's Local Coastal Program (LCP). This system included allocation wastewater quantities per service area as well as designate 5 priorities for development¹.

Priority 1 was designated for existing uses. Wastewater flows resulting from existing uses were estimated to be approximately 66,500gpd, resulting in a remaining quantity of 38,500gpd for priority uses 2-5. In addition, all vacant lots at that time were allocated 250gpd each. Wastewater needs for Moss Landing Beach, Salinas River Beach, and the Moss Landing Harbor District pump-out was designated as Priority 2. Priority 3 was for new or expanded coastal dependent industries². Priority 4 was for new or expanded essential public services, basic industries, or recreational uses. All other uses fell under Priority 5. These allocations were further divided between the 5 service areas. Service Area 1, Struve Road area, is outside of the MLCP area while areas 2-5 are within the Plan area.

¹ Appendix 3 to the LCP, "Moss Landing Sanitation District Allocation Plan can be found online at the following web address: <https://www.co.monterey.ca.us/home/showdocument?id=38059>

² The November 6, 1984 Report to the Board of Supervisors specified this priority to be for "development of coastal-dependent industrial uses on Moss Landing Island". That specificity was left out of the adopted allocation plan. However, the remaining industrial zoned properties in Moss Landing were not served by MLCSD.

Current Wastewater Conditions

After the CCSD took over as wastewater service provider and the Castroville Treatment Plant was replaced with the Monterey One Water's Moss Landing Regional Pump Station, wastewater capacity service increased to 309,000 gpd.

In addition to the capacity increase, average daily flows of wastewater were measured (see the **Table 1** below) and overall, were well below the allocation limitations.

	1984 Allocation	Average Daily Flow	Remaining Capacity
Service Area 1	34,250 gpd	31,236 gpd	3,014 gpd
Service Area 2	10,100 gpd	953 gpd	9,147 gpd
Service Area 3	14,000 gpd	14,081 gpd	-81 gpd
Service Area 4	13,000 gpd	3,974 gpd	9,026 gpd
Service Area 5	33,650 gpd	29,506 gpd	4,144 gpd
Total:	105,000 gpd	79,750 gpd	25,250 gpd

Table 1. Allocation & Use Comparison

On July 21, 2015, the CCSD accepted the 2015 Moss Landing Sewer Allocation Plan (MLSAP) (Resolution No. 2015-7). The CCSD found due to the increase of wastewater capacity, from 105,000gpd to 309,000gpd, and the measured average daily flow for wastewater, approximately 79,750gpd, the 1984 allocation plan was out of date and needlessly restricts access to unallocated capacity needed by residences and business in the community. Therefore, the 2015 MLSAP increased the allocation from 105,000gpd to 140,000gpd by allocating an additional 16,000gpd to Areas 3 – The Island and 19,000gpd to Area 5 – Downtown.

NCLUP Wastewater Policies

These policies are referenced in the draft policy tables below. The NCLUP is attached as **Exhibit G** and can be accessed at <https://www.co.monterey.ca.us/government/departments-i-z/resource-management-agency-rma-/planning/land-use-regulations>

Key Policy

3.2.1 - *The rural areas of North County should continue to be served by septic or other high technology on-site wastewater management systems at appropriate densities to avoid individual or cumulative effects to public health and natural resources. Centralized sewers and treatment service should be provided for areas designated for high density development concentration and infilling, and areas which present significant public health hazards due to continued failure of on-site systems which cannot be corrected by on-site wastewater management programs.*

General Policies

- 3.2.2.1- *Capacity for a wastewater management service area shall be reserved according to the following ranking of priorities, especially in areas where the capacity of wastewater collection and treatment facilities are limited: (1) Existing uses within the service area; (2) New or expanded coastal-dependent industries within the service area; (3) New or expanded essential public services, basic industries and recreational uses, or minimum other uses on vacant parcels within the service area; (4) all other uses. If additional capacity is available after the above uses are served, and infilling has occurred, then the service area may be expanded to adjacent areas according to the same ranking of priorities. Specific service priorities for the Moss Landing wastewater collection system are described in Chapter 5.*
- 3.2.2.2- *New public sewer services shall not be extended outside of the urban service lines shown in Figure 1. Exceptions to this policy shall be considered only when necessary to resolve public health problems. Capacities of wastewater collection or treatment facilities should be limited to levels necessary to serve those areas contained within the urban service lines shown in Figure 1.*
- 3.2.2.3- *Agricultural lands shall not be included in any future expansion or adjustment of service areas unless the site is specifically designated as necessary to accommodate the infilling of a developed area. Sewer lines shall locate away from agricultural lands where possible. Where sewer lines are required to run through agricultural lands, such lands shall not be served by sewer.*
- 3.2.2.4- *A wetland restoration program for degraded wetlands now used as sewage treatment ponds shall be required in the event that Oak Hills or Monte del Lago connect to the Castroville or regional wastewater treatment plant. The wetland restoration program must be consistent with the resource protection policies of this plan.*
- 3.2.2.5- *No wastewater collection and treatment assessment of properties outside a designated wastewater district service area should be levied. In addition, parcels within a service*

area that cannot support development due to site constraints should not be assessed beyond its current use.

Specific Policies

- 3.2.3.1- Expansion and development of coast-dependent uses in Moss Landing shall have priority for wastewater collection and treatment service over non-coast-dependent development in the proposed Castroville service annexation area which will be served by the same wastewater treatment system.*
- 3.2.3.2- The Fruitland area should be considered as a future concentration of development area to be served by the Pajaro Sanitation District.*
- 3.2.3.3- The expanded Castroville County Sanitation District service area in the vicinity of Oak Hills shall be limited to the north of Highway 156, east of Castroville Boulevard and south of Meridian Road and the adjacent agriculture, in order not to conflict with the preservation of large areas of agricultural land adjacent to the boundaries and to concentrate development.*
- 3.2.3.4- Prunedale and Castroville should be considered as an area for future extension of the proposed regional wastewater management system in order to support residential development and regional commercial development serving areas within the North County coastal zone.*
- 3.2.3.5- Wastewater collection and treatment systems shall be constructed in a manner to minimize impacts to natural and visual resources.*
- 3.2.3.6- Appropriate odor controls should be included in constructing new wastewater transport and treatment facilities.*

Draft Wastewater Resource Policies

There are three draft MLCP water resource policies discussed below. Section 5.3.3 – Public Services, Wastewater Management of the draft MLCP provides a narrative that sets up the existing conditions of the area. Once adopted, development within the Plan area would be subject to the NCLUP policies identified above and the wastewater resource policies in the MLCP.

The 2017 draft policy language was discussed amongst staff, with the public during the community meetings, and with Coastal Commission staff for input and comment. Where appropriate, 2017 policies have been deleted, modified, or remain the same. Since these policies were not introduced at a Planning Commission workshop, additional discussion is provided below. Each draft policy is discussed in the following format:

1. The heading identifies the draft policy as numbered in the draft Plan (**Exhibit B**) and if applicable, includes in parentheses, reference to the 2017 draft policy number and/or 1982 policy number it originated from.
2. The entire draft policy language is provided in quotes and *italicized*.
3. Explanation of policy intent.
4. A summary table identifying applicable NCLUP policies, 1982 MLCP policies that would be replaced, and applicable 2009 subcommittee recommendations.
5. A summary of Community, County staff, and Coastal Commission staff input/recommendations.

Draft Policy No. 5.3.3.B.1 (formerly 2017 Policies ML-4.1 and ML-4.2)

"Development at the Moss Landing Business Park (MLBP) that exceeds existing onsite wastewater treatment system (OWTS) capacity shall require to connect to the wastewater collection system as a condition of project or plan approval. Such system improvements shall be funded at the sole expense of the Moss Landing Business Park and installed on or before the time that such development comes on line that could exceed OWTS capacity. Sewer conveyance system improvements shall ensure that operations at the Moss Landing Business Park do not significantly limit the existing or future sewer conveyance system capacity otherwise required to accommodate development anticipated by the Moss Landing Community Plan outside of the business park."

The intent of this policy is to ensure the new development on the Moss Landing Business Park (MLBP) property complies with Monterey County Code Section 15.40, it connects into the CCSD for wastewater service, the proper process for annexation of lands into a service district is followed, MLBP's connection for service does not financially burden other property owners, and that the capacity allotted to MLCP does not diminish service to other wastewater users outside of the business park.

1982 NCLUP Policy (See full text of existing NCLUP)	Key Policy 3.2.1 – Centralized sewers and treatment service should be provided for areas designated for high density development concentration and infill.
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policies in discussion above.)	Specific Policy 3.2.3.1 – Expansion and development of coast-dependent uses in Moss Landing shall have priority for wastewater collection and treatment service over non-coast-dependent development in the proposed Castroville service annexation area which will be served by the same wastewater treatment system.
1982 MLCP Policy	N/A
2009 MLCP Committee Recommendation (See complete language in Exhibit H.)	<p>No. 16(iv) – Moss Landing Business Park encouraged connect to sewer as soon as possible. Require connection to the sewer as a condition of project for development.</p> <p>No. 17 – Moss Landing Business Park would be responsible for providing any necessary improvements to the sewer system to accommodate its added flow.</p> <p>No. 32 – Expand the Moss Landing Urban Service Line to include the business park, power plant, and switch yard.</p>

Community Recommendation Narrative – MLBP’s representative and other members of the community inquired how the baseline would be established and how/when would MLBP be required to abandon its existing onsite wastewater treatment system (OWTS) and connect to the sewer system. MLBP’s representative also relayed concerns with the logistics of connecting to the sewer line. On the other hand, a community member asked what would occur if MLBP’s connection to the sewer system negatively affects their property? A community member stated that they support elimination of MLBP’s OWTS to protect groundwater. Another member inquired about the expansion of wastewater service relative to priority of coastal-dependent and coastal-related uses versus other uses. Some members in attendance suggested additional modification to staff’s recommended changes to the 2017 draft language for Policy ML-4.1. The Community was concerned with providing feedback on the proposed language for Policy ML-4.2 without knowing the outcome of draft Policy ML-4.1. Helpful insight was received; however, no consensus was received on this policy.

Staff’s Recommendation Narrative – The language brought before the community was simplified to omit the reference to LAFCO and specify expenses relative the sewer infrastructure expansion to serve the MLBP be the responsibility of MLBP’s property owner. Since draft Policy ML-4.1 is supposed to work in conjunction with draft Policy ML-4.2, staff recommended combining the two. Development that exceeds existing septic capacity should be the appropriate trigger for MLBP’s connection to the sewer system. Staff concurs that the appropriate baseline should be clarified in the CIP. Since the CCSD maintains control over system, they would advise on the required methods/construction for connecting into their system. Staff presented Coastal Commission staff with the language modified during the community meeting. Staff proposes that timing, thresholds, and connection logistics be addressed in implementing regulations for this policy.

Coastal Commission Staff Recommendation Narrative – Coastal Commission staff suggested the County consider revising/deleting the policy as MLBP’s sewer connection should follow the normal practice for requiring hookup into system. If the policy is revised, the County should consider a general policy that says adequate wastewater service shall be available to serve new development. Staff should also consider specific relative to funding.

Draft Policy No. 5.3.3.B.2 (formerly 2017 Policy ML-4.5)

“The County will work with the Castroville Community Services District to retire the Moss Landing Sewer Allocation Plan in favor of a traditional service system that ensures equitable service to all Moss Landing assesses and/or rate payers, including undeveloped and under-developed properties, in line with regional sewer conveyance and treatment capacities.”

The intent of this policy is to retire the sewer allocation plan and replace it with a traditional service system that ensures serve to rate-payers, including vacation or underdeveloped parcels. As discussed in the narrative below, Coastal Commission staff recommended deletion or modification of this policy. However, some members of the public wanted some type of assurance that wastewater service could be provided for future development. Therefore, staff suggests retention of this policy so that it will work in conjunction with draft Policy 5.3.3.B.3 below.

<p>1982 NCLUP Policy (See full text of existing NCLUP policies in discussion above.)</p>	<p>Policies contained in Sections 3.2.2 and 3.2.3 related to service priority, limiting capacity, and minimizing impacts to natural and visual resources.</p>
<p>1982 MLCP Policy</p>	<p>N/A</p>
<p>2009 MLCP Committee Recommendation (See complete language in Exhibit H.)</p>	<p>No. 16 – Expand sewer allocation system by 75% to serve existing uses, prospective developments brought before the committee, additional uses on undeveloped or underdeveloped properties, and to encourage the business park to connect to sewer.</p> <p>No. 17 – Moss Landing Business Park would be responsible for providing any necessary improvements to the sewer system to accommodate its added flow.</p> <p>No. 18 – Move away from a land use regulatory system that uses a sewer allocation as the primary means of limiting land use and allow land use regulations to control the type and intensity of development. Ensure sufficient sewer capacity is available during the review of new development.</p>

	No. 32 – Expand the Moss Landing Urban Services Line to include the Moss Landing Business Park, the Moss Landing Power Plant and Moss Landing Switch Yard.
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Community Recommendation Narrative – Staff presented the Community with options to retain the 2017 draft language as is, modify the language to simplify (e.g. replace “County of Monterey” with “County”), or keep the existing allocation system. Community had no recommended language revisions to staff’s changes; however, it was unclear if a consensus was reached.

Staff’s Recommendation Narrative –The 2009 Committee recommended that the Plan move away from the allocation system. As pointed out in the Existing Conditions section of this discussion, the system has a wastewater capacity of 309,000 gpd. Therefore staff presented the Coastal Commission with the simplified language discussed at the community meeting.

Coastal Commission Staff Recommendation Narrative – Coastal Commission staff suggested the County delete the policy or remove the reference to the Moss Landing Sewer Allocation Plan since it will no longer be part of the MLCP. If the policy is deleted, the County should consider replacing it with a policy that says that there shall be adequate wastewater capacity to serve development.

Draft Policy No. 5.3.3.B.3 (formerly 2017 Policy ML-4.6)

“The County of Monterey shall ensure that any replacement of the allocation system guarantees the preservation of rights of each parcel to previously granted sewer allotments.”

The intent of this policy is to preserve existing wastewater allocation for any vacant or under-utilized properties.

1982 NCLUP Policy (See full text of existing NCLUP policies in discussion above.)	Policies contained in Sections 3.2.2 and 3.2.3 related to service priority, limiting capacity, and minimizing impacts to natural and visual resources.
1982 MLCP Policy	N/A
2009 MLCP Committee Recommendation (See complete language in Exhibit H.)	No. 16 – Expand sewer allocation system by 75% to serve existing uses, prospective developments brought before the committee, additional uses on undeveloped or underdeveloped properties, and to encourage the business park to connect to sewer. No. 18 – Move away from a land use regulatory system that uses a sewer allocation as the primary means of limiting land use and allow land use

	regulations to control the type and intensity of development. Ensure sufficient sewer capacity is available during the review of new development.
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Community Recommendation Narrative – The community recommended slight modification to the language presented by staff. Some community members felt that a policy preserving granted sewer allotments was important and necessary.

Staff’s Recommendation Narrative – Staff concurs with the Community’s recommended language. The County of Monterey shall work with CCSD to provide a replacement allocation system that guarantees the preservation of rights of each parcel to previously granted sewer allotments.

Coastal Commission Staff Recommendation Narrative – Coastal Commission staff recommend the policy be deleted since an allocation system will no longer be part of the Plan.

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Exhibit E-1

Can be found on the following link:

<https://documents.coastal.ca.gov/assets/climate/slr/vulnerability/residential/RevisedDraftResidentialAdaptationGuidance.pdf>

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Exhibit E-2

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**MORRO BAY DRAFT COASTAL HAZARDS POLICIES
EXCERPT FROM SECTION 4D – PUBLIC SAFETY
(DRAFT DATED MAY 2018 – POLICIES NOT ADOPTED)**

GOALS AND POLICIES

Goal PS-3: Morro Bay is prepared for and responsive to the effects of sea level rise and other coastal hazards in both the short and longer term.

POLICY PS-3.1: PS-3 Definitions. The following definitions apply in the PS-3 policies below:

Coastal Hazards: “coastal hazards” include, but are not limited to, episodic and long-term shoreline retreat and coastal erosion, high seas, ocean waves, storms, tsunami, coastal flooding, landslides, bluff and geologic instability, and the interaction of same, and all as impacted by sea level rise.

Development: As used in these policies, “development” is synonymous with “new development”, and shall include construction of entirely new structures (whereby the policies apply to the entire new structure), additions to existing structures (whereby the policies apply only to the addition itself), and redevelopment (whereby the entire structure shall be considered new development subject to all applicable coastal hazards policies).

Shoreline protective devices: Structures along the shoreline that are used to protect development against coastal hazards, including but not limited to seawalls, revetments, gunite, sheet piles, breakwaters, groins, bluff retention devices, retaining walls, and pier/caisson foundation and/or wall systems.

POLICY PS-3.2: Develop Information. The City shall continue to gather information on the effects of sea level rise and other coastal hazards on Morro Bay’s shoreline, including identifying the most vulnerable areas, structures, facilities, and resources, with a focus on areas with priority uses such as public access and recreation resources, ESHAs, and existing and planned sites for public infrastructure. Updates to the LCP as well as project-specific coastal hazards assessments shall use the best available science, including the best available scientific estimates of expected sea level rise and potential resultant impacts. The information gathered should address multiple time frame horizons (e.g., 2025, 2040, 2050, and 2100) as well as multiple sea level rise scenarios, as appropriate and feasible.

POLICY PS-3.3: Minimize Risk. All development shall minimize risks to life and property in areas of coastal hazards. Development shall also assure stability and structural integrity, shall not create nor contribute significantly to erosion, geologic instability, or destruction of the site, shall not substantially alter natural landforms, and shall not include shoreline protective devices. **Tsunami.** The City shall maintain a warning system and procedures for protection of life and property in coastal areas that are subject to storm and tsunami hazard. Development subject to tsunami hazards shall prepare a tsunami preparedness plan that describes evacuation procedures and other protocols for addressing a potential tsunami event.

POLICY PS-3.4: Additional Waterfront Standards. The Harbor, Marina, and Working Waterfront Area shall be defined as the Morro Bay State Park Marina, Bay Front Marina, Morro Bay Boatyard, and the Embarcadero from the downcoast edge of the Public Launch Ramp to the Morro Rock Beach Public Parking Lot along Coleman Drive (see Figure xxx). For such areas, development shall include all feasible measures to avoid, or if avoidance is infeasible, to mitigate against coastal hazard threats and potential impacts to coastal resources. Fill and placement of materials in coastal waters, including shoreline protective devices in this area, shall be the minimum amount necessary, shall be allowable only where there is no feasible less environmentally damaging alternative and where feasible mitigation measures have been provided to minimize adverse environmental effects, and consistent with the following policies:

- a. Upon lease site approval or renewal, lease sites adjacent to the bayfront shall be required to relocate any underdeck utilities to a location above or inland of the water's edge.
- b. When feasible, lease sites should be encouraged to implement floating bayside lateral accessways to improve design resiliency to sea level rise.
- c. Decks, piers, and other immobile bayside lateral accessways should be raised or reconstructed to heights above the water.
- d. At-risk storm drains should be redesigned or relocated to maintain full function and prevent flooding as tides continue to rise.

- e. All lease sites where hazardous substances will be used or stored shall prepare, as a condition of lease renewal or any new development on the site, a hazardous substances spill prevention plan describing how such substances will be stored and/or elevated to ensure that storm impacts do not result in releases of pollutants or toxic materials to the marine environment.

For all other areas outside of the Harbor, Marina, and Working Waterfront Area as defined above, development shall be sited and designed in a manner consistent with the following policies.

POLICY PS-3.5: Avoid Coastal Hazards. Development shall be sited and designed to avoid impacts from coastal hazards over the life of the development. New development, including redevelopment, shall be prohibited from using or requiring shoreline protective devices at any point during the development's life. As a condition of approval for any such development/redevelopment, any existing shoreline protective devices shall be removed and the underlying area restored (see also Policy PS-3.11).

Coastal Hazard Risks Acknowledged. As a condition of approval for all development that at some point during its lifetime may be subject to coastal hazards, the Applicant shall record a deed restriction against the properties involved in the application acknowledging that the development and development site may be subject to coastal hazards, acknowledging that shoreline protective devices are prohibited to protect such development, waiving any right that may exist to construct such devices, and agreeing to remove threatened development and restore affected areas if necessary in the future subject to the requirement to prepare a removal and restoration plan, all of which shall also be added as conditions of any approval. Specifically, development shall be removed and the affected area restored to a natural condition if: (a) the City declares the development unsafe for occupancy and/or use; (b) the development requires shoreline protective devices; (c) the development encroaches onto public trust land (including as the public trust migrates); (d) access and utilities are no longer available to serve the development; or (e) required by subsequent adaptation planning through Shoreline Management Plans (see Policy 13). Approval of coastal permits shall

not constitute a waiver of any public rights that may exist on the affected property. A coastal permit permittee shall not use any permit approval as evidence of a waiver of any public rights that may exist on the affected property now or in the future.

POLICY PS-3.6: Coastal Hazards Report. Development proposed in potential coastal hazard areas, including those that are mapped as hazardous in Figures PS-7 and PS-8, shall be evaluated for potential coastal hazards at the site based on all readily available information and the best available science, including the Coastal Commission's adopted Sea Level Rise Policy Guidance. If the initial evaluation determines that the proposed development may be subject to coastal hazards over its lifetime, a site specific coastal hazards report prepared by a qualified geologist/engineer is required, the purpose of which is to ensure that such development can be built in a manner consistent with applicable Local Coastal Program coastal hazards policies.

POLICY PS-3.7: Shoreline Preservation as a City Goal. The Morro Bay shoreline is an irreplaceable resource and its preservation as a natural living shoreline is a matter of great public importance. Therefore, the intent of the Local Coastal Program is to ensure that shoreline protective devices and other shoreline altering development are only utilized in very rare situations and only when all coastal resource impacts are avoided, and where unavoidable are appropriately and proportionately mitigated, including consistent with Policies 7, 8, 9, and 10.

POLICY PS-3.8: Existing Shoreline Protective Devices. Repair and maintenance of existing legally established shoreline protective devices (including restacking dislodged rock rip-rap in revetments within the approved revetment profile and texturing/contouring a vertical seawall per the approved surface treatment, but not including replacement, augmentation, addition or expansion) shall only be allowed if the shoreline protective device is required to protect existing structures (i.e., structures legally constructed prior to January 1, 1977 that have not been redeveloped since then) and coastal-dependent development in danger from erosion (i.e., when the development would be unsafe to use or occupy within two or three years). If it is not so required, then the shoreline protective device shall be removed and the affected area restored. Any such allowable repair and

maintenance projects shall include measures to address and mitigate for any coastal resource impacts the device is having, including with respect to public views and public recreational access.

POLICY PS-3.9: New Shoreline Protective Devices. New shoreline protective device development (including replacement, augmentation, addition and expansion associated with an existing device) shall only be allowed where required to protect existing structures (i.e., structures legally constructed prior to January 1, 1977 that have not been redeveloped since then) and coastal-dependent development in danger from erosion (i.e., when the development would be unsafe to use or occupy within two or three years). Such devices shall only be utilized if no other feasible, less environmentally damaging alternative, including removal or relocation away from such hazards, beach nourishment, non-structural drainage and native landscape improvements, or other similar non-structural options can be used to address erosion hazards. Such non-structural options shall be used and prioritized wherever possible to protect coastal resources, including coastal habitats, public recreational uses, and public access to the coast.

Where such non-structural options are not feasible in whole or in part, soft structural alternatives (e.g., sand bags, vegetation, etc.) shall be used and prioritized wherever possible before more significant shoreline protective devices are considered. Shoreline protective devices shall not be constructed to protect non-coastal-dependent development, development built on or after January 1, 1977 (including redeveloped structures), or where other measures/alternatives, including relocation, can adequately mitigate erosion hazards. All construction associated with shoreline protective devices and repair or maintenance or augmentation of existing protection devices shall be designed to eliminate or mitigate adverse impacts to coastal resources.

POLICY PS-3.10: Shoreline Protective Device Standards. New shoreline protective devices shall be sited and designed to avoid coastal resource impacts to the maximum extent feasible, including through: eliminating or mitigating all adverse impacts on local shoreline sand supply (including sand and beach area that are lost through the shoreline protective device's physical encroachment on a beach, fixing of the

back beach, and prevention of new beach formation in areas where the bluff/shoreline would have otherwise naturally migrated, and the loss of sand-generating bluff/shoreline materials that would have entered the sand supply system absent the device); protecting and enhancing public recreational access; protecting and enhancing public views; minimizing alteration of, and being visually subordinate to, the natural character of the shoreline; avoiding impacts to archeological resources; and protecting other coastal resources as much as possible. Shoreline protective devices shall be required to mitigate impacts to shoreline sand supply, public access and recreation, and any other relevant coastal resource impacts in 20-year increments, starting with the building permit completion certification date. Permittees shall apply for a coastal permit amendment prior to expiration of each 20-year mitigation period, proposing mitigation for coastal resource impacts associated with retention of the shoreline protective device beyond the preceding 20-year mitigation period, and such application shall include consideration of alternative feasible mitigation measures in which the permittee can modify the shoreline protective device to lessen its impacts on coastal resources. Shoreline protective devices shall only be authorized until the time when the qualifying development that is protected by such a device is no longer present, constitutes redevelopment, and/or no longer requires armoring, at which time the shoreline protective device shall be removed and the site restored.

POLICY PS-3.11: Shoreline Management Plan. The City shall prepare a Shoreline Management Plan for approval by the Coastal Commission as an amendment to the Local Coastal Program. The plan shall function as a tool to help implement coastal protections, maximize public access, and protect coastal resources along the City's shoreline, including building upon the City's Adaptation Strategy Report. The plan shall be prepared in coordination with relevant local, regional, and/or state agencies for the purpose of protecting coastal resources, as well as ensuring the resilience of coastal public infrastructure, and evaluate the following:

- **Adaptation Triggers.** Refining adaptation triggers for actions to address sea level rise impacts for different areas and assets in Morro Bay, including monitoring beaches for sea level rise impacts such as erosion and changes in beach widths in order to identify trigger points for various adaptation strategies.

- **Site Reuse.** Considering appropriate uses for sites previously occupied by relocated assets, including parks, open space/natural areas, and other predominantly passive land uses.
- **Transfer of Development Rights (TDR).** Considering a TDR program to restrict development in areas that are vulnerable to sea level rise and allow the transfer of development rights to parcels with less vulnerability to hazards.
- **Sea Level Rise Hazard Overlay Zone.** Establishing a Sea Level Rise Hazard Overlay Zone to address safety from flood and sea level rise related hazards, and recommend remedial actions. Establishing a program to inform owners of real estate in the Sea Level Rise Hazard Overlay Zone about coastal hazards or property vulnerabilities, including information about known current and potential future vulnerabilities to sea level rise, and disclose permit conditions related to coastal hazards to prospective buyers prior to closing escrow.

The Shoreline Management Plan may be amended every five to ten years, as appropriate, by the City Council, and adopted by the Coastal Commission through the Local Coastal Program amendment process.

Exhibit E

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EXHIBIT E COASTAL HAZARDS DISCUSSION

Moss Landing is a community that is under substantial threat from climate change, perhaps the most threatened developed area for unincorporated Monterey County. It is a community that is tied, through its existence, to the ocean primarily through the harbor and public access. The County obtained grant funding to prepare a report to analyze climate change effects along Monterey Bay, with a focus on North Monterey County (Moss Landing Coastal Climate Change Vulnerability Report (2017), Central Coast Wetlands Group). The findings of this report were presented to the Planning Commission on January 29, 2020. The report projected significant climate change impacts to structures, infrastructure, recreational areas, agricultural land, and natural areas in the Moss Landing area. The community and surrounding area is at risk from rising tides (monthly high water including sea level rise), fluvial (inland) flooding, coastal dune erosion, and coastal storm flooding. As the report pointed out, the community will see climate change impacts by 2030.

Moss Landing exists in its location primarily due to two facilities: Moss Landing Harbor and Highway 1. This community, with residential, commercial, recreational, science, education and industrial uses, would not survive in its current form as a community without one, or perhaps both, of these facilities in Moss Landing. As we have learned, both the harbor and the highway are significantly threatened by climate change impacts. Relocation for both facilities is currently being discussed and would drive a discussion on the community's location if either were to relocate.

In discussions with the community, their desire is to remain in their current location as long as feasible. Interim harbor protections will likely protect the harbor against coastal hazards for a period of time. Those protections will likely also benefit the community. However, over time, much or all of the community will need to relocate if climate change effects are as significant as projected. As stated above, if the harbor and/or highway are relocated, the community may need to relocate even if some of the community is not under direct climate threat.

The policies presented below reflect the climate change threat as being significant for all of North County, not just Moss Landing. Staff worked with the community initially on developing policies. However, the policies recommended by staff in this report were developed based on Coastal Commission guidance, both written (see **Exhibit E-1** or visit <https://documents.coastal.ca.gov/assets/climate/slr/vulnerability/residential/RevisedDraftResidentialAdaptationGuidance.pdf>) and in discussions, with what they are expecting for the entire California coast. In the discussions with Coastal Commission staff, they also suggested we look at draft policies for the City of Morro Bay (**Exhibit E-2**) in drafting our policies. Staff is proposing several climate change policies to be added to the North County Land Use Plan that would be applicable to all of North County. Staff is also proposing supplemental climate change policies specific to Moss Landing. Staff is suggesting that these policies be categorized as "coastal hazards," as the results of climate change are increased hazards.

Many of the recommendations from the Coastal Commission were identified by County staff as more appropriate as regulations, so those recommendations are being included as part of the Coastal Implementation Plan being drafted for the Moss Landing Community Plan. Those areas of Coastal Commission guidance mostly relate to processing applications, including project analysis, processing of the permits through a hearing, detailed implementation of other policies, and applying conditions of approval on permits.

Existing NCLUP Hazards Policies

These policies are referenced in the draft policy tables below. The NCLUP is attached as **Exhibit G** and can be accessed at <https://www.co.monterey.ca.us/government/departments-i-z/resource-management-agency-rma-/planning/land-use-regulations>

General Policy

2.4.2.1 - *Further alteration of natural shoreline processes including drainage, erosion, water circulation, and sand transport, shall be limited to protection of public beaches, existing significant structures, coastal dependent development, and the public health and safety.*

Specific Policy

2.4.3.6 - *The County's diking, dredging, filling, and shoreline structures regulations shall incorporate Coastal Act Sections 30233(a) and (c), 30235, 30236, and 30607.1.*

Key Policy

2.8.1 - *Land uses and development in areas of high geologic, flood, tsunami, and fire hazard shall be carefully regulated through the best available planning practices in order to minimize risks to life and property and damage to the natural environment.*

General Policies

2.8.2.1- *All development shall be sited and designed to minimize risk from geologic, flood, tsunami or fire hazards to a level generally acceptable to the community. Areas of a parcel which are subject to high hazard(s) shall generally be considered unsuitable for development. Any proposed development in high hazard areas shall require the preparation of an environmental or geotechnical report prior to County review of the project.*

2.8.2.2- *In high hazard areas, low intensity or open space uses will be encouraged as the most appropriate land uses. Critical facilities (fire, police, hospitals, emergency communication facilities, bridges and overpasses, public utilities, dams), shall generally be prohibited in high hazard areas.*

2.8.2.3- *New land divisions which create commitment to new or intensified development shall be approved only where it can be demonstrated that development of each proposed parcel and construction of the proposed access roads will neither create nor significantly*

contribute to erosion, geologic instability, flooding, or fire hazard, nor require construction of protective devices which would substantially alter natural landforms.

2.8.2.4- *As part of the development review process, all proposed development, including single-family residences on lots of record, shall be evaluated for conformance and be required to comply with adopted hazard policies applicable to the site in question.*

2.8.2.5- *Those portions of parcels which are unsuitable for development due to the presence of geologic, flood, or fire hazards, shall not be included in computations of density for proposed developments.*

2.8.2.6- *In locations determined to have significant hazards, development permits shall include a special condition requiring the owner to record a deed restriction describing the nature of the hazard(s), geotechnical and/or fire suppression mitigations and, where appropriate, long-term maintenance requirements.*

Key Policy

6.2 - *Public access to the shoreline and along the coast shall be protected and provided, and opportunities for recreational hiking access shall be enhanced. The provision of all future access and improvements to existing access areas must be consistent with the overriding objective of protecting coastal agriculture, environmentally sensitive habitats and other sensitive coastal resource areas. The beauty of the coast, its tranquility, and the health of its environment must not be marred by public overuse or carelessness. Visual access as well as physical access should be emphasized as an appropriate response to the needs of the public.*

Specific Policies – Access and Management Plans

6.4.B.1 - *Management plans or programs shall be prepared by the appropriate managing agency and approved by the County prior to improvement of existing accessways or trails or intensification of their use, or provision of new access ways. These plans and proposals shall be coordinated, where applicable, with the improvement and management of shoreline destination areas or recreation areas. Management plans and programs shall address the following points as well as the site - specific recommendations of Table 2 and shall otherwise be consistent with policies in Sections E through J below and with other applicable resource protection policies of this plan:*

- *types of uses to be encouraged, allowed, discouraged, and prohibited, consistent with the protection of coastal resources, agriculture and other considerations.*
- *need for seasonal restrictions, if any*
- *the improvements needed for trails, including boardwalks, signs, and gates and sanitary facilities.*
- *proposed location, construction and capacity of parking facilities.*

6.4.B.2 - *The responsible agency is encouraged, during development and implementation of access management plans, to consult as often as necessary with other appropriate agencies for general coordination purposes and in order to bring the best expertise to*

the ultimate management of each access location. It will be the County's policy during review and approval of access management plans to consult with other agencies, property owners and interested members of the community.

Draft Coastal Hazards Policies

There are eight draft Moss Landing Community Plan (Plan) coastal hazards policies (three for erosion hazards and five for climate change hazards) and eight draft North County Land Use Plan (Land Use Plan) coastal hazards policies discussed below. Section 5.2.6 – Hazards, of the draft Plan provides a narrative that sets up the existing conditions of the area. Once adopted, development within the Plan area would be subject to the Land Use Plan policies identified above and the hazards policies in the draft Plan.

The 2017 draft policy language was discussed amongst staff, with the public during the community meetings, and subsequently with Coastal Commission staff for input and comment. Where appropriate, 2017 policies have been deleted, modified, or remain the same. Since these policies were not introduced at a Planning Commission workshop, additional discussion is provided below. Each draft policy is discussed in detail below using the following format:

1. The heading identifies the draft policy as numbered in the draft Plan (**Exhibit B**) and if applicable, includes in parentheses, reference to the 2017 draft policy number and/or 1982 policy number it originated from.
2. The entire draft policy language is provided in quotes and *italicized*,
3. Explanation of policy intent.
4. A summary table identifying applicable NCLUP policies, 1982 MLCP policies that would be replaced, and applicable 2009 subcommittee recommendations,
5. A summary of Community, County staff, and Coastal Commission staff input/recommendations.

Draft Policy 5.2.6.F.1 (formerly 2017 Policy ML-2.14)

“The County of Monterey supports structural armoring (i.e., bulkheading or rip rap) or other measures where necessary to prevent erosion, protect the Harbor shoreline and to incorporate where feasible public access into any armoring project.”

The intent of this policy supports necessary and appropriate structural erosion control measures that will protect the Harbor shoreline. It provides guidance as to when structural armoring will be allowed and to ensure that public access is considered with any such project.

<p>1982 NCLUP Policy (See full text of existing NCLUP policies in discussion above.)</p>	<p>Policy 2.4.2: Limit alteration of natural shoreline processes for protection of public beaches, significant structures, coastal dependent development, and the public health and safety,</p> <p>2.4.3.6: Incorporation Coastal Act sections in County regulations for diking, dredging, filling, and shoreline structures.</p>
<p>1982 MLCP</p>	<p>Similar structural erosion control language is found within the following</p>

<p>Policy</p>	<p>policies:</p> <p>Policy 5.3.3.3: Bulkheading to prevent erosion and to maximize use of available shoreline should be provided along the west bank of the South Harbor.</p> <p>Policy 5.3.3.8: Develop a retaining wall, bulkhead along the eastern bank of the North Harbor adjacent to the Harbor offices as a means of preventing further erosion and improving berthing capacity.</p>
<p>2009 MLCP Committee Recommendation (See complete language in Exhibit H.)</p>	<p>Recommendation No. 10 importance of strengthening shoreline erosion language to address shore erosion on the east side of the Island.</p>

Community Recommendation Narrative – The policy language staff presented at the community meeting reflected the County’s action to support necessary erosion control to protect the Harbor shoreline. “[C]onsultation with the Harbor District” has been deleted as that should be included as part of the CIP procedures. During the Community meeting, the community came to a consensus on the draft policy 2.14 staff recommended.

Staff’s Recommendation Narrative – After the Community meeting, staff determined that rip rap is a viable protection option under some circumstances based on discussions with the Harbor District. Therefore, the rip rap exclusion was deleted for the policy. The Harbor District has recently stated they desire to retain 1982 MLCP Policies 5.3.3.3 and 5.3.3.8; however, these policies are specific to certain areas and erosion control measures may be applicable to non-specified areas as well. For Policy 5.3.3.8, it is not the County’s purview to require these improvements be developed. However, it is the County’s purview to support necessary erosion control measures to protect the shoreline in all areas near the harbor as deemed necessary. Therefore, staff is recommending the Policy 2.14 language as modified. If it is determined that retention of the 1982 policies are necessary for the Harbor District to implement erosion control measures in the future, staff recommends that Policy 5.3.3.3 and 5.3.3.8 be modified as discussed below.

Coastal Commission Staff Recommendation Narrative – Coastal Commission staff stated that they have permit authority over harbor waters and this policy should be used as guidance to address coastal hazards.

Draft Policy 5.2.6.F.2 (updated from 1982 MLCP Policy 5.3.3.3)

“Bulkheading or other measures to prevent erosion and to maximize use of available shoreline should be provided along the west bank of the South Harbor.”

The intent of this policy is to identify a specific area where the shoreline needs protection and

allow measures to stabilize that area. It supports necessary and appropriate erosion control measures that will protect the South Harbor shoreline.

<p>1982 NCLUP Policy (See full text of existing NCLUP policies in discussion above.)</p>	<p>Policy 2.4.2: Limit alteration of natural shoreline processes for protection of public beaches, significant structures, coastal dependent development, and the public health and safety,</p> <p>2.4.3.6: Incorporation Coastal Act sections in County regulations for diking, dredging, filling, and shoreline structures.</p>
<p>1982 MLCP Policy</p>	<p>Policy 5.3.3.3: Bulkheading to prevent erosion and to maximize use of available shoreline should be provided along the west bank of the South Harbor.</p>
<p>2009 MLCP Committee Recommendation (See complete language in Exhibit H.)</p>	<p>Recommendation No. 10 importance of strengthening shoreline erosion language to address shore erosion on the east side of the Island.</p>

Community Recommendation Narrative – See discussion on draft Policy 5.2.6.F.1 (formerly 2017 Policy ML-2.14).

Staff’s Recommendation Narrative – Refinement of 1982 MLCP Policy 5.3.3.3 was discussed in conjunction with the draft 2017 Policy ML-2.14. Staff determined that retention of the 1982 policies are necessary for the Harbor District to implement erosion control measures in the future. Also see discussion on draft Policy 5.2.6.F.1 (formerly 2017 Policy ML-2.14).

Coastal Commission Staff Recommendation Narrative – Coastal Commission staff stated that they have permit authority over harbor waters and this policy should be used as guidance to address coastal hazards.

5.2.6.F.3 (updated from 1982 MLCP Policy 5.3.3.8)

“Retaining walls, bulkheads, or other appropriate erosion control measures should be developed along the eastern bank of the North Harbor as a means of preventing further erosion and improving berthing capacity.”

The intent of this policy is to protect a specific area of the North Harbor where erosion occurs and also to provide the ability to propose increasing berths in North Harbor if desired by the Harbor District.

<p>1982 NCLUP Policy (See full text of existing NCLUP policies in</p>	<p>Policy 2.4.2: Limit alteration of natural shoreline processes for protection of public beaches, significant structures, coastal dependent development, and the public health and safety,</p> <p>2.4.3.6: Incorporation Coastal Act sections in County regulations for</p>
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discussion above.)	diking, dredging, filling, and shoreline structures.
1982 MLCP Policy	Policy 5.3.3.8: Develop a retaining wall or bulkhead along the eastern bank of the North Harbor adjacent to the Harbor offices as a means of preventing further erosion and improving berthing capacity.
2009 MLCP Committee Recommendation (See complete language in Exhibit H.)	Recommendation No. 10 importance of strengthening shoreline erosion language to address shore erosion on the east side of the Island.

Community Recommendation Narrative – See discussion on draft Policy 5.2.6.F.1 (formerly 2017 Policy ML-2.14).

Staff’s Recommendation Narrative – Refinement of 1982 MLCP Policy 5.3.3.8 was discussed in conjunction with the draft 2017 Policy ML-2.14. Staff determined that retention of the 1982 policies are necessary for the Harbor District to implement erosion control measures in the future. Also see discussion on draft Policy 5.2.6.F.1 (formerly 2017 Policy ML-2.14).

Coastal Commission Staff Recommendation Narrative – Coastal Commission staff stated that they have permit authority over harbor waters and this policy should be used as guidance to address coastal hazards.

5.2.6.G.1 (formerly 2017 Policy ML-5.1)

“Development shall be designed and constructed to avoid effects from sea level rise and climate change hazards over the anticipated life of the development. Development shall assure stability and structural integrity of the development without reliance on shoreline protective devices, substantial alteration to natural landforms along bluffs and cliffs or otherwise harm coastal resources in a manner inconsistent with LCP policies or Coastal Act public access policies. Development shall not contribute significantly to erosion, geologic instability, or destruction of the site or surrounding areas. Minor and/or ancillary development, including public trails, benches, gazebos, patios, raised decks and platforms and other similar uses, may be located seaward of a bluff or shoreline setback line provided that such development does not: 1) use a foundation that can be better served as a retaining or protection device or, 2) require landform alterations.

If development cannot be located and designed in a manner that meets the state and local coastal hazards avoidance and minimization requirements over the full anticipated life of the development, the development may nevertheless be approved provided it meets all the following criteria:

- a. The proposed development is the least environmentally damaging alternative that is sited and designed to avoid/minimize impacts to coastal*

resources and avoids/minimizes effects from coastal hazards to the extent feasible;

- b. The approval is subject to conditions requiring removal of the development and/or other adaptation measures when specific thresholds are met to ensure that the development does not: a) interfere with the continued existence of adjacent environmentally sensitive habitat areas or recreation areas, b) substantially impair public trust resources, c) become structurally unstable, or d) pose increased risks to life and/or property or otherwise create a public nuisance;*
- c. The proposed development is consistent with the public access and recreation policies of the Coastal Act and this LCP;*
- d. A hazard assessment must demonstrate that the development appropriately minimizes risks to life and property and ensures structural stability for the life of the project; and*
- e. The proposed development minimizes risks to life and property to the maximum extent feasible.*

Development proposed in coastal hazards areas shall, as a condition of approval, record a deed restriction describing the hazard, the limitations of rights to protect the property from hazards, and describe restoration requirements.”

This is the overarching (key) policy for Moss Landing relating to climate change and future development. The intent of this policy is to provide guidance that any proposed development needs to be considered in light of coastal hazards, including future projections of such hazards during the expected life of the project.

<p>1982 NCLUP Policy (See full text of existing NCLUP policies in discussion above.)</p>	<p>Key Policy 2.8.1: Regulate land uses and development in areas of high hazard to minimize risks to life and property and damage to the natural environment.</p> <p>2.8.2 General Policies</p> <ol style="list-style-type: none"> 1. Minimize risk from hazards to a level generally acceptable to the community. 2. Low intensity or open space uses in high hazard areas. 3. Demonstrate that development on newly created parcels will not create or significantly contribute to hazards, nor require construction of substantial landform-altering protective devices. 4. Evaluate development for conformance with hazard policies. 6. Deed restriction required for development in high hazard areas.
<p>1982 MLCP Policy</p>	<p>N/A</p>
<p>2009 MLCP Committee Recommendation</p>	<p>N/A</p>

Community Recommendation Narrative – Staff presented the community with modified language of draft 2017 Policy ML-5.1 requiring all development be designed/constructed to avoid effects from climate change hazards. One member of the community suggested “avoid” be replaced with “withstand”.

Staff’s Recommendation Narrative – Since specific outcomes of climate change hazards are currently unknown, staff suggested the policy be made general and allow implementation regulations to provide detail. Therefore, staff presented the Coastal Commission with the language as modified during the community meeting.

Coastal Commission Staff Recommendation Narrative – Coastal Commission staff recommended County staff refer to the Coastal Commission guidance document and to Morro Bay’s draft climate hazards policies (**Exhibit E-2**).

Staff discussed the 2017 policy with the Coastal Commission, reviewed both documents and substantially changed the 2017 draft policy language, incorporating significant policy language from the Commission’s guidance and the Morro Bay draft policies.

Draft Policy 5.2.6.G.2 (formerly 2017 Policy ML-5.2)

“Maintain the long-term viability of Moss Landing Harbor and coastal-dependent and coastal-related uses as long into the future as is economically feasible. The County of Monterey shall, in cooperation with the community and affected agencies, plan the appropriate steps to protect (dune restoration, beach replenishment, vegetation planting, armoring, etc.) or develop adaptation strategies against the effects of climate change hazards.

For the rest of the community, shoreline protective devices and other shoreline altering development shall be allowed only when all coastal resource impacts are avoided, or if unavoidable, are appropriately and proportionately mitigated.”

The intent of this policy is to establish the overall framework for identifying, in the regulations, how and for how long the harbor and coastal-dependent and coastal-related uses will be maintained in light of coastal hazards. The policy also establishes guidance for allowing adaptive management techniques to be used. The policy further identifies how shoreline protective devices may be used for other situations and uses.

<p>1982 NCLUP Policy (See full text of existing NCLUP policies in discussion above.)</p>	<p>Key Policy 2.8.1: Regulate land uses and development in areas of high hazard to minimize risks to life and property and damage to the natural environment.</p> <p>2.8.2 General Policies</p> <ol style="list-style-type: none"> 1. Minimize risk from hazards to a level generally acceptable to the community. 2. Low intensity or open space uses in high hazard areas.
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	<p>3. Demonstrate that development on newly created parcels will not create or significantly contribute to hazards, nor require construction of substantial landform-altering protective devices.</p> <p>4. Evaluate development for conformance with hazard policies.</p> <p>6. Deed restriction required for development in high hazard areas.</p>
1982 MLCP Policy	N/A
2009 MLCP Committee Recommendation	N/A

Community Recommendation Narrative – During the meeting Ross Clark from the Central Wetlands Group explained that armoring on the island could provide protection for the harbor. Some community members recommended the 2017 draft Policy ML-5.2 be in two parts; 5.2.a would address the harbor and 5.2.b would address all other areas of the community.

Staff’s Recommendation Narrative – Based on discussions with Coastal Commission staff and review of their policy documents, staff recommends refinement of the language suggested by the community. Policies 5.2.a and 5.2.b have been combined for clarity.

Coastal Commission Staff Recommendation Narrative – Coastal Commission staff recommended staff refer to the Coastal Commission guidance document and Morro Bay’s draft climate hazards policies in developing policies addressing Climate Change Hazards.

Staff reviewed both documents and incorporated policy language from the 2017 draft policy and both Coastal Commission guidance and Morro Bay documents to create the proposed policy.

Draft Policy 5.2.6.G.3 (formerly 2017 Policy ML-5.3)

“Monterey County shall, in cooperation with Elkhorn Slough Foundation, Elkhorn Slough National Estuarine Research Reserve, and other affected agencies and the community, plan the appropriate steps for managed retreat implementation to accommodate a migrating shoreline caused by sea level rise while promoting the conservation of beach, dune, slough, and other natural habitats. Such planning shall also include measures to ensure that increases in sediment load do not compromise harbor operations.”

The intent of this policy is to ensure that when managed retreat occurs, conservation of natural features is considered in the planning.

<p>1982 NCLUP Policy (See full text of existing NCLUP policies in discussion above.)</p>	<p>Key Policy 2.8.1: Regulate land uses and development in areas of high hazard to minimize risks to life and property and damage to the natural environment.</p> <p>2.8.2 General Policies</p> <p>1. Minimize risk from hazards to a level generally acceptable to the</p>
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	community. 2. Low intensity or open space uses in high hazard areas. 3. Demonstrate that development on newly created parcels will not create or significantly contribute to hazards, nor require construction of substantial landform-altering protective devices. 4. Evaluate development for conformance with hazard policies. 6. Deed restriction required for development in high hazard areas.
1982 MLCP Policy	N/A
2009 MLCP Committee Recommendation	N/A

Community Recommendation Narrative – The community did not have significant concerns with this policy except to discuss why the phrase “necessary steps” (2017 policy) was changed to “appropriate steps.”

Staff’s Recommendation Narrative – Significant portions of the community will be affected by climate hazards and planning for managed retreat is necessary, either within the same property or to a new location, in the long term.

Coastal Commission Staff Recommendation Narrative – Coastal Commission staff recommended that a policy be developed for the Island, so the policy was broadened to apply to all of Moss Landing.

Draft Policy 5.2.6.G.4 (formerly 2017 Policy ML-5.4)

‘The County of Monterey shall work with the Moss Landing Harbor District and state and federal agencies to install and maintain a warning system, including adding nearby tide gauges, and signing for storm hazards and tsunami evacuation and education.’

The intent of this policy is to establish a commitment to work with other agencies to establish a warning system.

1982 NCLUP Policy (See full text of existing NCLUP policies in discussion above.)	2.8.1 Key Policy: Regulate land uses and development in areas of high hazard to minimize risks to life and property and damage to the natural environment.
1982 MLCP Policy	N/A
2009 MLCP Committee Recommendation	N/A

Community Recommendation Narrative – The community recommended adding language for installation of a tide gauge.

Staff’s Recommendation Narrative – It is clear that a warning system is necessary for Moss Landing. Implementation regulations for this policy will include details for funding and maintenance. However, if the warning system is owned by a state or federal agency, this detail may not be necessary.

Coastal Commission Staff Recommendation Narrative – Coastal Commission staff were satisfied with this draft policy.

Draft Policy 5.2.6.G.5

“Shoreline Management Plan. The County shall prepare a Shoreline Management Plan. The plan shall function as a tool to help implement coastal protections, maximize public access, and protect coastal resources along the shoreline. The plan shall be prepared in coordination with relevant local, regional, and/or state agencies for the purpose of protecting coastal resources, as well as ensuring the resilience of coastal public infrastructure, and evaluate the following:

- a. Refining adaptation triggers for actions to address coastal hazards impacts for different areas and assets in Moss Landing, including monitoring beaches for coastal hazards impacts such as erosion and changes in beach widths in order to identify trigger points for various adaptation strategies.*
- b. Site Reuse. Considering appropriate uses for sites previously occupied by relocated assets, including parks, open space/natural areas, and other predominantly passive land uses.*
- c. Transfer of Development Rights (TDR). Considering a TDR program to restrict development in areas that are vulnerable to coastal hazards and allow the transfer of development rights to parcels with less vulnerability to hazards.*
- d. Coastal Hazards Overlay Zone. Establishing a Coastal Hazards Overlay Zone to address safety from flood and sea level rise related hazards, and recommend remedial actions. Establishing a program to inform owners of real estate in the Coastal Hazards Overlay Zone about coastal hazards or property vulnerabilities, including information about known current and potential future vulnerabilities to coastal hazards, and disclose permit conditions related to coastal hazards to prospective buyers prior to closing escrow.*

The Shoreline Management Plan shall be adopted by the Coastal Commission through the Local Coastal Program amendment process and may be amended as appropriate.”

The intent of this policy is to have the County prepare a plan that will provide detailed guidance for dealing with future development along the coastline. A plan will provide a consistent

approach for the community and certainty for property owners.

<p>1982 NCLUP Policy (See full text of existing NCLUP policies in discussion above.)</p>	<p>Public Access 6.2 Key Policy: Protect public access to the shoreline and along the coast.</p> <p>6.4.B.1 Management plans or programs shall be prepared and coordinated with the improvement and management of shoreline destination areas or recreation areas.</p> <p>6.4.B.2: Consult with appropriate agencies, property owners and interested members of the community during development and implementation of access management plans.</p>
<p>1982 MLCP Policy</p>	<p>Shoreline Protection Policies:</p> <p>5.2.1.A.1: Due to the continued erosion of the shoreline of the "Island" a comprehensive shoreline erosion plan for the area should be developed to protect existing and future development. This plan should be based on engineering studies that address the stabilization of the entire length of the Moss Landing spit shoreline from the Moss Landing Marine Lab to the South Jetty.</p> <p>5.3.3.3: Bulkheading to prevent erosion and to maximize use of available shoreline should be provided along the west bank of the South Harbor.</p> <p>5.4.3.9: The State Department of Parks and Recreation is encouraged to evaluate the desirability of acquiring dune and beach properties at such time as they are offered for sale by the owner. A dune restoration program should be established, including protective fencing, replanting with native vegetation, and boardwalks constructed of permeable material to link parking areas and access sites with the shoreline.</p>
<p>2009 MLCP Committee Recommendation (See complete language in Exhibit H.)</p>	<p>10. The existing plan references addressing the shoreline erosion on the Island. It is important that this language be strengthened to specifically address shore erosion on the east side of the Island including such measures as “bulkheading” or other measures to stabilize the shoreline.</p>

Community Recommendation Narrative – This policy was created after community meetings as a result of discussions with Coastal Commission staff and has not been reviewed by the community.

Staff’s Recommendation Narrative Based on Discussions with Coastal Commission Staff – Pursuant to Coastal Commission guidance, staff is recommending a comprehensive Shoreline Management Plan to guide development along the shoreline in a consistent manner with the focus of providing measures for protecting the coast and coastal resources and to maximize public access along the shoreline.

Draft NCLUP Coastal Hazards Policies

Section 2.8.3: Insert the following new “Hazards” subsection:

“D. Coastal Hazards

1. *The County shall monitor the latest sea level rise and climate change information. The information gathered should address multiple time frame horizons (e.g., 2030, 2050, and 2100) as well as multiple sea level rise scenarios, as appropriate.*
 - a. *The County shall obtain the most current government issued floodplain/coastal hazards information that affects the most vulnerable areas of North County.*
 - b. *The County shall join or facilitate collaborative climate change adaptation efforts with local, regional, state, and federal entities to promote restoration or enhancement of natural ecosystems, such as coastal wetlands and sandy beaches.*
2. *Maintain the integrity and adaptability of essential public facilities that are vulnerable to natural coastal hazards. Locate new essential public facilities outside of natural coastal hazards areas. The County shall identify County owned infrastructure that could be compromised by coastal hazards. Replacement, reconstruction, or relocation of public infrastructure shall be designed and constructed to avoid effects from coastal hazards for the planned life of the infrastructure. Needed infrastructure improvements or relocation shall be included in the County’s applicable Capital Improvement Program.*
3. *Where full adherence with all LCP policies, including setbacks and other hazard avoidance measures, preclude a reasonable economic use of the property as a whole, minimum economic use and/or development of the property shall be allowed necessary to avoid an unconstitutional taking of private property without just compensation.*
4. *Incorporate an emergency response plan addressing climate change hazards impacts within the Monterey County Office of Emergency Services’ Hazards Mitigation Plan in an effort to reduce loss of life and property by lessening/mitigating the impacts caused by climate change hazards.”*

The intent of these policies is to establish a commitment to monitoring how coastal hazards are understood over time, participate with other agencies and organizations to establish adaptability and resiliency to coastal hazards, locate and maintain public facilities to avoid hazards, provide guidance on avoiding a constitutional taking for private property, and ensure that County emergency plans include coastal hazards.

1982 NCLUP/MLCP Policy	N/A
2009 MLCP Committee Recommendation	N/A

Community Recommendation Narrative – These policies were created after community meetings as a result of discussions with Coastal Commission staff and have not been reviewed by the community.

Staff’s Recommendation Narrative based on discussions with Coastal Commission Staff – Coastal Commission staff recommended staff refer to their guidance document and examples of Morro Bay’s draft climate hazards policies. Staff reviewed both documents and incorporated policy language from both documents to create the proposed policies.

Section 2.4.2: Amend the “General Policies” Section to add the following:

“7. *Shoreline protective devices, including revetments, breakwaters, groins, seawalls, cliff retaining walls, and other such construction that alters natural shoreline processes, shall be permitted when required to serve coastal-dependent uses, protect existing principal structures or public beaches, or eliminate or mitigate adverse impacts on local shoreline sand supply, and when there is no feasible, less environmentally damaging alternative. Any such structures shall be sited to avoid sensitive resources, if feasible, and adverse impacts on all coastal resources shall be mitigated. Alternatives considered under this alternative should include relocation of the threatened development, beach nourishment, non-structural drainage and native landscape improvements, or other similar non-structural options.*”

The intent of this policy is to describe the types of development that may be protected from shoreline protective devices and to consider environmental resources in the design and location of such devices.

1982 NCLUP/MLCP Policy	N/A
2009 MLCP Committee Recommendation (See complete language in Exhibit E.)	10. The existing plan references addressing the shoreline erosion on the Island. It is important that this language be strengthened to specifically address shore erosion on the east side of the Island including such measures as “bulkheading” or other measures to stabilize the shoreline.

Community Recommendation Narrative – This policy was created after community meetings as a result of discussions with Coastal Commission staff and has not been reviewed by the

community.

Staff’s Recommendation Narrative based on discussions with Coastal Commission Staff – Coastal Commission staff recommended staff refer to their guidance document and examples of Morro Bay’s draft climate hazards policies. Staff reviewed both documents and incorporated policy language from both documents to create the proposed policy.

Section 4.3.5: Amend the “General Policies” Section to add the following:

- “10. *Development meeting the threshold of a replacement structure shall be brought into conformance with all coastal resource protection policies.*”
- “11. *Subdivisions and lot line adjustments shall not result in parcels where development would be located in areas vulnerable to coastal hazards except where the new lot(s) would be permanently protected for open space, public access, or other similar purposes consistent with the LCP.*”
- “12. *Encourage property owners to reduce greenhouse gas emissions by using sustainable measures (e.g., weatherizing techniques and solar panels), when compatible with the community character, coastal viewsheds and the protection of coastal resources.*”

The intent of these policies is to state that replacement structures must be brought into conformance when replacement, as defined in the regulations, is proposed, how the creation of lots will be processed in coastal hazards areas, and that reducing greenhouse gas emissions shall be considered when new development is proposed.

1982 NCLUP/MLCP Policy	N/A
2009 MLCP Committee Recommendation (See complete language in Exhibit E.)	N/A

Community Recommendation Narrative – These policies were created after community meetings as a result of discussions with Coastal Commission staff and have not been reviewed by the community.

Staff’s Recommendation Narrative based on discussions with Coastal Commission Staff – Coastal Commission staff recommended staff refer to their guidance document and examples of Morro Bay’s draft climate hazards policies. Staff reviewed both documents and incorporated policy language from both documents to create the proposed policies.

Appendix B: Add the Following Glossary Terms:

“10.5 Coastal Hazards: An area that includes, but is not limited to, episodic and long-term shoreline retreat and coastal erosion, high seas, ocean waves, storms, tsunamis, coastal flooding, landslides, bluff and geologic instability, high liquefaction, and the interaction of same, and all as impacted by sea level rise.”

“69.5 Shoreline Protective Devices: Structures along the shoreline that are used to protect development against coastal hazards, including but not limited to seawalls, revetments, gunite, sheet piles, breakwaters, groins, bluff retention devices, retaining walls, and pier/caisson foundation and/or wall systems.”

The intent of adding these definitions is to clearly define new terms used in the North County Land Use Plan to provide certainty as to their applicability.

Community Recommendation Narrative – These definitions were not discussed at a community meeting as the terms were developed from recent discussions with Coastal Commission staff. Pursuant to Coastal Commission guidance, staff has included new policies related to these terms and, therefore, to ensure these terms are consistently defined, is proposing to add the new terms to the NCLUP Glossary.

Staff’s Recommendation Narrative based on discussions with Coastal Commission Staff – Coastal Commission staff recommended staff refer to their guidance document and examples of Morro Bay’s draft climate hazards policies. Staff reviewed both documents and incorporated these definitions from both documents.

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5. MOSS LANDING COMMUNITY PLAN

5.1 BACKGROUND

The findings, policies and recommendations contained in this chapter are the result of a cooperative land use planning effort between the Monterey County Planning Department, the consulting firm of Jefferson Associates, various public agencies and members of the community. The key products of this effort have been: a technical memorandum on wastewater facilities, three technical background reports, and the Community Plan. The three background reports, completed in August, 1980, include: Harbor Development; Commercial and Recreational Facilities; Visual Resource and Special Communities; Energy and Industrial Expansion Alternatives.

An integral part of the community planning process was a program of public participation. This included, general public workshops and meetings, North County Citizens Advisory Committee (CAC) meetings, CAC Harbor and Industry Development Sub-Committee meetings, and Technical Advisory Committee meetings on specialized topics. A particularly high degree of public involvement was achieved at several major public meetings held during the planning period. One of these meetings was devoted primarily to a mapping workshop in which attendants were asked to draw their own plans for the community. A total of 10 plans were mapped and no fewer than 275 comments were tabulated. A great number of the ideas and comments articulated at this workshop were used in developing the Community Plan for Moss Landing.

5.2 LAND USE, CIRCULATION, AND WASTE WATER TREATMENT

5.2.1 Land Use Proposals

The land use plan for the Moss Landing Community shown on Figure 2 illustrates the arrangement of land uses at the time when the community will be fully developed. The boundaries between land uses shown on the recommended plan are intended to be exact in most locations, particularly where land is developed now. In undeveloped or unsubdivided areas, boundaries are approximate.

A. Coastal Dependent Industry

The industries located in Moss Landing are generally dependent for their existence upon a location near the coastline, and as such are considered "coastal dependent". These industries include commercial fishing, aquaculture, energy facilities and manufacturing activities. Coastal dependent industries are given priority by the Coastal Act over other land uses on or near the coast. The intent of this plan is that these coastal dependent industrial facilities shall be encouraged to expand within existing sites, and shall be allowed reasonable growth consistent with the protection of the area's natural resources. If impacts to sensitive natural habitats cannot be avoided by future expansion of these facilities, then impacts must be mitigated to the maximum extent feasible. Policies that support this basic objective are contained in Sections 5.5 and 5.7.

1. *Light Industry*

Commercial fishing industries include canneries and fish processing companies, boat storage and repair facilities, marine supply stores, and other related facilities (i.e. fueling stations, private launching ramps, used boat sales businesses) located on the Island. Consolidation and up grading of some of these enterprises is currently planned, and should contribute to improving the efficiency and site economics of existing facilities. If such improvements are encouraged, Moss Landing should be able to maintain a reasonably strong commercial fishing base on the Island. The plan also recognizes an existing need for some limited commercial development of uses such as a fishermen's dormitory, cafe, etc., and flexibility in the plan is envisioned to allow these uses. Long-term economic uncertainties about commercial fishing make rapid future growth of the industry seem unlikely. Because of this and because most facility modernization can be accommodated on-site, the land designated for Light Industrial use north of the Moss Landing Marine Lab is considered adequate to meet the needs of the commercial fishing industry until the harbor is expanded. At such time, there may be need for additional facilities to support the commercial fishing industry. An area of land between the extension of Sandholdt Road and the channel is shown on the plan map as "Light Industry" to provide for support facilities in the event that the Old Salinas River Channel is ultimately approved as the site for expansion of the harbor. The development of industrial uses in this area shall not take place until the harbor is extended into the Old Salinas River Channel. This extension must be made consistent with the provisions and requirements of section 5.3.

Currently, several companies engaged in commercial aquaculture base their operations on the Island and use the Elkhorn Slough as a propagation area. These companies have located their buildings, which house offices, laboratories, indoor growing tanks and other processing equipment, on the Island. The plan encourages these uses by including them among the uses appropriate in the "Light Industry" designation applied to the Island.

Due to the continued erosion of the shoreline of the "Island" a comprehensive shoreline erosion plan for the area should be developed to protect existing and future development. This plan should be based on engineering studies that address the stabilization of the entire length of the Moss Landing spit shoreline from the Moss Landing Marine Lab to the South Jetty. It should involve the cooperation of property owners, the Moss Landing Harbor District, the County, the State, and other governmental bodies, in the planning, financing, and construction phases.

2. *Heavy Industry*

The only existing energy production facility in the Moss Landing area is the PG&E thermal electric plant located on the south bank of Elkhorn Slough and across Highway One from Moss Landing Harbor. This plant has two cooling water intake structures in the east branch of the harbor (outlet of Moro Cojo Slough), with thermal discharges into Elkhorn Slough north of the plant, and the ocean west of the plant and beyond Moss Landing Island.

There are seven steam turbine units with a total capacity of about 2,113 Megawatts (MWe) at the PG&E Moss Landing Power Plant. Units 1-5 are fueled by either natural gas, or by fuel oil which is offloaded from tankers three- fourths of a mile offshore, and employ six boilers for powering. Units 6 and 7, activated in 1968, have a gross capacity of 1,500 MWe and are similarly fueled and equipped.

An assessment of options for upgrading and expanding the PG&E power plant presented in the Background Report on Energy and Industrial Expansion Alternatives indicated that future plans for modernization of the plant can be accommodated on-site. Future use of coal or nuclear fuel is not likely and not recommended in the plan. Minor modifications of on-site parking facilities and circulation systems is a future possibility. Utilization of an additional transmission line easement is possible in the future, but should be discouraged in favor of using the existing transmission corridor due to undesirable impacts to agricultural operations and to the scenic beauty of the area. Recommended policies for upgrading energy facilities and minor on-site land use and circulation changes consistent with the preservation of adjacent wetlands habitats and sensitive natural resources are presented in Section 5.7.

The major existing manufacturing industry is Kaiser Refractories, located south of PG&E off Dolan Road and Highway One. The Moss Landing plants produce magnesia and refractory brick, using as raw material sea water from the ocean and dolomite from the Natividad Quarry near Salinas, thirteen miles away. The refractory brick production is a coastal-related industry while magnesia production is coastal-dependent.

As with the PG&E facility, major changes in the next twenty years at Kaiser can be accommodated on-site. A primary option available to Kaiser is the replacement of the present gas and fuel oil as furnace fuels by refinery coke. In addition, increased pressurized filtering of products before firing would remove further water and decrease the fuel requirement per pound of finished product. On-site circulation system and land use changes are planned, and primary access from Highway One will be closed and shifted to Dolan Road. Major changes in primary access to PG&E and Kaiser shall be approved only upon the condition that comprehensive landscaping programs are completed around the perimeter of all properties fronting on public roads. Policy recommendations for the modernization proposals are presented in Section 5.7.

B. Commercial

Two types of commercial land uses are designated on the plan map. These are Recreation and Visitor-Serving Commercial and General Commercial uses. The Coastal Act gives priority to visitor-serving commercial uses, although this priority is lower than that afforded coastal dependent industry. In addition to the following discussion, section 4.3.6.E.4 of the plan should be consulted.

1. Recreation and Visitor-Serving Commercial

This term is used to describe businesses that serve primarily visitors rather than residents. Although an absolute distinction between visitor-serving and neighborhood type commercial uses is difficult to make, visitor-serving uses would include businesses such as restaurants, motels, service stations and antique shops.

The plan designates four areas strictly for visitor-serving commercial uses. In the north harbor, visitor-serving commercial uses are shown north of the Elkhorn Yacht Club and harbor office. Appropriate uses for this area could include restaurants and/or motels, with adequate on-site parking, controlled access from Highway One, and appropriate design controls to ensure that public views of the north harbor are not obstructed. The plan permits up to 150 hotel/motel units based on available land and wastewater collection system capacity. These shall generally be provided by several smaller establishments not exceeding 30 units each. The area from what is now known as Skipper's Seafood and the Harbor Inn north to Little Baja is also designated for visitor-serving commercial uses, with controlled access from Highway One and a frontage road.

In the South Harbor area, three visitor-serving commercial areas are shown. The currently undeveloped area south of the antique shops on the east side of Moss Landing Road is designated visitor-serving commercial. The area at the corner of Potrero Road and Moss Landing Road, which includes a restaurant, antique shop, liquor store and fishermen's supply store, and the property fronting on Highway One between Moss Landing Road and Moro Cojo Slough are also designated for visitor-serving commercial use.

2. *General Commercial*

General Commercial uses are shown on the plan map on both sides of Moss Landing Road. This designation provides the opportunity to combine commercial and residential uses. Antique shops, the Moss Landing Post Office and historical buildings such as the Pacific Coast Steamship Company, lend a special character to this area and should be preserved and upgraded. Opportunities for providing a motel, a small neighborhood grocery store and low-cost rental housing units exist on undeveloped or underdeveloped parcels in this area. Appropriate design and setback standards should be applied as a means of providing relief from "strip" development that can be an aesthetic nuisance to the community. Design standard suggestions are presented in Section 5.6.

C. *Residential*

Very little residential development exists in Moss Landing. Although a significant market exists for lower priced rental units, available locations without environmental or topographical constraints are limited. Low density and medium density housing are the two residential categories shown on the plan map.

1. *Low Density (0.1 to 0.4 units per gross acre)*

Low density housing development is shown for the undeveloped areas near the end of Potrero Road and on the hillside overlooking the Old Salinas River Channel. Such development should be clustered to maximize preservation of trees and open areas and minimize negative effects of heavy grading.

2. *Medium Density (1 to 4 units per gross acre)*

Medium density housing is shown for the developed residential area on Potrero Road, and for an area on Moss Landing Road north of the cemetery.

3. *High Density (5 to 15 units per gross acre)*

No high density residential development is shown on the plan. However, the general commercial use areas shown on Moss Landing Road provide opportunities to combine commercial uses and high density residential development.

D. *Resource Conservation*

Protection of sensitive resources, plant communities and animal habitats is emphasized. This land use is applied to wetlands and dunes and the Old Salinas River under the Wetlands and Coastal Strand category. Only very low intensity uses and supporting facilities compatible with protection of the resource are allowed. Uses would include low-intensity recreation, education and research. In designated wetland areas, aquaculture is permitted.

E. Agriculture

Preservation of agricultural lands is a major priority of the Coastal Act and is ensured in this plan by designating all lands in agricultural production, or suitable for such use, as "Agricultural Conservation" and by setting aside considerable other lands for aquacultural use.

1. Agricultural Conservation

Agricultural Conservation areas designated on the map are lands north of Bennett Slough and areas between Elkhorn Slough and the PG&E property. These areas should be provided maximum protection against development to maintain consistency with the agricultural policies of Section 2.6.

2. Aquaculture

Aquaculture, defined in the California Aquaculture Development Act as, "...The culture and husbandry of aquatic organisms, including but not limited to, fish, shellfish, mollusks, crustaceans, kelp, and algae" is an agricultural industry that is growing rapidly in many parts of the world.

Aquaculture is shown as an appropriate use for certain areas of Elkhorn Slough. Aquaculture facilities in these areas are limited to non-structural development such as ponds or basins, piers, walkways, or minor storage facilities for tools. Aquaculture processing buildings are to be located in Light Industrial areas. Reasonable growth of aquaculture operations with appropriate mitigation to prevent disturbance of marsh and Clapper Rail habitat is compatible with the basic Resource Conservation designation of this area.

F. Recreation

1. Scenic and Natural Resource Recreation

Low-intensity recreational and educational uses that are compatible with the natural resources of the area and require a minimum level of development, accommodate basic user needs, and necessitate minimal alteration of the natural environment are appropriate. Uses may include general beach use, hiking, fishing, picnicking, nature studies and horseback riding. The only facilities contemplated are improved parking and restrooms at Moss Landing and Salinas River State Beach, and at fish cleaning facilities at Moss Landing State Beach.

2. Outdoor Recreation

Moderate-intensity recreational use with accompanying facilities compatible with the recreational and natural resources of the site are appropriate. In addition to the uses permitted in the Scenic and Natural Resource Recreation category, facilities may include tent and recreation vehicle campgrounds, improved restrooms, and fish cleaning facilities.

G. Special Treatment

The "Special Treatment" designation is intended to facilitate a comprehensive planned approach towards developing specifically designated properties. Particular attention is to be given towards siting and planning development to be compatible with existing resources and adjacent land uses.

The property on the north side of Potrero Road bordering the east bank of the Old Salinas River is designated for Outdoor Recreation Special Treatment. The primary land use for this property is Outdoor Recreation with an emphasis on a recreation vehicle park. A secondary, alternative use for this property is medium-density housing. An open space buffer strip not to exceed 20' in width shall be established on the property along the north side of Potrero Road to protect adjacent agricultural operations. When combined with the County road right-of-way and the agricultural service road this will result in a total buffer width of 110'.

The "Special Treatment" designation is also used to indicate the area of the Old Salinas River Channel proposed for development for harbor purposes and adjacent land proposed for Light Industrial uses and Harbor Facilities. This "Special Treatment" area is one of four locations that will be considered as a potential site for harbor expansion. Prior to any development of the harbor in the Old Salinas River Channel certain interim uses may be permitted as described in H.4. below.

H. *Public/Quasi-Public*

Three public/quasi public uses are shown. These include educational/scientific, harbor facility and cemetery designations.

1. *Education/Scientific*

Two facilities given this designation are the Moss Landing Marine Lab and the school district office building on Moss Landing Road. Future redesign and expansion of Moss Landing Marine Labs shall not be permitted to encroach upon sensitive dune habitats south of the existing site.

2. *Cemetery*

The Moss Landing Cemetery is shown on the plan map on Moss Landing Road.

3. *Harbor Facilities*

This designation applies to the Harbor District office area, land south of the Sandholdt Bridge, and land in the North Harbor proposed for harbor support facilities. Facilities in the South Harbor adjacent to the new berths would include a parking lot, restrooms and staging areas. If enough space exists, a harbor maintenance facility would be developed in this area. Unused lands near the Harbor District office would be used for additional dry storage, possible overnight parking, and the harbor maintenance facility if space constraints prohibit its development in the harbor support area south of the bridge. Public facilities in the North Harbor would include a boat launching ramp, additional dry storage areas, and restroom facilities for non-yacht club members. Policies pertaining to harbor support facilities are contained in Section 5.3.

4. *Plan Alternatives for South Harbor Area*

It should be kept in mind that the future expansion of Moss Landing Harbor into the Old Salinas River Channel discussed in Section 5.3 is an important factor in determining the kinds of land uses that would be appropriate adjacent to the channel. Accordingly, properties on the west bank of the channel have been designated for Light Industrial use to support the harbor, and Harbor District property along the east side of the channel has been designated for parking and restrooms. The replacement of Sandholdt Bridge with a new crossing is also based upon future expansion of the Harbor into the Old Salinas River Channel.

If ultimately the Old Salinas River Channel is not used for harbor expansion then changes in the proposed circulation system and the land use plan will be needed. The new crossing over Old Salinas River Channel shown on Figure 2, would not be necessary, and would not be constructed. The existing circulation system that provides access to the Island via Sandholdt Bridge would be retained unless Sandholdt Bridge is too expensive to repair or reconstruct. In this case an alternative access route to the Island would need to be developed.

Land on the west bank of the channel, south of the Marine Lab and designated Light Industrial in order to support harbor expansion into the channel, would not be appropriate for Light Industrial use and would need to be changed to other designations. A combination of Resource Conservation and Scenic and Natural Resource Recreation may be most appropriate uses for the area and would be consistent with similar properties adjacent to the south. These are also considered appropriate interim uses for private beach properties until the South Harbor is expanded south of Sandholdt Bridge.

Any change in the Plan, however, concerning either harbor expansion, related land uses, or the circulation system can only be made through public hearings before the Monterey County Planning Commission and Board of Supervisors and with approval of the California Coastal Commission. The community, property owners, and affected agencies will participate in the process of revising the plan if this becomes necessary.

5.2.2 Circulation

The primary transportation emphasis of the Coastal Act is to preserve highway capacity for coastal access and coastal dependent land uses. In this context the plan shows improvements to Highway One and recommends a reduction in the number access points from the highway to minimize hazardous and congested conditions. Needed parking facilities are also proposed. Pedestrian access is discussed in item E. below and in Section 5.4.

A. Highway One

Highway One should be improved as a four lane divided scenic highway. Access points to Highway One shall be consolidated and limited to Jetty Road, Dolan Road, Moss Landing Road and Potrero Road.

B. County Roads

The County roads shown on the land use plan map are Jetty Road, Moss Landing, Dolan Road and Potrero Road. These are shown as two-lane roadways with the access improvements to Highway One discussed above. In order to minimize the access points to Highway One in the North Harbor area, a frontage road with a single access point should be developed to serve the yacht club and present and future commercial uses.

C. Sandholdt Bridge

As part of the long-term expansion plan for the harbor, Sandholdt Road would be extended about 1,000 feet south of the Sandholt Bridge on the west side of the Old Salinas River Channel by purchase of private property. The bridge would be removed. A new embankment crossing of the river would be constructed with access provided from Moss Landing Road, and from Sandholdt Road to the north just west of the existing bridge. These are shown as proposed circulation system improvements on Figure 2.

Should the planned harbor expansion into the Old Salinas River not be implemented, access to the spit will remain dependent upon the existing one-lane Sandholdt Bridge, the maintenance of which is becoming an increasingly expensive problem. Replacement of the bridge would be even more expensive barring assistance from some federal program or some other outside source. The plan recognizes the economic problems of retaining a bridge at the existing location and further recognizes that such pressures on public funding may eventually force abandonment of the bridge crossing. New access would then need to be provided to the Island, consistent with other LCP policies.

D. Parking Facilities

Locations for improved parking facilities are shown on Figure 4 for the North Harbor area. It is recommended that the improved parking area to be located between the Sand dunes and Bennett Slough at the curve of Jetty Road be limited to not more than 100 spaces. Consistent with access policies in Chapter 6, parking improvements shall be made only upon completion of more detailed management plans for the area by the State Department of Parks and Recreation. Care should be taken during development of parking at the Jetty Road curve, to avoid filling the Bennett Slough wetlands or disrupting wildlife and shorebird habitat.

The potential for parking improvements should be studied at "the opening" a popular parking area mid-way along Jetty Road where there are no longer any dunes remaining and where there is easy beach access.

Up to 150 improved parking space should be provided at the end of Jetty Road where there is ample area for a paved turnaround, or loop to assist circulation. When these improvements have been made it will be desirable to limit parking along the shoulder of the road.

Parking improvements are proposed for the South Harbor area. The existing Cal Trans Park and Ride facility is shown on the west side of Highway One near Dolan Road. Future parking is also shown at the South West corner of Moss Landing Road North and Highway One, and near the South intersection of Moss Landing Road and Highway One. General upgrading of the existing parking area at Salinas River State Beach is also needed.

E. Pedestrian Access

Access improvements to and along the Shoreline within the Moss Landing Community Plan area are described in Chapter 6 and are shown on Figure 6. Figure 3 and 4 provide additional illustration of existing and proposed access opportunities. The small scale of the central community area generally encourages walking, although the lack of sidewalks on Moss Landing Road or Sandholdt Road require caution on the part of pedestrians and drivers. It will be desirable to require sidewalks to be installed on Moss Landing Road as part of future development, because this will continue to be the primary focal point of visitor oriented commercial development. If in the future Sandholdt Bridge is replaced a pedestrian walkway should be provided separate from the roadway.

F. Public Transit

Public transit stops are shown on the west side of Highway One near Dolan Road, and at the Jetty Road/Highway One and Potrero Road/Highway One intersections. Public transit is provided in the North County by Greyhound and Monterey-Salinas Transit, and a new route is planned between Watsonville and Salinas via Highway One. Commercial, recreational and industrial facilities are not currently served in Moss Landing. Designation of new stops and improved scheduling would provide better service to the beaches and to the island.

5.2.3 Wastewater Treatment

The California Coastal Act of 1976 sets criteria for expansion of urban areas and allocations of the capacities of public works facilities such as wastewater collection and treatment facilities.

The Moss Landing County Sanitation District was formed in response to the ban on installation of additional septic systems ordered by Monterey County and construction of wastewater collection lines and a main transport line from Moss Landing to Castroville are planned. The wastewater collection project will collect effluent from the residences and commercial establishments in Moss Landing and transport it to the Castroville wastewater treatment plant or the proposed regional plant in Marina. Collection service will include the Moss Landing Mobile Manor and the residential area along Struve Road in addition to the central Moss Landing Community. The industrial facilities of Kaiser and PG&E are not included in the service area. These facilities have adequate wastewater treatment and disposal systems. While all domestic wastewater would be collected in Moss Landing, aquaculture and fish processing industries would probably continue to discharge their processing wastewater in other manners.

The design capacity of the Moss Landing wastewater collection system is about 105,000 GPD average daily flow. The current amount of wastewater generated in Moss Landing that would be collected is estimated to be about 66,500 GPD. This leaves a potential remaining capacity of 38,500 GPD to serve all new uses. However, no capacity is presently available at the Castroville treatment facility to treat effluent from Moss Landing. A regional system is not yet functioning. Until the Castroville facility is expanded or the regional system begins operation, the wastewater collection system will not be able to begin operation. Further, the planned expansion of the Castroville treatment plant is sufficient to serve existing uses only. Additional treatment capacity for Moss Landing will not be available until the Castroville plant is expanded beyond proposed levels, or a regional facility with higher capacity is placed in operation.

Finally, the California Coastal Commission, in approving permits for the collection system, set conditions allocating capacity in the collection line based on the priorities of the Coastal Act. These priorities for wastewater service are as follows:

- a) Existing uses within the service area.
- b) Moss Landing State Beach, Salinas River State Beach.
- c) New or expanded coastal-dependent industries within the service area.
- d) New or expanded essential public services, basic industries or recreational uses excluding the Struve Road area, or minimum other uses on vacant parcels in the service area.
- e) All other uses.

5.3 COMMERCIAL FISHING & RECREATIONAL BOATING FACILITIES

The intent of the Coastal Act with regard to commercial fishing and recreational boating is that increased use of coastal waters for these purposes shall be encouraged. As a coastal dependent industry, commercial fishing facilities are given the highest priority for development on or near the coastline. Similarly, development of land-based facilities to support recreational boating is favored over non-water dependent land uses near the coastline. However, Section 30233 of The Coastal Act is specific concerning conditions under which the development or expansion of harbors can occur when it states: "The diking, filling, or dredging of open coastal waters, wetlands, estuaries, and lakes, shall be permitted . . . 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 . . . 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." Thus, the legislative intent is to allow reasonable expansion of commercial fishing and recreational boating facilities consistent with maximum preservation of sensitive natural resource areas and wetland habitats.

For the entire Moss Landing harbor, demand for commercial and recreational boat berths and related facilities far exceeds the available supply in the existing harbor area. Even maximum expansion of the South Harbor would not entirely satisfy this demand. Efforts to make optimal year round use of available berthing and support facilities particularly in the South Harbor are constrained by peaks created by the cyclical nature of the fishing industry upon which the planning process can have little effect.

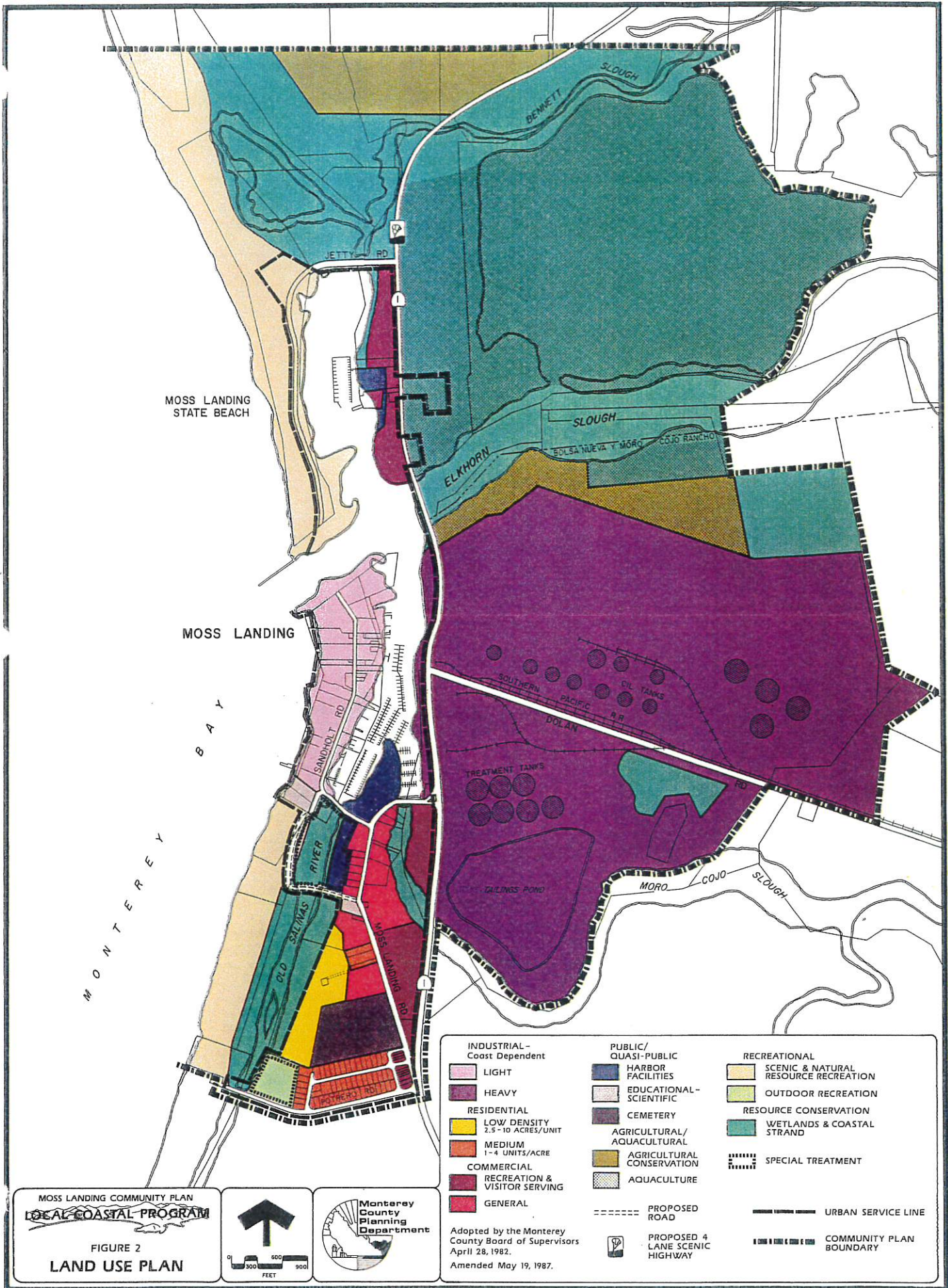
Nonetheless, some of the physical constraints on maximizing the use of existing facilities can be addressed by land use planning and harbor management measures. In the South Harbor for example, the ability to intensify boat repair and fish processing activities will be considerably improved when bulkheading work along the western shoreline of the south harbor is completed. Similarly, optimal processing of fish catches is limited by the lack of adequate unloading and work docks and the capacity of some fish handling facilities. When dredging work is completed, fish processing capabilities of certain docks will increase. The limited supply of dry storage areas and underutilization of other areas that could be used for dry storage is a further constraint on efficient use of existing facilities.

Another problem constraining efficient use of available resources involves utilization of boat berthing space and slips by inactive or unseaworthy vessels. This limits potential for future use of space by vessels on the waiting list for berths in the South Harbor.

Other problems in the South Harbor include:

- Adequacy of boat launching ramps or hoists for sport fishing and recreational boats.
- Adequacy of boat fueling facilities.
- Compatibility of commercial fishing industry support requirements with the increasing demand for sport fishing and recreational boating berths and facilities.
- Adequacy of parking facilities, traffic conflicts and congestion on "the Island".
- The one lane Sandholdt Bridge limits efficient access to and from the island.

In addition to these factors, Highway One capacity constraints and hazardous traffic conditions, as well as limited future sewer capacity, will have an effect on the degree to which commercial fishing support facilities and industries in the South Harbor can expand. It is expected that upgrading of existing uses can be accommodated by the proposed sewer pipeline facilities for Moss Landing. The proposed sewer facilities may not be able to support development of a new fish processing company or some other intensive water user. Private financing for sewer expansion may be possible.



MOSS LANDING STATE BEACH

MOSS LANDING

MONTEREY BAY

<p>INDUSTRIAL - Coast Dependent</p> <ul style="list-style-type: none"> LIGHT HEAVY <p>RESIDENTIAL</p> <ul style="list-style-type: none"> LOW DENSITY 2.5 - 10 ACRES/UNIT MEDIUM 1 - 4 UNITS/ACRE COMMERCIAL RECREATION & VISITOR SERVING GENERAL 	<p>PUBLIC/ QUASI-PUBLIC</p> <ul style="list-style-type: none"> HARBOR FACILITIES EDUCATIONAL - SCIENTIFIC CEMETERY <p>AGRICULTURAL/ AQUACULTURAL</p> <ul style="list-style-type: none"> AGRICULTURAL CONSERVATION AQUACULTURE 	<p>RECREATIONAL</p> <ul style="list-style-type: none"> SCENIC & NATURAL RESOURCE RECREATION OUTDOOR RECREATION <p>RESOURCE CONSERVATION</p> <ul style="list-style-type: none"> WETLANDS & COASTAL STRAND <p>SPECIAL TREATMENT</p> <ul style="list-style-type: none"> SPECIAL TREATMENT
<p>PROPOSED ROAD</p> <ul style="list-style-type: none"> PROPOSED ROAD 		<p>URBAN SERVICE LINE</p> <ul style="list-style-type: none"> URBAN SERVICE LINE
<p>PROPOSED 4 LANE SCENIC HIGHWAY</p> <ul style="list-style-type: none"> PROPOSED 4 LANE SCENIC HIGHWAY 		<p>COMMUNITY PLAN BOUNDARY</p> <ul style="list-style-type: none"> COMMUNITY PLAN BOUNDARY

MOSS LANDING COMMUNITY PLAN
LOCAL COASTAL PROGRAM



FIGURE 2
LAND USE PLAN

Adopted by the Monterey County Board of Supervisors April 28, 1982.
Amended May 19, 1987.

The most significant opportunity for increasing the number of commercial boat berths is the eventual expansion of the South Harbor. The Moss Landing Harbor District, with assistance from the U.S. Army Corps of Engineers has studied a variety of alternatives for harbor expansion and has concluded the only financially feasible option is to extend the existing South Harbor approximately 1000 feet south of the Sandholdt Bridge in the Old Salinas River Channel. This will require removal of Sandholdt Bridge and the construction of a new crossing over the channel at the south end of the extended harbor, as shown on Figure 2. Extensive dredging will also be required in the wetlands of the Old Salinas River Channel. Before this work can be undertaken, the Coastal Act requires that the State Department of Fish and Game make the finding that the area is a degraded wetland. Considerable wetland restoration will be required to serve as mitigation for the use of the Old Salinas River Channel. The resolution of the environmental issues involved and successful expansion of the harbor will necessitate a cooperative effort by the Moss Landing Harbor District, the Department of Fish and Game, the U.S. Fish and Wildlife Service, the Corps of Engineers, and the California Coastal Commission.

Constraints in the North Harbor include a lack of restroom facilities for non-yacht club members; lack of a boat ramp and/or hoist for use by recreational boaters without berths; limited dry storage and parking areas; and uses of property for purposes that may conflict with recreational and visitor-serving uses dependent on locations adjacent to the harbor. Bank erosion adjacent to the North Harbormaster Office, has prevented maximum utilization of this area for harbor-related purposes. Expansion is limited ultimately by basin dimensions. However, when retaining walls are developed and dredging is completed along the shoreline, additional slips or other harbor support uses may be possible.

5.3.1 Key Policy

The County encourages the maximum development of commercial fishing and recreational boating facilities at Moss Landing; consistent with the conservation of the area's wetlands, dunes and other natural resources.

5.3.2 General Policies

1. Commercial fishing facilities shall be protected and, where feasible, upgraded. Commercial fishing shall have priority for berthing space in the South Harbor, and recreational boating facilities shall not interfere with the needs of the commercial fishing industry.
2. Optimum use of the existing harbor area and expansion of the harbor should be compatible with conservation of the most sensitive and viable wetlands.
3. Due to limited capacity of Highway One and Sandholdt Road, priority should be given on the island to expansion of commercial fishing industries and facilities that generate low volumes of traffic. Some flexibility should be maintained for other development on the island that directly serves people engaged in those above industries and would not be suitably located in other areas of Moss Landing.
4. Use of existing land-based facilities that support commercial boating should not jeopardize the protection of public access to the shoreline
5. Use of existing piers for access and recreational purposes should be encouraged when compatible with commercial fishing uses.

5.3.3 *Specific Policies*

The specific policies that follow set forth a two phase harbor improvement program that stresses maximizing the use of existing resources and restoring wetlands habitats before expansion occurs. Figure 3 illustrates the location of improvement measures discussed in the following policies.

Harbor Development - Phase 1

1. Encourage the conversion of underutilized or unused parcels on the island to land uses that are supportive of the commercial fishing industry and aquaculture.
2. Legal remedies should be investigated to prevent berthing of unseaworthy boats in the harbor and abandonment of boats in dry storage areas.
3. Bulkheading to prevent erosion and to maximize use of available shoreline should be provided along the west bank of the South Harbor.
4. The capacity of dry dock storage areas should be increased when needed and new dry storage areas should be developed. Measures should be taken to ensure that grading and surfacing work performed to provide additional capacity will not adversely affect water quality in the harbor.
5. Provision of an additional boat fueling facility should be considered.
6. The Sandholdt Pier should be considered for renovation as a fishing pier.
7. An additional boat launching ramp or hoist should be provided. A possible location would be in the North Harbor just south of the Elkhorn Yacht Club.
8. Develop a retaining wall or bulkhead along the eastern bank of the North Harbor adjacent to the Harbor offices as a means of preventing further erosion and improving berthing capacity.
9. On-site parking facilities shall be provided by private developers to satisfy demand generated by upgrading land uses on the island. Development of a public facility parking should be considered for a location near the north west end of the island.
10. Methods to improve tidal flow and sediment transport from the North Harbor as a means of improving capacity of the North Harbor to accommodate additional berthing facilities and minimize the need for dredging should be studied. One possible method would be expansion of the existing culvert under Jetty Road.
11. Priority shall be given to developing recreation and visitor-serving commercial uses in the North Harbor area and improving public recreational boating facilities.
12. Upgrading and development of recreational boating support facilities should not jeopardize conservation of sensitive mudflat habitats in the North Harbor.
13. Additional restroom facilities should be provided in the North Harbor area.
14. A comprehensive wetland restoration program shall be undertaken as mitigation for the expansion of the harbor area (phase 2) as required by Sections 30233 and 30411 of the Coastal Act. Designation of the wetland areas to be restored and the extent of restoration

necessary, has not been determined by the affected agencies at the time of the certification of this plan. However, Bennett Slough, Moro Cojo Slough, and Old Salinas River are potential restoration areas. The State Department of Fish and Game, U. S. Fish and Wildlife Service, the Coastal Conservancy and the U. S. Army Corps of Engineers should be consulted and a habitat evaluation conducted, if necessary, to determine the measures required to implement this program. Mitigation measures might include such things as a new tide gate to control tidal flushing under Moss Landing Road, upstream Moro Cojo Slough flood control measures and widening of the Bennett Slough culvert. Completion of the wetland restoration program must be attained before harbor expansion in the Old Salinas River is allowed. Former wetlands that have been diked off from tidal influence but not filled should generally receive priority for restoration over diked and filled wetlands.

Harbor Development - Phase 2

15. After optimal use of existing facilities is made and the wetland restoration program is completed, expansion of the Harbor using the feasible least environmentally damaging alternative should be encouraged. Environmental impacts of harbor expansion must be mitigated to the maximum possible extent. All feasible road construction measures should be investigated to minimize damage to the sand dune habitat. Prior to extension of Sandholdt Road, a dune restoration program should be developed in cooperation with appropriate agencies and property owners. This program should under take the restoration of degraded dunes adjacent to the extended road by replanting with native vegetation and the installation of fences or other means of controlling public access between the road and the dunes.
16. Additional land-based harbor support facilities should be provided following any expansion of the harbor. Figure 2 designates the Harbor District property on the east side of the Old Salinas River Channel for the development of harbor support facilities that will include parking and restrooms. On the west bank of the channel Light Industrial development is proposed between Sandholdt Road and the bank.

5.4 RECREATION AND PUBLIC ACCESS

A major reason for the passage of the Coastal Initiative (Proposition 20) in 1972 was to ensure preservation of access to the coast and protection of coastal recreation resources. One of the principal goals of the Coastal Act of 1976 is to "maximize public access to and along the coast and maximize public recreational opportunities in the coastal zone consistent with sound resource conservation principles and constitutionally protected rights of private property owners".

At Moss Landing State Beach, problems with sand blowouts, littering, fires in the dunes, crowded parking conditions, congestion along Jetty Road, and illegal camping, limit the aesthetic appreciation and quality of the recreational experience. Uncontrolled access to fragile sand dunes are resulting in trampling of dune vegetation and severe damage to the dunes themselves. Similar problems exist at Salinas River State Beach and the sand dunes south of the Marine Labs.

Overall, the lack of adequate management and public facilities at the two state beaches is a pressing problem in urgent need of correction. Improved parking facilities and restrooms are needed at both beaches. Other facilities needed at Moss Landing State Beach include fish cleaning tables, fire pits and bicycle racks. Finally, the lack of adequate public transit service to

the two state beaches limits the degree to which either facility can be used and appreciated by those dependent upon public transit services.

Opportunities for public access to the Island Beach are limited by inadequate parking and capacity constraints of Sandholdt Road and Bridge, as well as by the developed character of this area. Other areas where opportunities for improved public access and low intensity recreational use are Bennett and Elkhorn Sloughs. The Moro Cojo Slough, by virtue of its proximity to Highway One, represents a potential recreational opportunity that could be appreciated by the public in addition to the areas above.

5.4.1 Key Policy

The Moss Landing Community contains a variety of sandy beaches, dunes, estuaries and wetland habitats which offer diverse recreational opportunities. In the spirit of the Coastal Act, public access to these areas shall be provided. However, conservation of the sensitive natural resources of the coastline is an even higher priority. It is the County's policy to encourage an optimal level of development of recreation and public access opportunities consistent with the conservation of sensitive natural resources of Moss Landing.

5.4.2 General Policy

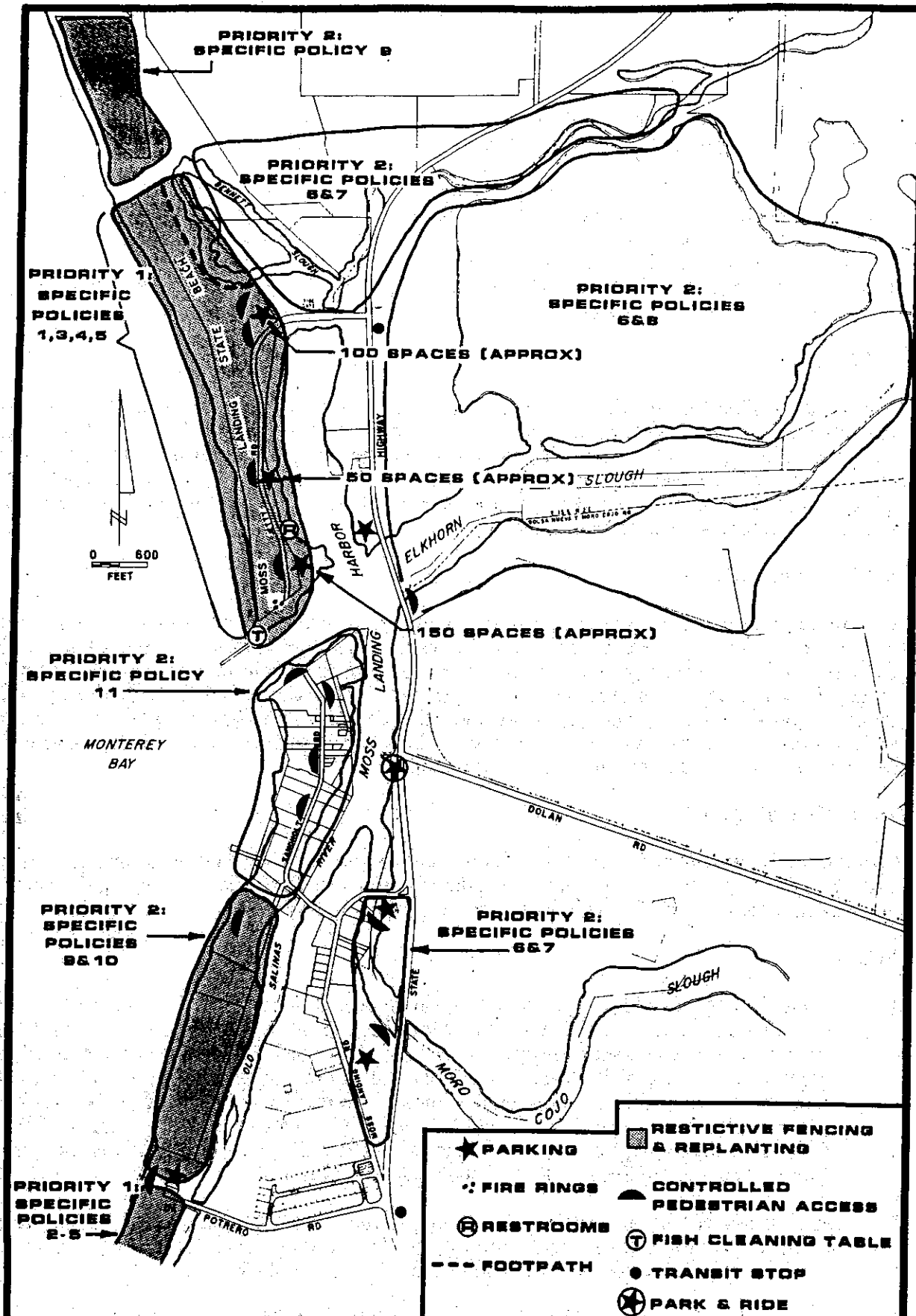
General policies on shoreline access and development of recreation and visitor-serving facilities contained in other chapters of this plan are incorporated by reference in the Moss Landing Community Plan. These policies emphasize permanent protection of major access points and property management by appropriate public agencies. New access and recreation areas should be guided by detailed management plans, and the rights of residents and property owners should not be jeopardized by irresponsible public access. Low and moderate cost recreation and visitor-serving facilities are preferred to higher cost facilities.

5.4.3 Specific Policies

Specific public access and recreation policies that follow are presented according to a priority system that emphasizes improving existing facilities before new access and recreation opportunities are opened. These priorities are illustrated on Figure 4.

Priority 1

1. First priority should be given to improving recreational facilities and reversing the degradation of sand dune habitats at Moss Landing State Beach. To accomplish this objective, a management program should be developed that includes the provision of restrooms, firepits, fish cleaning facilities and improved parking areas with controlled pedestrian walkways to and over the dunes. Protective fencing and replanting of the dunes with native vegetation should be instituted. This will be accomplished by the California Department of Parks and Recreation generally as illustrated in Figure 4, and as further discussed in Section 4.3.6 C and Chapter 6 of this plan.
2. A management and restoration plan similar to that for Moss Landing State Beach, should be developed for Salinas River State Beach. The parking area at the end of Potrero Road should be improved to accommodate increased access to the beach.
3. Increased supervision of Moss Landing and Salinas River State Beaches should be provided by the State Department of Parks and Recreation and the Monterey County Sheriff's Department.



MOSS LANDING COMMUNITY PLAN

PUBLIC ACCESS AND RECREATION

FIGURE 4



4. Educational displays and signs alerting visitors to the fragile nature of the dune environment and directing them to controlled accessways should be posted at major access areas at the two state beaches.
5. Improved bus scheduling to allow more frequent transit service to the state beaches and commercial center should be provided.

Priority 2

6. Consistent with the General Policy, the second priority for provision and improvement of public accessways should include Bennett Slough, Elkhorn Slough, Moro Cojo Slough, the Island beach, and the sand dunes south of the Moss Landing Marine Labs.
7. Controlled public access to Moro Cojo Slough and Bennett Slough should be provided after the wetlands restoration programs for these areas have been successfully implemented. Accessways should not infringe upon sensitive natural habitats. Provision of boardwalks constructed of permeable materials should be favored over foot trails where the potential for damage to wetlands habitats exists. Access to Moro Cojo Slough, including an improved parking facility, should be provided via Moss Landing Road and from the parking lot near the intersection of Moss Landing Road North and Highway One. Access to Bennett Slough, with education displays and viewing areas, should be provided via Jetty Road. Visual access shall also be maintained to these wetland areas.
8. Management responsibility for recreational use of the Elkhorn Slough area should be actively assumed by an agency or agencies with recreation management capabilities.
9. The State Department of Parks and Recreation is encouraged to evaluate the desirability of acquiring dune and beach properties at such time as they are offered for sale by the owner. A dune restoration program should be established, including protective fencing, replanting with native vegetation, and boardwalks constructed of permeable material to link parking areas and access sites with the shoreline. Controlled access points should be clearly marked, and educational displays developed to inform the general public about fragile dune habitats. The development of a dune habitat interpretive center should also be considered.
10. The potential for coastal dependent, low intensity recreational and educational use of the Old Salinas River Channel area should be studied.
11. Adequate on-site parking and public access to the beach should be a condition of development permit approvals on the Island.

5.5 ENERGY FACILITIES AND INDUSTRIAL DEVELOPMENT

Coastal dependent industries are given priority by the Coastal Act over other developments on or near the coastline. PG&E and the Kaiser facilities may expand within their existing sites in accordance with local air pollution control regulations and if consistent with the preservation of natural resources and sensitive wetland habitats. Special protection against the spillage of crude oil, gas, petroleum products, or other hazardous substances related to coastal dependent facilities must also be provided.

Reasonable options for upgrading and modernizing energy production and industrial facilities at PG&E and Kaiser Refractories, will not involve construction of off-site facilities. Future

changes may include installation of 135 employee parking spaces just north of the main administration building, and closing the main entrance gate on Highway One and channeling all traffic to the access gate on Dolan Road. Modernization plans for Kaiser call for relocation of the main point of access to and from the plant off Highway One to Dolan Road. Administration buildings and truck shipping/receiving areas will be relocated to this area, and construction of additional process waste storage ponds is anticipated. If PG&E marine terminal expansion occurs, some short-term construction-related impacts to Moss Landing State Beach and potential longer term impacts from construction of terminal support facilities could occur.

Conversion of the PG&E plant to alternative technologies such as coal, nuclear, or biomass fuels is highly unlikely. However, the California Energy Commission has identified this site as a potential site for a 500 megawatt coal-fire power plant. Use of natural gas and oil will continue as the main fuel source for the plant. Kaiser has recently requested that gas and fuel oil be replaced by refinery coke as furnace fuels. This will result in increased particulate sulfur dioxide and nitrogen oxide emissions.

Entrainment and impingement impacts to marine organisms in general are currently generated by the PG&E power plant cooling system. Based on analysis contained in PG&E's reports to the Regional Water Quality Control Board, these impacts by the cooling system are considered insignificant in terms of overall effect on the phytoplankton community in the Moss Landing vicinity. However, the results of studies currently being prepared for EPA will provide additional detail and analyses of impingement and entrainment impacts.

Increased power generation from the older existing steam turbine units 1-5 at PG&E, through replacement of boilers with higher efficiency turbine units, for higher temperature and pressure steam operation, would increase the rate of fuel consumption and therefore of uncontrolled emissions of sulfur oxides and nitrogen oxides. Although there are no firm plans for construction of additional units at PG&E, if future gas turbine units were added in a combined cycle configuration, the resultant higher utilization rates for units 1-5 would be associated with increased entrainment and impingement of organisms from Moss Landing Harbor and increased thermal discharge to Elkhorn Slough.

If the sale of OCS Leases occurs in the future, the risk of oil spills and their attendant biological impacts to Monterey Bay will increase, and some growth inducement related to onshore support facilities and crews may occur in Monterey County. OCS Leases in the Santa Cruz basin will have the potential to create significant adverse air quality impacts.

Opportunities to use waste heat for residential heating purposes in Moss Landing are limited. The two major potential uses are for fish and shellfish processing and for the processing at Kaiser Refractories. Short-run costs of developing insulated waste heat lines from PG&E to Kaiser or the fish processing plants may be prohibitive; however, long-term costs of this alternative versus heat generation from other energy sources should also be considered.

5.5.1 Key Policy

Existing coastal dependent industries in Moss Landing have local, regional, statewide and, in some cases, national significance. Accordingly, the county shall encourage maximum use and efficiency of these facilities, and to allow for their reasonable long-term growth consistent with maintaining the environmental quality and character of the Moss Landing Community and its natural resources.

8. The responsible government agencies shall periodically examine the effectiveness of PG&E's oil spill contingency clean-up plans for both on shore and off shore areas. One condition of possible future expansion of offshore tanker terminal mooring facilities should be the demonstrated effectiveness of oil spill contingency plans to minimize the environmental effects of oil spills to the maximum extent feasible. Maximum protection of Elkhorn Slough must be provided.
9. The development of mariculture using existing warm water discharge should be encouraged.
10. All new heavy industry shall be coastal dependent.
11. Due to sensitive agricultural, fishing, recreational and environmental resources in the proximity of Moss Landing, additional development of polluting heavy industry shall not be permitted unless all adverse effects on these resources are fully mitigated.

5.5.3 *Specific Policies*

1. Due to sensitive agricultural and environmental resources in proximity of the PG&E and Kaiser plants which could be damaged by coal conversion, the plant should continue operation with the use of natural gas and oil fuels.
2. Methods should continue to be studied for improving efficiency and air emission controls at the PG&E and Kaiser plants by both the County and MBUAPCD.
3. In the event of future upgrading or modification of P G & E generating units 1-5, consideration should be given to continuing the cooling water discharge outfall for these units into the slough at their historical discharge rate. If the discharge rate is to be increased, environmental studies should be undertaken to determine the effect.
4. Additional Kaiser process storage ponds shall be limited to the area shown on Figure 5 and designed and located to avoid any adverse effects to wetland areas and agriculture. All feasible alternatives shall be examined to prevent loss of wetlands.
5. In the event that conversion of the PG&E power plant to a coal burning facility is necessary, effective mitigation measures to minimize adverse effects to air quality, public safety, agriculture, and aquaculture shall be required. A safe disposal site for coal ash and collected air pollutants shall be located away from inhabited areas and sensitive resources. Methods to reduce potentially significant environmental effects from runoff to an acceptable level shall be incorporated into the power plant and disposal site design.
6. Due to potential hazards related to geological conditions, proximity to populated areas, land use conflicts, and possible impacts on marine and estuarine environments, the PG&E site south of Potrero Road should not be considered a suitable location for future development of a nuclear power plant facility.
7. An atmospheric surveillance station shall be established in the Moss Landing vicinity by the Monterey Bay Unified Air Pollution Control District or the County of Monterey to monitor air pollution concentrations in addition to pertinent meteorological parameters.

8. As a condition of issuance of development permits, to industries with significant emissions, the County of Monterey shall require that an atmospheric surveillance station be established in the Moss Landing vicinity. This station should thereafter be operated by the MBUAPCD to monitor air pollution concentrations in addition to pertinent meteorological studies.
9. Further expansion of heavy industrial uses on the property owned by PG&E west of Highway One and east of the Moss Landing Harbor shall be limited to improvements or modifications that are compatible with the road right-of-way and visual policies of the plan.
10. Possible future development of a transmission line north from the PG&E power plant shall be shown to be compatible with research and educational use of the estuarine sanctuary, and potential environmental effects shall be reduced to an acceptable level before development is allowed.

5.6 VISUAL RESOURCES AND COMMUNITY CHARACTER

The intent of the Coastal Act is that the scenic and visual qualities of coastal areas should be considered and protected as a resource of public importance with full consideration to private property rights. Communities and neighborhoods that are popular visitor destination points for recreational uses or have highly scenic and historical features shall be protected and enhanced by new development.

Viewed from great distances, Moss Landing is one of the most easily identifiable coastal communities in California. The 550-foot PG&E stacks serve as a landmark feature that unmistakably mark the location of the community from any approach.

But the special character and unique visual features of the community are derived from more than its significant industrial activities. Other factors also play a part, including its status as an historical port and setting for cannery activities; its cultural significance for scientific research; its striking natural setting and abundance of marine life and shorebirds; and its well-known collection of antique shops. The recreational opportunities it affords make it a unique destination point for an increasing number of visitors.

In summary, Moss Landing contains a diversity of natural and man-made visual features that contribute to the community's strong vitality and special character. For the benefit of both residents and those who come to work and play, care should be taken to preserve and enhance these important visual resources as the community changes and grows over time.

It is particularly important to recognize that the community itself is composed of distinctly different areas that accommodate the needs of different groups of people pursuing varying activities. The visual resources of these areas are different. The policies that follow acknowledge this by giving protection to specific natural and cultural resources as well as setting forth some broad guidelines to be used by the County, when it considers development proposals in the different areas of the community.

The success of efforts to enhance the visual and scenic qualities of the Moss Landing ultimately rest on the active participation of the many public and private members of the community and the support they can provide for the County. An important recommendation, therefore, is that a design review committee be established to provide local guidance to the County concerning the visual and aesthetic aspects of future development of Moss Landing.

5.6.1 Key Policy

1. The County's objective shall be to conserve the unique visual, cultural, and historic resources of Moss Landing to the greatest extent possible while protecting private property rights.

5.6.2 General Policies

1. To protect the visual resources of Moss Landing, development should be limited wherever possible in scenic beach, dune, estuary, and wetland areas consistent with the resource protection policies of this plan.
2. The County should implement land use and zoning designations to protect and enhance the unique natural and cultural characteristics of the Moss Landing Community.
3. The County should maintain an identification survey and inventory program of historical sites and should maintain a registry program to protect and preserve historical land mark sites and districts.
4. As early as possible in the planning stage for a proposed development project, the County shall identify any historical, architectural, archaeological or cultural resources eligible for inclusion on historical registers which may be located within the project's potential impact area. Owners of the properties containing those resources shall be promptly notified. Guidelines for preservation, restoration or adaptive use of designated historic sites should be developed.
5. The "HR" Zoning District Ordinance should be applied to designated historical sites to ensure that new onsite development is compatible with existing historical resources and to maintain the special values and unique character of the historical properties.

5.6.3 Specific Policies

1. The highest priority should be given to preserving and maintaining all fish handling and processing facilities on the island. According to both the State Lands Commission Charter for the Moss Landing Harbor District and the Coastal Act mandate, it is imperative that commercial fishing activities be protected.
2. Where the preservation of designated historical buildings and landmarks is in jeopardy, the land and resource should be considered for acquisition by private or public organizations with the capacity to properly manage and supervise the property.
3. Design standards should be developed to address the most essential factors in conserving the visual, historic, and fishing port character of Moss Landing.
4. Scenic beaches, dunes, estuaries and wetlands should be zoned with a district that only allows structures associated with the recreational, educational and aquacultural use of the areas. Procedures and standards should be designated for review of the siting, design, landscaping, and grading for any structures proposed in these areas, including the proposed expansion of the harbor and its associated public and private commercial development.
5. Elkhorn Slough should be officially designated as a State Scenic Waterway, and its visual character should be preserved.

6. Views of the Moss Landing community, harbor and dunes from Highway 1 should be protected through regulation of landscaping and siting of new development adjacent to the highway to minimize the loss of visual access.
7. A Moss Landing Community Design Review Committee shall be formed to provide guidance to the County in the consideration of development proposals. In cooperation with the County, the committee should develop design review criteria and standards to ensure that new development is visually compatible with natural features, historical resources, and the unique character of Moss Landing. Design standards should include criteria regulating height, bulk, siting, structural design, shape, color, texture and materials used in new buildings, and should also address landscaping requirements. Once developed, these criteria shall be used by both the Committee and the County in reviewing development proposals.

The following are suggestions to the Design Review Committee in formulating design criteria for the various areas of the community:

- a) Recreational Boating/Visitor-Serving - Design standards should enhance the recreational boating/visitor serving/restaurant character of the North Harbor area. To maximize views of the harbor, building heights should be single and two story. Structures should be small scale; the use of horizontal natural or painted wood siding should be encouraged; if soil conditions permit, utility lines for new structures should be placed underground; unsightly storage areas should be adequately screened and set back from the roadway; one restricted point of access from Highway 1 should be developed with a frontage road between the Highway and commercial/restaurant facilities in this area; parking areas should be upgraded.
- b) The Island - Design standards should enhance the commercial fishing and historical cannery character of this area. Building and bulk controls consistent with the low-lying vertical character (1 and 2 stories) and small scale of most of the buildings along the Island should be developed. Wall material should be limited to the use of natural wood for building facades near the cannery buildings. The "HR" Zoning District should be applied to the canneries where feasible, and other guidelines for preservation, should be applied as long as they do not conflict with the use of the buildings for commercial fishing purposes. Rehabilitation of existing structures and new development should include amenities for visitors such as pathways or boardwalks to the shoreline; removal or screening of unsightly storage areas. An off-street parking lot should be considered at the end of the Island, and new development proposals should provide off-street parking.
- c) Moss Landing Road - Design standards should enhance the antique shop and historical building character of the Moss Landing Road area. Height and bulk controls should be consistent with low vertical height (1 and 2 stories) and small scale of existing buildings. Wall material should be limited to wood siding, and design of new buildings should conform to the early American character of existing buildings. Historical preservation status should be applied to the Pacific Coast Steamship Company office. Utility lines should be placed underground where feasible. Opportunities to combine visitor serving commercial and residential development (first floor commercial and second floor residential) should be encouraged. Appropriate setback standards should also be developed.

Exhibit G

Can be found on the following Link:

<https://www.co.monterey.ca.us/government/departments-i-z/resource-management-agency-rma-/planning/land-use-regulations>

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Exhibit H

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EXHIBIT H

Moss Landing Community Plan

Update Committee

Recommendations

January 15 2009

Background

A Community Plan Update Committee (“Committee”) has been created to develop a vision for future development in Moss Landing. This report presents issues and recommended direction for Moss Landing that can be integrated with a subsequent update of the North County Local Coastal Plan.

The Moss Landing Community Plan Update Committee considered several prospective projects in Moss Landing that include both short- and long-term plans. During the course of the process the committee received presentations from:

- Kim Solano – Commercial Development in Downtown
- Gregg Drilling – New Marine Engineering facility on the Island
- Jim Gilbertson – Expansion of retail facility on Struve Road
- Monterey Bay Aquarium Research Institute – Expansion of facilities on the Island
- Moss Landing Harbor District – Use of District owned parcels and harbor improvements
- Moss Landing Marine Labs – Campus expansion downtown and new facilities on the Island.
- Nadar Agha – Converting former Refractory site into a Business Park

In addition, the Committee heard reports from CalTrans, Public Works, Pajaro Sunny Mesa and others with expertise in infrastructure, utilities, traffic and developing projects such as the Coastal Trail.

The Committee considered how these proposals fit into the context of the existing Moss Landing Community Plan and the infrastructure that supports the community.

In order to facilitate the committee’s assignment, the committee formed two subcommittees, each with a different focus:

Land Use Subcommittee - This subcommittee focused upon existing and proposed land use. The committee used the existing text of the plan as a starting point to address the needs of existing and future development.

Infrastructure Subcommittee - This subcommittee focused upon the existing and future infrastructure needs of the community. A significant amount of the subcommittee’s time was spent attempting to address sewer, water and traffic related issues.

A public meeting was held on December 2, 2008 to allow members of the community who had not been a part of the process to come and provide input on what was being considered. Three development alternatives were presented to the public as follows:

1. No change--limited further development. In this alternative no changes would be made to the plan and little additional development could be accommodated in Moss Landing.

2. Moderate Growth Alternative. This involves updating the plan to allow the growth proposed and to allow the vacant property to develop consistent with the land use and zoning. This would also involve expanding the Urban Service Line to connect the old Kaiser Site to the sewer system
3. Expanded Growth Alternative. This involved changing existing land use and zoning to allow commercial and other uses along the Highway 1 Corridor. The current Heavy Industrial Land Use and Zoning do not currently contemplate such uses.

The public response was favorable to the moderate growth alternative. This public meeting generated the following comments:

- a. Traffic Safety is a major concern when entering Highway 1 from Moss Landing. A traffic light at Pieri Court and Portero Road and at Highway 1 and Moss Landing Road should be considered for safety.
- b. Concern for protection of wildlife on Harbor District parcel on Potrero Road.
- c. Safety of Industrial site development
- d. Install curb, gutter, sidewalks, and street lights
- e. The speed limit on Moss Landing Road must be reduced.
- f. The area between Sandholdt and the Bed and Breakfast must retain its charm. Design elements could include early California, and other historical themes to allow diversity but also maintain charm of the place.
- g. Something must be done about shore line erosion within the harbor.
- h. Open space and recreation must be added into the community.
- i. The flyover across Highway 1 must consider the impacts to Moss Landing Road.
- j. Efforts should be made to enhance pedestrian and Bike Connections
- k. Some provisions need to be made for beach access for people with pets.
- l. Concern for the use of pesticides on agricultural land adjacent to “The Heights”.

While some work on actual text has been completed, no text is being presented because at this time we do not have a complete Plan. The purpose of this report is to address issues which require attention of the Board and receive direction to develop a complete Plan to process. It is anticipated that the language developed by the Subcommittee would be the starting point for developing the updated plan. The recommendations presented below are large policy level concerns.

Approach of Committee

The Committee early in the process came to the consensus that the overall direction of development within Moss Landing was consistent with the existing Land Use Plan and that this direction is viewed favorably, but it is also recognized that there are some areas of the plan that are out of date, and other components of the plan that need additional work. Therefore, the approach has been to retain the current goals and address areas where policies, ideas and references are out of date, or where new ideas, development proposals or schemes need additional clarification for continued development.

The recommendation of the Committee is to suggest changes to responsibly address foreseeable development. This recommendation is not intended to be a complete plan, but is to allow the Board of Supervisors to provide staff direction regarding updating the plan, and also to the associated environmental review which will need to be accomplished as part of any plan update.

Recommendations

The following discussion identifies issues raised during the Committee's consideration and provides a recommendation to the Board of Supervisors as to what the Committee believes needs to be done to address these issues. The discussion is broken down into two groups, first, land use and then, infrastructure.

Land Use

1. Changes to Land Use Map

The following changes are needed to the Land Use Map because the circumstances associated with the properties have changed.

A. Moss Landing Marine Labs – Moss Landing Road

a. Issue

Property owned by the school (APN: 133-201-003,004,005,16,21) has three different land use designations: Low Density Residential, Medium Density Residential, and Moss Landing Commercial. The intended use of the facility is for Education - Scientific, which is an existing land use in the Moss Landing Community Plan.

b. Recommendation - Direct staff to:

1. Change the Land Use and Zoning Designation on the Moss Landing Marine Labs property (APN: 133-201-003,004,005,16,21) from a mix of land use designations to Education – Scientific.

B. State of California – Sandholdt Road

a. Issue

A two acre property located west of Sandholt Road south of Sandholdt Bridge was previously owned by the Moss Landing Marine Labs, and was therefore assigned the Education – Scientific Land Use designation (APN: 133-232-007, 008). The property has since received dune habitat restoration and has been dedicated to the State of California (State Parks). The property will only be used as part of the greater adjacent dune and beach habitat and thus will not receive any sort of development.

b. Recommendation - Direct staff to:

2. Modify the land use designation on State owned property (APN: 133-232-007, 008) from Education - Scientific to Scenic and Natural Resource Recreation to match the adjacent land use.

C. Light Industrial south of Sandholdt Road

a. Issue

This small sliver of property was designated for Light Industrial in the event that the harbor extended south of the Sandholdt Bridge (APN: 133-162-002). The current Community Plan gives significant consideration to replacing the old Sandholdt Bridge further to the south and dredging the Salinas River channel to expand the harbor. Since then, the Sandholdt Bridge has been reconstructed in its original location, making it very unlikely that the harbor would be expanded south of the current bridge location. The plan is very clear in limiting the use of the property to light industrial uses only in the event that the harbor is expanded. Since the harbor is not going to be expanded in this manner, the Light Industrial land use and zoning designation is no longer appropriate.

The appropriate land use designation would be something consistent with what is around it. This light industrial land use designation is mostly within tidal wetlands. There is very little land outside of the coastal wetlands and this is primarily dune habitat. This Light Industrial designation only encompasses a portion of a larger parcel that is also designated for Scenic and Natural Resource Conservation and zoned open space. It seems appropriate to apply this Resource Conservation land use designation to the land outside the tidal wetland. For the land within the tidal influence, the land use should match the adjoining and land use and zoning which is Wetland and Coastal Strand. The Committee felt it was important to inform the property owner that this change is being considered. Staff will be sending a copy of this staff report to the property owner.

b. Recommendation - Direct staff to:

3. Change Light Industrial land use designation for two parcels as follows:
Land Outside wetland (APN: 133-162-002) - Scenic and Natural Resource Recreation and change Land within wetland (APN: 133-162-002) - Wetland and Coastal Strand

D. Elkhorn Slough Property on Moss Landing Road

a. Issue

The Elkhorn Slough Foundation owns 15.61 acres of land in the downtown area between Moss Landing Road and Highway 1 south of Moro Cojo Slough (APN: 133-221-007). The land use designation on this property is currently designated as “Moss Landing Commercial” and “Recreation and Visitor Serving”. The Elkhorn Slough

Foundation does not have any definite plans for the property but some type of open space including either a park or unimproved open space is being considered.

b. Recommendation - Direct staff to:

4. Designate the entire Elkhorn Slough Foundation property (APN: 133-221-007) as “Recreation and Visitor Serving”.

2. Textual Changes

During the analysis of the plan, it was clear that many circumstances had changed and that many of the references are now out of date. In developing the following recommendations the Land Use Subcommittee spent a great amount of time rewriting text. This allowed the Committee to develop a detailed understanding of the issues at hand, and it is from that understanding that the following information is presented.

A. Harbor District

a. Issues

The Harbor is a significant component of the plan, and is divided harbor into two components:

- North Harbor: A General Development Plan was approved for two restaurants, a new boat launch facility, plus two new docks for small and large vessels. There is also a commercial business and the Moss Landing Yacht Club.
- South Harbor: The Harbor District has their offices in the south harbor and also hold lands with an RV park and dry storage. This area includes many boat slips where the commercial boats are docked and a number of owners live on their boats.

Approximately half of the Harbor District properties have a “Harbor Facilities” land use designation and the other half is designated Recreation and Visitor Serving. The Harbor Facilities designation needs to be updated to address the improvements which have been made by the Harbor District on those holdings. In addition, there is a section of the current Plan devoted to describing the Commercial Fishing and Recreational Boating component of Moss Landing. The Plan strives to protect commercial fishermen from having recreational boating interfere with their activities and also envisions expanding the harbor to better facilitate the Commercial Fishing Industry.

Today, the Harbor serves more than just commercial fishermen and recreational boating needs. The commercial fishing industry is facing regulatory and resource challenges and finds no need to plan for expansion. A great deal of the language in the plan is devoted to future harbor expansion which is unlikely to occur. All this language should be removed.

The Harbor now serves a broader range of uses that also need to be considered in the Plan. The Committee proposes changing the title of this section from Commercial Fishing and Recreational Boating to Harbor Facilities so that it is consistent with the land use designation. This section should be modified to address the expanded usage of the harbor including residential use of the boats research and commercial maritime activity. Priority should continue to be given to the Commercial Fishing industry within the harbor.

b. Recommendations - Direct staff to:

5. Revise the “Harbor Facilities” land use designation to recognize current use of harbor properties and to accommodate future harbor users. This would include but is not limited to existing references to Commercial Fishing and Recreational Boating, and would also include such additional uses as: Residential use of Boats, marine research, and education, and other “maritime activities”.
6. Remove references to the harbor expansion. Removal of this text does not preclude the harbor from pursuing further development on district property; it reflects that Sandholdt Bridge will not be moved.
7. Rename Section 5.3 of the plan and broaden its scope to address the users who rely on the Harbor Facilities. Add provisions to this section to include uses such as Maritime Activities, food service, charter services and other visitor serving, or commercial activities normally found in a harbor.

B. Light Industrial

a. Issues

The Light Industrial Land Use Designation applies to the entire “Island”. Initially the island was contemplated in the Plan to serve the commercial fishing industry (e.g. fish processing). However, the commercial fishing industry is no longer expanding and as a result there is no longer the same need for expanded fish packaging and processing. Uses such as marine research, education and engineering are gravitating to this location, and there is no longer consideration to expand the harbor. The Committee feels that the Island should have a designation that covers a multitude of commercial, educational, and recreational coastal related uses. The Committee was also sensitive to maintaining the opportunity for a restaurant to operate on the island.

b. Recommendations - Direct staff to:

8. Modify the Island land use designation from Light Industrial and create a new Special Treatment Area – Moss Landing Island designation with a description to address the important uses of the Island as it relates to Moss Landing. Include provision to allow one restaurant on the Island.
9. Remove references to harbor expansion
10. The existing plan references addressing the shoreline erosion on the Island. It is important that this language be strengthened to specifically address shore erosion on the east side of the Island including such measures as “bulkheading” or other measures to stabilize the shoreline.

C. Heavy Industrial

a. **Issues**

When the Heavy Industrial Section was written, PG&E owned the power plant and Distribution facility and Kaiser Refractory was in full operation. Since that time the Moss Landing Power Plant has been sold, and the Refractory Site has changed hands several times with current plans for a “Green” Business Park retaining much of the historical development of the site. As a result many of the references are simply out of date. For clarity, the Power Plant, Switch Yard and Business Park all need to be referenced individually. The use of the switch yard and power plant property will not likely change, but the nature of the refractory site property will change from one large industrial user with many different operations, to many different users conducting different, but possibly related, operations.

A challenge of the Committee is identifying the uses allowed on the Business Park property. Currently the Plan limits new uses to those that are Coastal Dependent, which constrains the dynamics of a business park. The committee finds that the business park should allow Coastal Dependent and Coastal Related Industrial Uses to be in keeping with the Coastal Act. However, the site needs a designation that provides for the range of uses normally found in a business park. In addition, the Committee and owner want to encourage green types of business which reuse the waste stream or materials from other uses. In addition, the Plan needs to recognize and protect the wetlands on the east end of the site as well as the Moro Cojo Slough that traverses the southern property line.

At the time of adoption of the Plan, there was concern that a nuclear power plant or a coal operated power plant could be operated in Moss Landing. There is no longer any plan for such use so these references should be removed. However, both the power plant and refractory site have expressed interest to utilize existing infrastructure for desalinization plants that would provide water to other areas of Monterey County.

b. **Recommendations - Direct staff to:**

11. Update the language of the Plan to clarify current uses of the Heavy Industrial lands. Develop language that recognizes ownership and user changes over time so as to not render the plan out of date. Update the language related to the power plant to reflect the improvements made to the site.
12. Add to the land use designation on the old Refractories site a “Special Treatment Area” overlay on the Heavy Industrial zoning designation. The title of the Special Treatment Area would be a hybrid designation titled Moss Landing Business Park. The Special Treatment area would allow coastal dependent and coastal related industrial uses and would develop policies that take into account the unique setting and protect the natural resources on and around the site. The Special Treatment area would encourage co-development of operations which can reuse waste heat or other effluent streams as part of their processes. Development

within the special treatment area would include limitation on the ultimate development in relationship to an estimated sewer allocation of 25,000 gallons per day (see chart on page 12)

Other Land Use Subcommittee Concerns

A. Design Guidelines

a. Issue

Currently, the design guidelines for Moss Landing contained in the Community Plan call for an “old town” wood sided type of theme. These materials do not hold up well to the nearshore coastal weathering processes. In the downtown there is interest to broaden the mix of designs, while maintaining the character of the community. Design Guidelines can be used to identify different neighborhoods/areas. For example, the Island is more research and development where the architecture could be more modern yet coastal. The Downtown area could be expanded to reflect early California with a coastal town character that would allow a multitude of design opportunities. The business park site should remain in keeping with the historical refractory site.

The committee also received a presentation from an architect about developing a pedestrian oriented downtown. There is significant interest to continue with this idea as the Plan moves along.

b. Recommendation - Direct staff to:

13. Create design guidelines that are sensitive to the existing character of the community, but allow for expanded styles of historic architecture and allow for material alternatives that replicate historic materials, but are more durable.

B. Agriculture and Residential Buffer

a. Issue

Active farming operations are located south of Potrero Road with residential units (The Heights) north of Potrero Road. A conflict has developed related to the use of pesticides in close proximity to these homes. The Committee understands that the County’s “Right to Farm” ordinance is intended to protect the right of farmers to conduct their business without hindrance, and that the County’s General Plan protects the right of farmers to conduct their farming operations without interference from surrounding land uses. In addition, the farm to the south is outside the Moss Landing Community Plan boundary. While a boundary line does not diminish concern about the use of pesticides in close proximity to residences, the Committee recognizes the need to address interface between agriculture and development as part of the Moss Landing Community Plan. The residents request that the Plan prohibit use of pesticides within their proximity, which

would switch the burden from development onto agriculture (contrary to current County policy).

b. Recommendation - Direct staff to:

14. Evaluate alternatives to using harmful pesticides in close proximity to residential areas. Develop ways to encourage new and safe agricultural applications.

Infrastructure

1. Sewer

a. **Issues.**

The issues associated with the sewer can be broken down into four components, as follows:

Current Allocation. The Moss Landing Community Plan currently includes a Coastal Commission certified Sewer Allocation Plan that serves as a growth limiting factor. Moss Landing Community Services District (MLCSD) consists of 5 service areas. Each area was allocated a certain volume of sewer flow based upon existing (at the time) land use, expected future growth, and allocations for future priority uses. This allocation system has been implemented as part of the billing process for the MLCSD, and the unit of measurement in this allocation system is Gallons Per Day (GPD). However, these units are not metered measurements of actual flows, but rather are assumed flows that are assigned to various uses under the Allocation Plan. For example a single family residence is assumed to use 250 GPD and a restaurant would be assumed to use 33 GPD per seat.

The following table shows the original allocation by district, and the current usage in each district:

District	1982 Allocation	Current Usage
1 -- Struve Road	34,250	20,000
2 -- North Harbor	10,100	11,076
3 -- The Island	14,000	22,765
4 -- The Heights	13,000	11,814
5 -- Downtown	33,650	43,420
Total Allocation	105,000	109,075

This table shows that more sewer allocation is being utilized than was originally granted in 1982. The column titled current usage reflects that the sewer allocation as determined by existing users plus the amount of sewer allocation reserved for future growth on

property which is not currently developed (assumed at 250 GPD per vacant parcel). The reason that the current usage exceeds the allocation is due to the fact that some uses have expanded without notifying the MLCSD.

The purpose of collecting the information for this analysis was to accurately determine current use of properties for land use planning purposes. As such, the Committee recommends avoiding any code enforcement action but rather proposes to update the allocation system to accommodate the users that are already in operation.

The primary issue associated with the sewer infrastructure is limited allocation even though there is adequate sewer capacity (discussed below). The Allocation Plan needs to be amended in order to allow new development, address new technologies, account for existing usage, and retain space for vacant lots.

The Committee wants to appropriately address the sewer needs of projects that have been presented as part of this process. In addition, there are undeveloped and underdeveloped lots in Moss Landing which are designated for the Coastal Act priority of visitor serving uses so some provision must be made for those properties.

As part of the new Allocation Plan, the Urban Service Line should be expanded to include the Moss Landing Business Park so that they may connect to the sewer and remove septic systems in order to help improve the Slough. County Codes require all properties within two hundred feet of an existing sewer to connect to the sewer wherever possible. There is an existing sewer line along the Highway 1 corridor and turning down Moss Landing Road, which is within two hundred feet of the Business Park property.

System Capacity. During the review of the sewer system, staff discovered that the capacity of the local system exceeds what was assumed in the allocation assumptions made in 1982. There is a critical point in the system along Moss Landing Road in which most of the system flow must go through. This point will accommodate approximately 280,000 gallons per day, and the proposed allocation including the Business Park is about 180,000 GPD. Therefore, local system “capacity” is not an issue.

Capacity of Regional Facilities. The capacity of the regional facilities involves the regional treatment plant, and the Moss Landing lift station including the force main that extends to Castroville. The Monterey Regional Water Pollution Control Agency (MRWCA) has expressed that they have plenty of treatment capacity for current and proposed future uses.

The Moss Landing Lift station seems to have the capacity to handle all the development west of Highway 1. There may be some improvements necessary as time goes by, but nothing which would require a significant change to the system.

One of the constraints to the Moss Landing Business Park property being connected to the sewer is that it is not clear at this time whether the existing regional lift station in Moss Landing can accommodate the additional flows from the Moss Landing Business

Park. The property owner has estimated 25,000 GPD for the Business Park, but a more detailed study is necessary to determine what improvements may be needed to the lift station to accommodate the added flows from the Moss Landing Business Park.

Future Allocation.

The following table shows what a full build out analysis of the sewer system would look like when all property is developed:

District	1982 Allocation	Current Usage	Proposed Allocation
1 -- Struve Road	34,250	20,000	34,250
2 -- North Harbor	10,100	11,076	21,876
3 -- The Island	14,000	22,765	25,169
4 -- The Heights	13,000	11,814	13,000
5 -- Downtown	33,650	43,420	62,748
Moss Landing IP			25,000
Total Allocation	105,000	109,075	182,043

Build out would represents a 73% expansion in the sewer allocation, but includes existing uses that need additional allocation as well as replacing septic with sewer at the Business Park. The biggest sewer users are the restaurants which are also a key component of the visitor serving component of the plan. County staff met with the Coastal Commission staff and determined that the planned approach is the best to consider all of the components at once. Recommendations for the Community Plan remain true to the priorities of the Coastal Act to ensure that visitor serving uses remain available.

b. Recommendations - Direct staff to:

15. Place a priority on fixing the existing breaks and failures within the system and then maintain the system in a condition which minimizes infiltration from storm water and especially water infiltration from high tides.
16. Expand the sewer allocation system by approximately 75% to allow:
 - i. Existing uses to continue in their current mode
 - ii. Prospective developments that have been presented to the Committee
 - iii. Additional uses to develop on undeveloped and under developed properties
 - iv. It is encouraged that the Moss Landing Business Park connect to Sewer as soon as possible, but the site should be required to connect to the sewer as a condition of project or plan approval associated with the development of any new buildings.
17. Moss Landing Business Park would be responsible for providing any necessary improvements to the sewer system (local and regional) to accommodate the added flow resulting from this development connecting to the sewer system. The Moss

- Landing Business Park shall complete a study to identify what improvements are necessary to the local system and to the regional lift station to accommodate the additional sewer flows.
18. Move away from a land use regulatory system that uses a sewer allocation as the primary means of limiting land use and allow land use regulations to control the type and intensity of development. Some provision must be made in the plan to ensure that during the review and development of new development that sufficient sewer capacity is available to accommodate development on other undeveloped and underdeveloped property. The methodology for determining the sewer allocation should be updated to be consistent with County Ordinance, and/or the regional plant's methodology for calculating usage. This could include future metering.

2. Water

a. **Issues**

The committee expressed several concerns related to water. First is whether there is sufficient capacity to meet growth, second is whether the source of water is of a permanent nature, and third is whether there are facilities necessary to provide water needs. The Infrastructure subcommittee received testimony from Pajaro Sunny Mesa Community Services District (PSMCSD) about these issues.

PSMCSD indicates that they do not have sufficient water to accommodate intensification of growth. PSMCSD identified that they could accommodate existing water users, development that has already been approved, lots of record and most development that is occurring on property that already has a water connection. PSMCSD states that unless there is a water savings element in proposed new development that would result in a net equivalent to the current usage; new expansion can not be accommodated. PSMCSD can not commit to providing water beyond the current level of development unless additional sources of water are developed.

PSMCSD has also asked for various improvements including:

- New water pipe in the Heights subdivision
- 500,000 water tank constructed on the Avila Road well site.
- Upgrades to existing pressure system to curb electrical costs.

There were many questions remaining regarding the future status of water supply in the area and how phasing of new development could be accommodated. There were also differences of opinion regarding water availability in this area.

b. **Recommendations**

19. The update of the Moss Landing Community Plan needs to develop an approach to address the demand for water to support short and long term growth in relation to the concern about ground water overdraft. It may be necessary to develop a staged development plan until alternative sources of water are established.

20. Because current groundwater is not sustainable, new and innovative methods of water conservation and recovery need to be developed and implemented in order to address reduced freshwater sources throughout the County. Encourage incentive programs to bring existing structures into current code compliance: low flow toilets and showerheads, xeriscape installations, etc. Encourage the use of rainwater capture and enhanced freshwater wetlands that are integrated with the County's storm water runoff plan. Efficient strategies for desalinization should be pursued. Saltwater intrusion should be minimized. Alternative method of meeting the water needs of ML need to be explored. These methods could include wave powered desalinization, solar distillations etc...

3. Circulation

a. **Issues**

The circulation component of Moss Landing includes Pedestrian, Bicycle and automotive elements. Connectivity of the different areas of Moss Landing are fragmented due to natural and human made barriers. The North Harbor area is detached from the rest of Moss Landing by the Elkhorn Slough and connected solely by Highway 1. Pedestrian and Bicycle access will be greatly improved when the Monterey Bay Scenic Bicycle trail is constructed from the North Harbor area south across the Elkhorn Slough to Moss Landing Road, and then along Moss Landing Road.

The Moss Landing Business Park and Power Plant facility are separated from the remainder of Moss Landing by Highway 1. There is no aligned intersection, and crossing Highway 1 has become challenging due to traffic volumes and geometrics (elevation and alignment) of the roadway. Plans for the Business Park include uses that extend from operations within the Moss Landing area but that require larger space (tanks, storage, etc). Therefore, the Plan needs to address how businesses along Moss Landing Road and employees of the facilities east of the freeway can safely connect across Highway 1.

Pedestrian circulation within Moss Landing is limited by the lack of sidewalks and lack of street lighting. Pedestrian circulation within the community would be significantly improved by alternative pedestrian paths along and across the Moro Cojo Slough and perhaps even along the Old Salinas River channel. A desirable improvement would be to create access for the disabled to the beach. There are private beach areas that currently provide access and State Beach areas that have access, but none of these provide disability access.

b. **Recommendations - Direct staff to:**

21. Provide for pedestrian circulation including sidewalks along Moss Landing Road and Sandholdt Road
22. Create bicycle/pedestrian paths along waterways that avoid impacts upon environmentally sensitive habitat.

23. Create a pedestrian connection between the downtown area on Moss Landing Road and the commercial area along Highway 1 across the Moro Cojo Slough.
24. Develop at least one access point onto the beach that is accessible to persons with disabilities.
25. Incorporate pedestrian connections into the design, and to provide other improvements such as picnic tables or benches to connect developments in a pedestrian friendly manner.

4. Traffic

a. **Issues**

The issues associated with traffic center around Highway 1. Due to current levels of traffic, turning movements onto and off of Highway 1 from both ends of Moss Landing Road and Dolan Road are difficult during peak times. Most of the existing traffic on Highway 1 is not the result of development in Moss Landing, but rather regional traffic between Santa Cruz and the Monterey Peninsula. Additional development in Moss Landing would complicate an already difficult situation.

The Infrastructure Subcommittee spent a great deal of time discussing how to address traffic issues. Many people in the community would like to see traffic signals installed at Dolan Road and Highway 1 and/or at Moss Landing Road and Highway 1. The preferred approach by Caltrans is to develop circulation patterns that do not rely on Highway 1, and Caltrans is currently opposed to installing any traffic signal on Highway 1 without considering other alternatives first and determining what is the most effective and efficient solution. Rather than focusing upon identifying a project right now, the preferred approach is to develop criteria identifying what the best solution would be to address the congestion issues on Highway 1 in general as well as it relates to the Moss Landing Community Plan.

Although the North County Land Use Plan currently calls for Highway 1 to be expanded to 4 lanes, a Periodic Review drafted by the Coastal Commission would require maintaining Highway 1 as a rural scenic two lane highway. Safety and traffic flow on Highway 1 can be improved by limiting driveways and consolidating intersections. The Moss Landing Road/Potrero Road/Highway 1 intersection is confusing, and traffic flow and safety could be enhanced by consolidating this intersection.

b. **Recommendations**

26. All transportation planning along Highway 1 needs to be done in the context of a Corridor System Management Plan (CSMP). All improvements shall be made consistent with this plan.
27. The traffic study prepared for the update of the Moss Landing Community Plan needs to be consistent with the Caltrans CSMP and include success criteria by which future projects are evaluated. The criteria could be, but are not limited to such factors as: resource impacts (wetlands, farmlands, etc.), safety needs, congestion reduction,

- community acceptance (local and regional), fundability, total overall delay at node, and possible alternative routes.
28. The Moss Landing Community should develop multiple viable modes to transportation which is not reliant upon single occupancy vehicles. The Plan update needs to tie together mass transit opportunities with significant pedestrian and bicycle linkages.
 29. There is a need to provide some connectivity between Moss Landing Business Park and the development on the west side of Highway 1.
 30. The committee did look at several small, low-cost, short-term, traffic solutions that would improve traffic circulation and safety. These include:
 - a. Realigning the Moss Landing Road, Potrero Road, and Highway 1 intersection.
 - b. Consolidating and realigning driveways.
 - c. Installing acceleration and deceleration lanes
 - d. Restrict the use of any improvements, structures or plant material that impacts traffic safety.
 - e. Lower the speed limit along Moss Landing Road. Examine the use of a school zone in front of Moss Landing Marine Labs.

5. Street Lights

a. **Issues**

Currently street lighting is absent from the community. A segment of the community does not want to see the streets lit up with bright lights, while others would like to see some low intensity, low profile lights installed to increase safety and minimize nighttime glare.

There are currently opportunities to have the infrastructure put in place as the PG&E facilities are being placed underground. As part of this work, provisions could be made to at least install the conduit for the installation of possible street lighting some time in the future.

b. **Recommendations**

31. Provide capability to install low profile street lights that meet dark sky criteria and produce a minimum amount of glare but add to the safety of the community.

6. Urban Services Boundary

a. **Issues**

Currently, the Moss Landing Business Park (old National Refractories Site) and the Moss Landing Power Plant at the corner of Highway 1 and Dolan Road are outside the Urban Services Line. An Urban Services Line was established to identify infrastructure limits under the Community Plan. It was used as a growth policy to provide for logical growth by not allowing utilities to be extended to property that may increase development pressure on undeveloped property. The National Refractories Site has been developed and is proposed for redevelopment as a green business park. It is currently served by a

series of septic systems. The site currently is within the Moss Landing Community Plan, so placing it within the Urban Services Boundary will not be growth inducing but merely open the door for the site to connect to the sewer system (See sewer discussion above)

b. Recommendations - Direct staff to:

32. Expand the Moss Landing Urban Services Line to include the Moss Landing Business Park, the Moss Landing Power Plant and Moss Landing Switch Yard.

7. Wireless Communication

a. Issue

There is a growing need to be able to respond to the changing nature of communication technology. The Committee received testimony from a wireless provider that could substantially benefit many different users in the area as well as vessels out on the ocean. There is a need to continue to allow this type of public infrastructure to be installed while maintaining the character of the community.

b. Recommendation - Direct staff to:

33. Incorporate provisions for wireless telecommunications facilities in the community plan update.

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Exhibit I

Can be found on the following Link:

<https://www.co.monterey.ca.us/home/showdocument?id=46526>

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