GREATER MONTEREY PENINSULA

AREA PLAN

A PART OF THE MONTEREY COUNTY GENERAL PLAN
DECEMBER 1984 WITH SUBSEQUENT AMENDMENTS

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Approved by the Planning Commission September 26, 1984
Adopted by the Board of Supervisors December 17, 1984
Amended by the Board of Supervisors as of November 29, 1994
Amended by the Board of Supervisors as of December 5, 1995

UPDATE INDEX

GREATER MONTEREY PENINSULA AREA PLAN AMENDMENTS

As Adopted by the Monterey County Board of Supervisors for the following dates:

1. ***July 1, 1986*** *- MAP CHANGE - APN A09-482-03 - Change density from 18 units/acre to 9 units/acre. MODIFY Policy 27.1.5.*

2. ***October 7, 1986*** *- MODIFY POLICY 62.1.14 - Delete Policy 62.1.15 deletes density bonus for low/moderate income units.*

3. ***June 9, 1987*** *- VACATE Resolutions #84-570 and #84-571 in so far as they pertain to Rancho San Carlos.*

4. ***May 22, 1990*** *- MAP CHANGE - APNs 416-111-03, 05, 06, 07, 08, 09, 10 - Change Land Use Density from RDR 5+ to RDR 7.15 units/acre and from LDR 2.5 units/acre to LDR 5 units/acre.*

5. ***December 11, 1990*** *- MAP CHANGE - APNs 007-103-001 thru 014, 016 (Correct Error) - Change Land Use designation from RC to MDR 2.4 units/acre.*

6. ***March 30, 1993*** *- AMEND LAND USE MAP - Greater Monterey Peninsula Area Plan to designate Rancho San Carlos as "Resource Conservation/40 acre density (subject to the Comprehensive Planned Use policies).*

7. ***March 30, 1993*** *- ADD LANGUAGE TO AREA PLAN SECTION - Land Use Designations - Recommendations showing a new designation "Comprehensive Planned Use" under this section describing Rancho San Carlos designated as a comprehensive planned use with special planning requirements for the specific area.*

8. ***November 29, 1994*** *- MAP CHANGE AND ADD LANGUAGE - APNs 417-041-007, 008, 009, 011, 013, 014; 417-021-017; 417-181-001 - Change Land Use designation from "Permanent Grazing, 160 Acre Minimum", to "Resource Conservation 160 Acre Minimum" for several parcels totaling 2,366 acres and known as the White Rock Club located southerly of the terminus of Robinson Canyon Road; and adopt a "Special Treatment" designation in the area plan recognizing the White Rock Club (by Monterey County) (See Update Index #9 for text change.).*

9. ***November 29, 1994*** *- MAP AND ADD LANGUAGE - APNs 417-051-012, 013, 014, 016, 017, 018, 019, 023, 024; 418-051-003, 013 - Change Land Use designation from "Permanent Grazing, 160 Acre Minimum" to "Resource Conservation, 160 Acre Minimum" for several parcels totaling 2,059 acres and known as the San Clemente Ranch located easterly of Robinson Canyon Road and adopt a "Special Treatment" designation in the area plan recognizing the San Clemente Ranch (by Monterey County).*

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INTRODUCTION

The Greater Monterey Peninsula Area Plan is part of the Monterey County General Plan* which is a long-range, comprehensive guide addressing all aspects of future growth, development, and conservation. State law requires that the County adopt such a plan and that the plan meet minimum requirements regarding its content. A general plan must address nine specific subject areas: land use, circulation, housing, conservation, open space, seismic safety, noise, scenic highways, and safety. It must include text and graphic materials which represent the county's goals, objectives, and policies. Furthermore, a general plan's components must comprise a well integrated document which is internally consistent.

Monterey County's General Plan represents long-range goals, objectives, and policies for the County. The Greater Monterey Peninsula Area Plan is one of eight area plans of Monterey County which address local issues. An area plan may be more specific than the General Plan due to its geographic focus. Development opportunities, constraints, and natural resources of the Greater Monterey Peninsula Planning Area are unlike those in other parts of the County, hence the policies for this planning area are more precisely adapted to the characteristics of this area than are the more general policies of the General Plan. An area plan must be consistent with the General Plan and must address all subjects required by state law.

Citizen participation is an integral part of the planning process. Citizen advisory committees guide the formulation of goals, objectives, and policies of both the General Plan and the eight area plans. Comments made by the public are considered by the Planning Commission and Board of Supervisors prior to final action on any of these plans.

When adopted, a plan must be implemented so that it will apply in an explicit manner to each parcel of property and will address every development proposal made in the Planning Area. Regulations and programs will be used to properly implement each plan once it is adopted. These include zoning regulations, subdivision regulations, capital improvements programming, and project review under the California Environmental Quality Act. Each of these has its own focus and purpose and all of these shall be in accord with the goals, objectives, and policies adopted in the General Plan.

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* "Monterey County General Plan" or "General Plan" refers to any part of the body of information which includes the adopted countywide general plan or the eight area plans as they are adopted.

NATURAL RESOURCES

In preparing an area plan for the Greater Monterey Peninsula Planning Area, it is essential to have an understanding of the opportunities and limitations of the area's physical features and natural resources. Natural characteristics shape the setting in which physical development takes place. The Planning Area's unique combination of natural resources provides considerable opportunities for a variety of land uses.

The natural resources discussed in this plan can be characterized either as those which are unaffected by man or as those which may be depleted or destroyed through improper management. Geography, climate, and geology, for example, are essentially unchanged by man's activities. The remaining categories of this section--minerals, soils, water, vegetation, wildlife, environmentally sensitive areas, ocean resources and archaeological resources--may be significantly altered or even destroyed through misuse.

NATURAL RESOURCES

GEOGRAPHY

As shown on Figure 1, the Planning Area is bordered by the North County and Greater Salinas Planning Areas on the north, the Toro and Cachagua Planning Areas on the east, and the Coast Planning Area on the south. Within its boundaries lie the incorporated coastal cities of Monterey, Carmel, Seaside, Pacific Grove, Marina, Sand City and Del Rey Oaks. Federal lands in the Planning Area include the 27,954-acre Fort Ord military reservation, the 392 acre Presidio of Monterey and approximately 9,000 acres of the Los Padres National Forest.

The Greater Monterey Peninsula Planning Area consists of some of the most striking geography in Central California. The Monterey Peninsula--which separates Monterey and Carmel Bays--and the Carmel Valley are the two most significant geophysical features of the Planning Area.

The topography of the Planning Area is greatly varied, ranging from level bottomland at the mouth of the Carmel Valley to the steep palisades--with slopes exceeding 100% in places--forming the south wall of the upper Carmel Valley. The highest points of the Planning Area are Palo Corona Peak (2,972 feet) and Mt. Carmel (4,417 feet), both of which are located on the area's southern boundary.

A portion of the mouth of the Salinas Valley is contained in the northernmost corner of the Planning Area. The northeastern boundary follows the bluffs above the Salinas River, southeasterly to Highway 68.

The region to the south of the Carmel Valley is the most sparsely populated portion of the Planning Area and contains its most extreme topography. Some of the most rugged terrain in the Planning Area is located in the Los Padres National Forest.

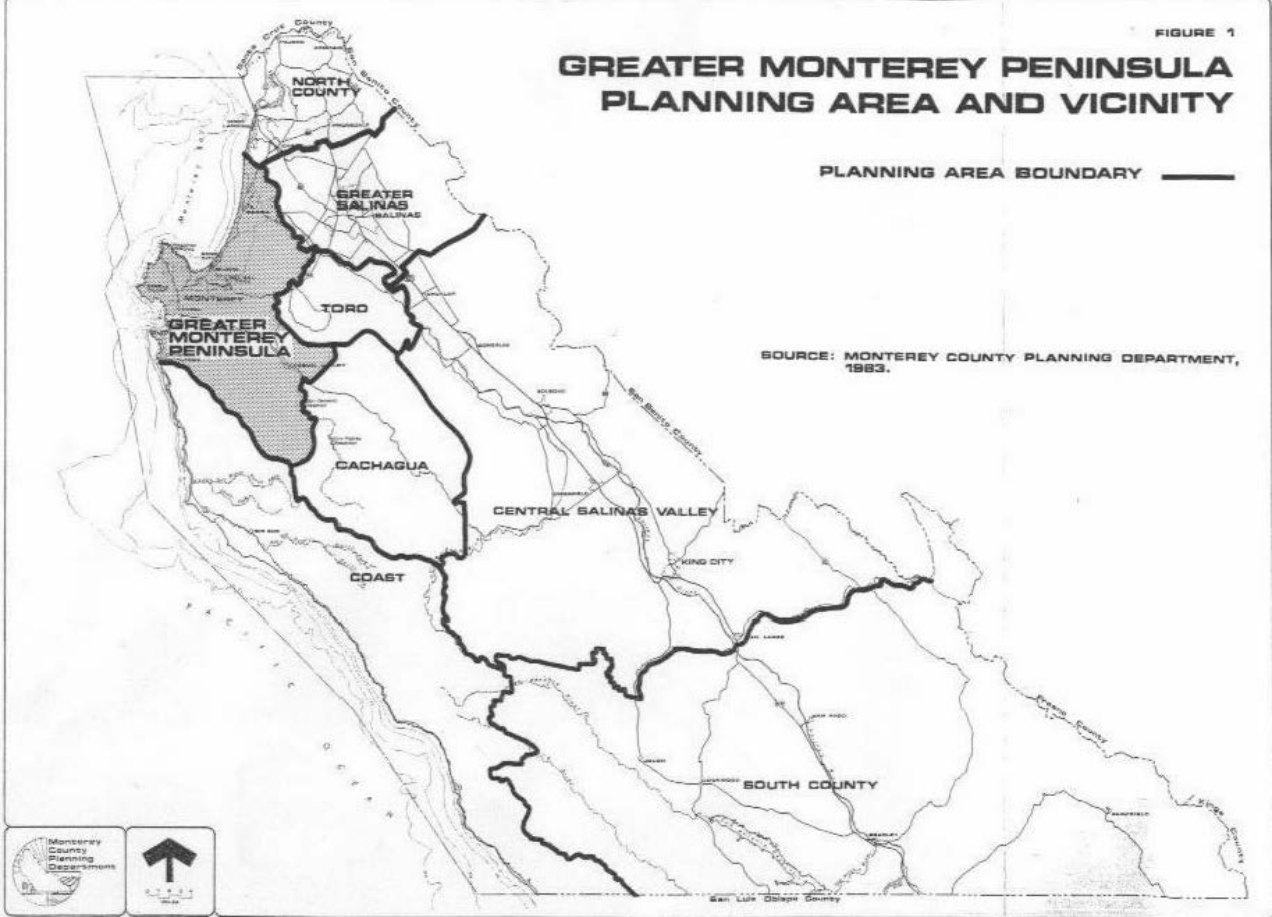
CLIMATE

The Greater Monterey Peninsula Planning Area experiences a coastal mediterranean climate with moderate temperatures throughout the year, mild winter rains, and cool summers greatly influenced by coastal fog and onshore breezes. Rainfall varies from year to year; over the thirty-year period ending in 1960, there was a 66% chance of receiving less than the average rainfall in a given year.

Average annual rainfall ranges from 14 inches per year in the Monterey/Seaside area to 75 inches per year in the rugged southern portion of the Planning Area, the most dramatic
variation in precipitation in Monterey County.

FIGURE 1

GREATER MONTEREY PENINSULA PLANNING AREA AND VICINITY



SOURCE: MONTEREY COUNTY PLANNING DEPARTMENT, 1983.

GEOLOGY

A deposit of sand dune material covers the base rock from Monterey to the present day mouth of the Salinas River. Extending as much as six miles inland, these sands have been deposited by the southward coastal transfer of sand by wave action over millions of years. The shape of Monterey Bay and the Peninsula have caused much of this sand to be trapped on the southeastern shore of the bay, making the famous rocky coastline of the Monterey Peninsula and Big Sur possible. Carmel's famous white, powdery sand has been able to filter past this very efficient sand trap, while the coarser sands mined at Sand City have not and are deposited at the southerly portion of the bay.

MINERAL RESOURCES

At present, mineral extraction is limited to commercial sand removal operations in the Sand City/Marina area. While industrial grade sand is undoubtedly plentiful in these dunes, its large-scale removal is prevented by the visual and ecological impacts which would result.

SOILS AND SLOPE

Soil types of the Planning Area are divided into three categories based on suitability for septic system effluent absorption, dwellings without basements, and development of roads and streets. Soil constraints considered in determining suitability include slope, depth to bedrock, soil strength, shrink-swell potential, and the presence of water. Categories of soil constraints are rated as low, moderate, and high. Soils in areas with a low constraint rating are favorable for most land uses and any limitations can be easily overcome. Soils with moderate constraints have properties which render them unfavorable for specified uses, but limitations can be overcome by special planning and design. Areas with soils given a high constraint rating have soil properties which are so unfavorable or difficult to overcome that a major increase in construction effort, special design, or intensive maintenance is required and development may be entirely precluded. Soils in the Monterey Peninsula Planning Area which have a low constraints rating are found on the floor of Carmel Valley and along the coast. These are generally bottomlands and coastal strand areas, having very well-consolidated soils and gentle slopes. Soils which have moderate constraints include areas north of Marina, most of Fort Ord, Carmel, San Francisquito Flats (south of Carmel Valley), and the slopes above Carmel Valley Village. The majority of the Planning Area contains soils in the high constraints category.

Slope is a significant factor in determining soil stability, rate of erosion, and runoff velocity. Figure 2 demonstrates that, generally speaking, areas of low and moderate slopes correspond roughly to areas of low and moderate soil constraints. Conversely, slopes greater than 30 percent also tend to have high soil constraints. Areas having slopes in excess of 30 percent are generally suitable only for open space, low intensity recreation, watershed, or grazing purposes. Figure 2 is a generalized depiction of slope

within the Planning Area and, as with soils constraints, site specific analyses will be necessary to identify particular areas where slope will or will not have an impact on development.

FARMLANDS

The Soil Conservation Service has developed and adopted a system for categorizing important farmlands in California and the rest of the nation. The system distinguishes four categories of farmlands, each with specific criteria. The categories are prime farmlands, farmlands of statewide importance, unique farmlands, and farmlands of local importance. Prime farmland is land best suited for producing food, feed, forage, fiber and oilseed crops. Farmland of statewide importance is land other than prime that has a good combination of physical and chemical characteristics for producing food, feed, forage, fiber and oilseed crops. Additionally, lands must be irrigated to be included in these two categories. Unique farmland is land other than prime and farmland of statewide importance that is currently used for the production of specific high value food and fiber crops. Farmlands of local importance have been defined as lands which fail to qualify as prime farmlands or farmlands of statewide importance only because they are not irrigated.

Prime farmlands are found at the mouth of the Salinas River, on terraces bordering the Salinas River, and at several locations in the Carmel Valley near the Carmel River. This is also true of the farmlands of statewide importance, which occur in the Planning Area only in one strip along the Salinas River and in one small area on the south side of the Carmel River west of Robinson Canyon Road. No unique farmlands have been mapped in the Planning Area because all lands currently producing high-value crops are within the two preceding categories. The farmlands of local importance in the Planning Area are grazing lands not currently used for the cultivation of food or fiber crops. The high suitability for cultivation of these lands must be weighed against the limitations of area, adjacent uses, access, and water availability.

Food crops produced in the Planning Area include artichokes grown at the mouth of the Carmel Valley and a variety of crops such as lettuce, broccoli, cauliflower, and brussel sprouts grown in the lower Salinas Valley. Farther up the Carmel Valley, some row crops are still grown commercially.

WATER RESOURCES

The Planning Area encompasses three distinct drainage basins with related aquifers: the Carmel Valley Basin/Carmel Valley Aquifer; the Canyon del Rey Basin/Seaside Aquifer; and the lower portion of the Salinas Valley Basin/ Salinas Valley Aquifer.

Carmel Valley Basin/Carmel Valley Aquifer

The Carmel Valley Basin drains a 250 square mile area which includes all of the Carmel Valley, the southern portion of the Planning Area, and over half of the Cachagua Planning Area, adjacent to the east. Almost all drainage is ultimately carried by the Carmel River, which flows naturally only during the

winter and spring months. Dry season releases from the Los Padres and San Clemente Reservoirs are timed to recharge the Carmel Valley Aquifer. Releases are made from the Los Padres Reservoir to the San Clemente Reservoir to provide adequate flow for steelhead spawning.

Over the years the Carmel Valley Aquifer and Carmel River have consistently produced the greatest quantity of high quality water in the Planning Area. Between November and April, the drainage basin receives from 15 to more than 40 inches of rainfall per year. This very seasonal distribution is reflected in the pronounced changes in river flows and, therefore, groundwater recharge. To a certain extent these seasonal fluctuations are controlled by the San Clemente Dam located at the southeasterly Planning Area boundary and Los Padres Dam farther upstream in the Cachagua Planning Area. These dams have a total impoundment capacity of approximately 4,000 acre feet of water and have historically supplied 8,000 to 9,000 acre feet for domestic use each year. The balance of supplies are obtained from the Carmel Valley Aquifer which is highly permeable and well confined by the rather steep valley walls.

Canyon del Rey Basin/Seaside Aquifer

The Canyon del Rey Basin is relatively small, yet is important to an understanding of drainage and water resource concerns in the Planning Area. The Seaside/Del Rey Oaks/Highway 68 corridor is located above a geologic trough which is relatively isolated from Carmel Valley on the south and the Marina area on the north by faulting and a series of anticlines and synclines. Recent studies indicate that recharge actually occurs not only within the valley itself but also from the adjacent Fort Ord dune sand area.1/ All of the recharge areas are moderately to highly permeable, allowing good percolation of the approximately 15 to 17 inches of local annual rainfall.

Salinas Valley Basin/Salinas Valley Aquifer

Although both the City of Marina and Fort Ord are located on older dune sands, their water supplies are taken from deeper formations which are extensions of those found in the Salinas Valley. These formations, commonly called the 180-foot and 400-foot aquifers, are relatively distinct permeable layers separated in the lower valley by impermeable clay layers. Recharge occurs primarily from stream flows of the Salinas River above Spreckels. Although recharge has stabilized groundwater levels through most of the valley, pumping near the coast has formed a groundwater trough which allows sea water to move inland, causing sea water intrusion in the shallow aquifers and requiring increasingly deeper wells to supply water of adequate quality.

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1/ Richard Thorup, Groundwater Study of Highway 68, 1977.

Figure 2
Slope

VEGETATION

Coastal Strand

Coastal strand vegetation varies from the low growing succulents along the high tide line, through grasslands, brush areas (dominated by bush lupine and other shrubs), to well-developed forests in which the cypress and Monterey pines are characteristic. The great variety of vegetation is very favorable to birds of many kinds. Coastal strand vegetation is primarily found along the sandy shoreline of Monterey Bay. The delicate nature of the dune flora makes it particularly sensitive to man's activities.

Wetlands

Freshwater marshes occur in areas with relatively large expanses of standing or sluggishly moving fresh water. Many wetland areas in the County have been destroyed over the years and the remaining wetlands are extremely valuable for wildlife, particularly migratory birds. Wetlands in the Planning Area include Laguna Seca Marsh, Salinas River Estuary, the Marina Ponds, Roberts Lake, Laguna Grande, El Estero Lake, and the Carmel River Lagoon.

Riparian Woodland

Riparian woodland is found along seasonally and permanently flowing freshwater streams and also in canyon bottoms and other drainage features where conditions are wet enough to support it. There are often dense stands of trees and a thick understory of shrubs. Wildlife tend to be particularly abundant here. Freshwater, which is a limited resource during summers in the Planning Area, can usually be found here as well as a diversity of habitats for fauna. Riparian corridors may extend through other plant communities providing long linear tracts of similar vegetative resources. Riparian woodland occurs in the Planning Area primarily along the Salinas and Carmel Rivers.

Grassland

Grassland usually occurs in soils having too little moisture to support larger types of vegetation. It occurs on marine terraces, ridge tops, and in dry, hot valleys. Grassland species may also appear intermittently in closed-cone pine and cypress forest and in foothill woodland.

Coastal Scrub

Coastal scrub can usually be found on drier coastal slopes, and those with heavier soils than those occupied by chaparral. In fact, coastal scrub is often found on lower foothills between valley grassland on the flatlands and chaparral on steeper slopes. Elements of coastal sage scrub can be found in scrub communities to the lee of active dunes along the coast, along with the elements of north coastal scrub.

Chaparral

Chaparral communities are typically composed of a uniform covering of hardy woody evergreen shrubs with stiff dark green leaves. They often form dense, impenetrable thickets. Chaparral may be found on drier slopes and sometimes on slopes with rocky or infertile soil. Typically, chaparral is adapted to frequent fires and hot climate, away from the immediate coast. However, in the Monterey Bay area and in a few other highly localized areas, chaparral is found close to the coast in a climate within the summer fog zone. The endemic plants of this so-called "maritime" chaparral are adapted to the cooler, more humid summers characteristic of the localized coastal areas in which they grow.

Foothill Woodland

The foothill woodland community is found in more protected areas having abundant moisture, deep soil, and good drainage. Such areas include canyons, coastal terraces, and sheltered valleys. The foothill woodland community supports an abundance of varied wildlife.

Redwood Forest

A once-common feature of the coastal canyons and slopes south of Carmel Valley is the redwood forest community which is located in Robinson, San Jose, Gibson, Garzas, Potrero, and Malpaso Canyons. Typically, these are small communities with species limited to coast redwood, coast live oak, and a predominantly fern understory. The redwood forest is excluded from the immediate coast due to low salt tolerance. Other restricting factors include needs for moisture from summer fog, partial sunlight, and bare mineral soil for seed germination.

Closed-Cone Pine and Cypress Forest

The most unique of the wooded areas found in the Planning Area is the closed-cone pine and cypress community, a stand of maritime conifer covering the Monterey Peninsula, Carmel area, Point Lobos, the Carmel Highlands and also extending easterly along the north ridge of Carmel Valley. The range of this community is limited by its preference for a cool, moist climate. Typical vegetation includes Monterey pine, Bishop pine, Monterey cypress and Gowen cypress. This is a very limited plant community and the Monterey Peninsula is unique in having all four species survive there. Of special interest is Huckleberry Hill in the Del Monte Forest because it is the only place where Gowen cypress, Bishop pine and Monterey pine grow in the same location. The area's acid, clay pan soil discourages the aggressive Monterey pine and allows the growth of the less aggressive, but more tolerant, Bishop pine and Gowen cypress.

WILDLIFE

Wildlife in the Planning Area is very diverse and abundant. Throughout the Planning Area, small mammals, reptiles, and birds typical of central California are found in fairly consistent populations. On the coast, several seabird colonies, or rookeries can be found. Bird Island, off shore of Vierra Knoll on

the south side of Pt. Lobos, contains California's second largest colony of Brandt's Cormorant and is the most northern site for nesting brown pelicans ever recorded. No nesting pelicans have been observed since 1963, but the recovery of the species since the banning of DDT in 1964 (1971 nationwide) suggests that nesting pelicans may return to Bird Island.

OCEAN RESOURCES

Monterey Bay and the waters of the rocky Monterey coast are uniquely rich in diverse marine life due to the seasonal upwelling of nutrient-rich cold water from the ocean floor through the Monterey Trench. This is a major submarine canyon located off of Moss Landing which may have been carved by the Salinas and Pajaro rivers. These upwelled nutrients support several sport and commercial fisheries in the coastal waters of the Planning Area as well as several unique species of marine life.

Sport fishing in the Planning Area includes rockfish, salmon, lingcod, cabezon, flatfish, halibut, Pismo clam, and surfperch. Abalone is taken by divers at several locations along the coast. Commercially-harvested species include rockfish, sole, and lingcod in the bay. Squid is taken off Seaside and Monterey, spot prawns in Carmel Bay, and market crabs near the mouth of the Salinas River. Albacore, salmon, and sablefish are taken commercially further off the coast. Due to this diversity of commercial fishing a variety of fishing techniques--gillnetting, trawling, seining, trapping, and long lining are employed in the waters of the Planning Area.

A commercially-harvested marine commodity often overlooked is kelp, from which various foods, food additives, and industrial agents are derived. Kelp is also important in the Planning Area as a habitat. Great forests of kelp are anchored offshore where they provide shelter and camouflage for a great variety of marine life, including the protected sea otter.

The harbor seal is a pinniped, or land-based marine mammal, which has been placed under protected status by the federal Marine Mammal Protection Act of 1972. The harbor seal inhabits the coastline and bay margins of the Planning Area and was placed under protected status after extensive hunting caused significant population reductions. Harbor seals are known as "opportunistic feeders" and, although they feed on fish in great abundance, will also feed on squid, shrimp and crabs.2/

With the rich fisheries of Monterey Bay as a food source and the off shore rocks offering sheltered haulout and breeding grounds, the rocky shoreline of the Monterey Peninsula provides an ideal habitat for sea lions.

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2/ U. S. Department of the Interior, An Ecological Characteri zation of the Central and Northern California Coastal Region, Volume II, Part 2, Species, October 1981.

ENVIRONMENTALLY SENSITIVE AREAS

Special consideration is given in this section to those portions of the Planning Area that have particular sensitivity to man's activities and include areas of outstanding natural resource value.

Inventories of Natural Areas

There are 22 plant species in the Planning Area which are considered to be rare and/or endangered by the California Native Plant Society. The known distribution of these species is illustrated in Figure 3. It should be understood that these are only the recorded locations of observed plants. Consequently, much of the Planning Area, most notably portions of Fort Ord and all lands to the south of Carmel Valley, has not been surveyed to determine the locations of any rare and endangered plant species.

In its mandate to manage and protect the fish and wildlife of the State, the California Department of Fish and Game (DFG) inventories the State's endangered, threatened, and rare animal species and leads efforts to protect and restore them. The key to preserving species lies in the preservation of the natural ecosystems in which the animals exist--ecosystems threatened by a rapidly changing environment. Preserving habitat for endangered species benefits numerous other species as well. Therefore, the DFG instigated a program to identify and map those areas that are of special importance for one or more kinds of wildlife, and are thus considered by the DFG to be particularly sensitive to development. These are called Areas of Special Biological Importance (ASBI). The ASBIs in the Planning Area are mapped in Figure 3.

The redwood forest community mapped as part of Figure 3 deserves particular discussion due to its identification by the DFG as an essential habitat for the spotted owl. Major stands of redwood forest are located in Robinson, Garzas, San Jose, Gibson and Malpaso Canyons. These redwoods thrive only under very specific combinations of soil and climatic factors, are under increasing pressure for timber harvesting, are important in the prevention of soil erosion, and are critical to maintenance of the environmental character of the southerly portion of the Planning Area. It is important to note that the County cannot regulate the harvesting of redwoods. Such activity is regulated by the California Department of Forestry.

Limited habitat is a habitat type that has been significantly reduced from its historical distribution, either locally or statewide, and is of special importance in meeting the general life requirements of a diversity of wildlife species.

Limited habitats in the Planning Area are interior wetlands, coastal wetlands, and riparian habitat. In addition to its habitat value, the Carmel River riparian woodland, shown in Figure 3, is of critical importance in prevention of river bank erosion.

FIGURE 3
ENVIRONMENTALLY SENSITIVE AREAS

In its publication, Inventory of California Natural Areas, the California Natural Areas Coordinating Council (CNACC) offers the first all-inclusive statewide inventory of natural areas. The criteria for inclusion in the Inventory are very general. Natural areas selected must be unique, or of particular scientific or educational interest, or representative of the various biotic communities found in the state. Areas included in this list are identified in Table 1 and designated by the letters CNACC. A summarized description of each area is also included. More detailed descriptions can be found in the Inventory. Locations of the natural areas can be found in Figure 3.

The Heritage Conservation and Recreation Service (HCRS), under the Department of the Interior, administers a federal program to designate Natural Landmarks throughout California. Two background papers were undertaken to determine locations for potential Natural Landmarks, under biotic, geologic, fossil, and marine themes. These locations are included in the natural areas list (Table 1) under the designation of HCRS and are identified in Figure 3. The only location in Monterey County thus far designated as a Natural Landmark, Point Lobos Reserve, is located in the Planning Area.

Under its mandate of water quality control, the California State Water Resources Control Board (SWRCB) designates particular areas of coastal waters as Areas of Special Biological Significance (ASBS). These are areas where it has been determined that alteration of natural water quality is undesirable and therefore waste discharges are prohibited. Along the Planning Area coast are four of Monterey County's six ASBSs: Pacific Grove Marine Gardens Fish Refuge; Point Lobos Ecological Reserve; Hopkins Marine Life Refuge; and Carmel Bay. These are included in the natural areas list (Table 1) under the designation "ASBS" and are identified in Figure 3.

ARCHAEOLOGY

According to archaeological records, the Planning Area was occupied by Indian groups at least 6,000 years and perhaps as much as 10,000 years prior to the Spanish colonization of Monterey County. Known archaeological sites tend to be distributed at the edge of the more abundant plant and wildlife habitats, demonstrating the need for local Indians to locate near varied food resources.

Archaeological Sensitivity

Less than 5% of the total land area of Monterey County has been surveyed for archaeologic importance. However, nearly 1,100 new sites have been identified. Based on this research, the County has established criteria and guidelines for reviewing proposed development and assesses that information during the initial environmental review. Additional professional studies may have to be completed for any project on a site where there is high possibility of an archaeologic site.

TABLE 1

Using available information and applying the various topographic characteristics most often associated with such sites, the County has delineated archaeological sensitivity zones. Three zones have been established (low, moderate, and high) which indicate the probability of an archaeologically sensitive site being present in a given location. Figure 4 shows the archaeological sensitivity zones for the Planning Area. Zones of high sensitivity are found along the coast and inland along the Carmel River and along the major creeks. More than half of the Planning Area has a moderate degree of archaeological sensitivity. A low degree of sensitivity is shown in the portion of the Salinas Valley that is within the Planning Area. This represents an area which is intensively farmed; any archaeological sites which may have existed in this area were probably destroyed long ago through intensive cultivation of crops.

FIGURE 4

ENVIRONMENTAL CONSTRAINTS

The environmental constraints analysis identifies conditions and hazards that threaten people and property. The analysis identifies hazard prone or sensitive areas that may or may not be occupied by people. The term "constraints" implies that because of possible negative effects of development in specific hazardous areas, land uses must be critically analyzed and, where necessary, restricted. Environmental constraints include seismic, geologic, fire, flood, noise, and miscellaneous hazards as well as air and water quality.

ENVIRONMENTAL CONSTRAINTS

SEISMIC AND GEOLOGIC HAZARDS

The Greater Monterey Peninsula Planning Area is located approximately 17 miles west of the San Andreas Fault, which is highly significant in that it forms the boundary between two of the world's largest tectonic plates. Most faults in California--and all those found in the Planning Area--are essentially sub-units of the San Andreas Fault complex.

The San Andreas Fault has been classified as an "active" fault in accordance with the Alquist-Priolo Special Studies Zones Act of 1972. It is generally agreed that the San Andreas is capable of producing an earthquake of up to 8.5 Richter, and the epicenter could be considerably less distant. Given the 50- to 125-year recurrence interval for a major earthquake on this fault, seismic hazards in the Planning Area must be considered significant. Because the process for adding new faults to the list of active faults is complex, many faults will not be classified as "active" by the Alquist-Priolo Act but will be considered by geologists to be active and capable of inflicting severe loss of life and property.

Figure 5 locates and identifies the more significant faults occurring in the Planning Area. With few exceptions, these faults consistently run in a direction paralleling the San Andreas fault complex to the east. Several, including the Carmel Canyon, Navy and Cypress Pt. Faults, have been located offshore, continuing the northwest to southeast course so typical of California's faulting system. This consistency demonstrates that the faults shown in Figure 5 are in fact sub-units of the San Andreas Fault System and should not be considered completely inactive.

Figure 5 also identifies zones of relative seismic hazard, based upon bedrock type, soil type, and proximity to known faults. Generally, it has been the County's policy to consider those zones rated IV, V, or VI as "high seismic hazard" areas, although impacts to development in areas rated as IV are not expected to be significant for low densities. Seismic hazard zones of intensity V or VI are either lands immediately adjacent to fault traces or saturated land most likely to liquefy during extended groundshaking.

Figure 6 illustrates the relative landslide potential of lands within the Planning Area. It is important to note that these landslides need not be triggered solely by groundshaking. Construction on slide-prone slopes which are saturated by stormwater, septic tank water or irrigation water and grading at the base of a slope or toe of an existing slide are only a few of the other factors which can cause slope failure.

FLOOD HAZARDS

Figure 7 identifies those portions of the Planning Area which are subject to inundation by a 100-year flood; this is the flood height which is reached, on the average, once every 100 years. It is usually associated with the meteorological event referred to as a "100-year storm" because of its incidence

roughly every 100 years. Lands within the 100-year flood hazard zone in the Planning Area are primarily the flood plains of the Salinas and Carmel Rivers.

Figure 7 also shows the extent of inundation in the event of a major dam failure in the upper reaches of both the Salinas and Carmel Valleys. This information assumes total and immediate dam failure, resulting in maximum flooding. It should be understood that the map shows flooding at depths of six inches or greater and that structural damage or casualties may not be a problem within all areas inundated by the dam failure.

FIRE HAZARDS

The California Department of Forestry is mandated by the state to prepare wildland fire hazard maps for each county, rating fire hazards as urban/ agricultural, low, moderate, high, or extreme. These classifications are based on slope, climate, fuel loading (vegetation), and water availability. They show wildland fire hazard only; structural fire hazards are not covered. The Fire Hazard Map (Figure 8) of the Planning Area shows that the cultivated valley floors are the lowest fire hazard (urban/ agricultural), the lower grassland slopes are a moderate fire hazard area, and that high and extreme hazard areas are found on the steeper brushland and wooded slopes.

MISCELLANEOUS HAZARDS

Miscellaneous hazards include pesticides, herbicides, fertilizers, hazardous chemicals, caustic materials, or explosives. The Planning Area does not contain any significant manufacturing or refining operations for hazardous chemicals, and nor do any industrial operations appear to produce significant amounts of hazardous waste products.

Since Highway 1 is not a major north-south transportation route and since the east-west trending Highway 68 terminates at the Monterey Peninsula, the shipment of hazardous chemicals, caustics, explosives, or radioactive materials would not likely occur in the Planning Area on a regular basis, with the exception of ordinance deliveries to Fort Ord.

FIGURE 5
SEISMIC HAZARDS

FIGURE 6
LANDSLIDE AND EROSION SUSCEPTIBILITY

AIR QUALITY

An estimated 75 tons of emissions, in the form of organic gases, are generated in Monterey County daily (1981 estimate). The 1982 Air Quality Plan for the Monterey Bay Region prepared by the Monterey Bay Unified Air Pollution Control District and the Association of Monterey Bay Area Governments identifies motor vehicle use, petroleum production, organic solvent use and pesticide application as major contributors to the ozone air quality problem in the County. Additionally, the plan identifies transport of air pollutants into the basin from the San Francisco Bay Area as a contributor to local air quality degradation.

WATER QUALITY

Carmel Valley Basin/Carmel Valley Aquifer

According to the Carmel Valley Wastewater Study (Montgomery Engineers, 1982) and other sources, there are strong indications that the extensive use of individual septic systems throughout the valley appears to be contributing to groundwater quality degradation. Monitoring of wells for many years has shown both seasonal and long term increases of dissolved solids, chlorides and nitrates caused by the increased volume of sewage due to increased density loading from septic tank systems. In the Village, for example, the changes appear to be related to development. However, to a certain extent groundwater quality problems can be attributed to natural conditions or localized agricultural fertilization.

Canyon del Rey Basin/Seaside Aquifer

Wells in the Seaside area are showing a minor decrease in quality due to increases in chloride content indicating the possibility of sea water intrusion. This is particularly evident in shallower wells closest to the ocean.3/ The Public Utilities Commission has limited withdrawals by Cal-Am in this area to 2,000 acre feet--the apparent safe annual yield to avoid sea water intrusion.

_____

3/ Thorup, Highway 68

FIGURE 7
FLOOD PRONE AREAS

FIGURE 8
FIRE HAZARDS

Salinas Valley Basin/Salinas Valley Aquifer

In the Salinas Valley, total dissolved solids (TDS) have been gradually increasing since 1968. Saltwater intrusion due to overdrafting is a significant factor with regard to groundwater quality in the Salinas River Basin and is the major contributor to the increase in TDS. Chloride concentrations are highest near the mouth of the Salinas River and have been increasing steadily--exceeding public health standards in some areas. Some aquifers near the coast are now unfit for agricultural use due to high chloride content. Generally, chloride concentrations in excess of 500 parts per million (ppm) will significantly retard crop vitality and require mixing with better quality water.

Although little data is available regarding water quality in the Marina/Fort Ord area, there is sufficient information to draw some generalized conclusions. The wells in this coastal area are producing from the "400 foot aquifer" in an effort to minimize the effects of salt water intrusion. Even at this depth, chlorides tend to be a problem and at least one major well in Marina has been abandoned because of this. In other respects, local supplies appear to meet quality standards.

NOISE HAZARDS

Generally noise becomes a problem when it exceeds 60 decibels (dB) on an A-weighted scale (60 dBA). The A-weighted scale relates sound pressure level and frequency to apparent loudness; and it closely matches the frequency response of the human ear. Noise at 60dBA is equivalent to normal conversion at a distance of 12 feet.

A generally accepted interior noise level in residential areas is 45 dBA. Typically, a standard frame house built to the Uniform Building Code can reduce exterior noise levels by approximately 15 dB, allowing an exterior noise level of 60 dBA to be reduced to an interior level of 45 dBA. No noise levels outside of freeway rights-of-way, railroad rights-of-way, or airport approaches in the Planning Area exceed 60 dBA. Noise measurements taken at York School were found to be as much as 80 dBA for aircraft taking off or landing. Aircraft passing over the Hidden Hills area are very near the surface of the hills and produce intermittent noise levels in the 75 to 80 dBA range.

It should also be noted that Fort Ord is scheduled to prepare an Installation Compatible Use Zone Study which will address noise and show noise contours both on and off the installation. However, while intermittent noise nuisances may occur in the unincorporated portions of the Planning Area, there is no apparent hazard to human health resulting from these intermittent nuisances.

HUMAN RESOURCES

The human resources component encompasses the demographic and socioeconomic analyses of the Greater Monterey Peninsula. The size, characteristics, distribution, and structure of the Planning Area's population, growth trends, and population projections are explored in the demographic section. The social and economic characteristics of the population--level of education, personal income, number of low income households, and employment--as well as the area's economic base are analyzed in the socioeconomic section. The size and composition of the current and projected population and its economic resources form the foundation for major planning decisions and are essential in forecasting demand for housing, jobs, land, water, recreation facilities, and transportation systems.

HUMAN RESOURCES

DEMOGRAPHIC ANALYSIS

The population of the Peninsula has increased the slowest of any of the planning areas. Table 2 indicates that, with Fort Ord's decline in population, the Peninsula registered a slight decrease in population between 1970 and 1980. Without Fort Ord, the growth rate was a modest 10% during the same period.

TABLE 2
County and Planning Area Population Change, 1960-1980

Location	1960 Population	1970 Population	% Change 1960-1970	1980 Population	% Change 1970-1980
Planning Area*	107,954	128,828	19.3	128,786	-0.03
Monterey County	198,351	247,450	24.8	290,444	17.4

*Includes Fort Ord.
Source: U.S. Census of Population, 1960 - 1980.

The population growth of the Peninsula's incorporated cities from 1940 to 1980 is shown in Table 3. The seven Peninsula cities show a mixture of moderate growth, stagnation, and population decline. The City of Monterey had tremendous growth in the 1940s (61%) and 1950s (40%). Growth tapered off in the 1960s, and by the 1970s the growth rate was only 5%. Unless the proposed development as part of the Highway 68 Area Plan takes place (which could provide for approximately 8,000 to 9,000 additional people), the City will grow very slowly in the future. The City of Carmel grew 53% between 1950 and 1960. Thereafter the City never registered more than 5% growth per decade and, in fact, lost population in the 1960s.

Del Rey Oaks, a tiny land-locked city of less than one square mile, has lost 15% of its population since 1970. The city has no large parcels left for development. The population of Seaside is largely tied in with troop levels at Fort Ord; therefore its population has stagnated along with Fort Ord's declining troop strength. Sand City, an industrial town of 182 people, lost thirty people or 14% during the past ten years. Pacific Grove increased almost 17% between 1970 and 1980, primarily due to annexation. Marina's unincorporated population in 1970 was 8,393; the city's growth rate was 65% after incorporation and annexation of new census tracts.

TABLE 3

Population of Monterey Peninsula Cities, 1940 - 1980

City	1940 Population	1950 Population	1940-1950 Population	1960 Population	1950-1960 % Change	1970 Population
Carmel	2,837	4,351	53.4	4,580	5.3	4,525
Del Rey Oaks	--	--	--	1,831	--	1,823
Marina*	--	--	--	--	--	--
Monterey	10,084	16,205	60.7	22,618	39.6	26,302
Pacific Grove	6,249	9,623	54.9	12,121	26.0	13,505
Sand City	--	--	--	--	--	212
Seaside*	--	--	--	19,353	--	20,165

*Excludes Fort Ord

Source: U.S. Census of Population, 1940 - 1980.

Population Characteristics

The Peninsula population is almost three-fourths White, compared to 60% countywide. The racial composition of the County and the Planning Area differs greatly in other respects as well. Persons of "Spanish Origin" number 26% of County population versus 7% of Peninsula population. On the other hand, the percentage of Blacks is twice that of the County. The Peninsula contains most (84%) of the County's Black population, over half of whom live in the City of Seaside.

Population Forecast

Population forecasts made by the Association of Monterey Bay Area Governments (AMBAG) indicate that about 185,293 people will live in the Planning Area by the year 2000. This is a twenty-year growth rate of 43.9% or 1.84% average annual growth. The fastest growing areas are projected to be Carmel Valley, Del Monte Forest, the Aguajito/Laguna Seca/Hidden Hills Area, and the Armstrong Ranch area north of Marina. To a large degree, the extent of growth projected for the Aguajito/Laguna Seca/Hidden Hills area and the Armstrong Ranch is linked directly with future annexation capabilities of Monterey and Marina which may be constrained by various factors such as water supply, sewage treatment and traffic capacity.

The Greater Monterey Peninsula Area Plan Citizens Advisory Committee has not made a detailed examination of the assumptions behind the AMBAG population projections and does not necessarily accept them. In addition, a comparison of the actual growth rate on the Peninsula with the AMBAG projected population growth rate shows serious inconsistencies between the two. If Fort Ord is included in the calculations, the Planning Area had slightly less than a zero growth rate between 1970 and 1980. Excluding Fort Ord, the 1970-1980 growth rate was 1% per year. In either case, actual yearly population growth in the Planning Area is significantly less than that which is projected by AMBAG. It should be noted that AMBAG is in the process of making slight adjustments to the population projections based upon the 1980 Census.

SOCIOECONOMIC ANALYSIS

Among the County's eight planning areas, the Greater Monterey Peninsula had one of the highest levels of educational attainment. For the area as a whole, 85% are high school graduates and 22% are college graduates compared to countywide figures of 71% high school graduates and 16% college graduates. Many of the individual communities had college-level median school years completed. In the unincorporated area, the Del Monte Forest area had the highest educational level with 94% high school graduates and 51% college graduates. Of the cities, Carmel had the highest level of education with 91% high school graduates and 36% college graduates. No community had a median below 12 years, with the exception of Sand City. Overall, the Peninsula compares favorably with the County in terms of educational level. Residents of the Planning Area have a similar median length of school attendance and a lower dropout rate than the County as a whole.

The 1979 median household income countywide was $17,661. Although the Peninsula had one of the highest household income levels with a median of $18,479, communities within the Planning Area

encompassed a wide range of income. Median household income for Seaside, which includes a portion of Fort Ord, was $14,603 (83% of the County median); at the other end of the income scale was Del Monte Forest with a $34,493 median household income (195% of County median). In fact, Del Monte Forest had the highest income level of any area in the County.

Employment

1980 Census information on industry and occupation was obtained for employed persons 16 years and older. Some of the most significant findings when analyzing the Planning Area's industrial and occupational categories of workers are that:

1) 68% of all persons 16 years or older are in the labor force compared to 78% countywide.

2) 7% were unemployed when the 1980 Census was taken compared to 10% countywide.

3) The percentage rates of employment in the various industrial and occupational categories were relatively the same with the exception of agriculture and the armed forces.

4) 39% are in the armed forces (all non-civilians that reported to be on active duty in any branch of the armed forces) compared to 18% countywide.

5) Only 3% are working in agriculture, forestry, fisheries, and mining as compared to 15% countywide.

Economic Base

The economy of the Monterey Peninsula is based on military payrolls and on a large scale visitor and convention industry. Other important industries include commercial and sport fishing, research laboratories, and light manufacturing.

Approximately 90% of visitor activities in the County occur on the Peninsula, according to a Recht-Hausrath study of the visitor sector. In 1978 there were an estimated 6.3 million day visitors to Monterey County. The Monterey Peninsula receives large numbers of sightseers, shoppers, recreation seekers (particularly divers and golfers), business and conference visitors, and people attending special events. Annual attendance at the two state parks and Point Lobos State Reserve is over 400,000. Overnight visitors in 1978 numbered 515,000 in campgrounds and 3.4 million in hotels and motels. Estimates are based on 5,925 hotel/motel rooms with a 73% occupancy rate.

The Recht-Hausrath study estimated that expenditures by visitors accounted for more than half of all sales in restaurants and bars and one-third of all sales in retail stores. Additionally, the visitor impact proceeds beyond direct expenditures to indirect effects. A portion of the dollar goes for the purchase of other local goods and services which results in other employment. The subsequent spending by local residents for local goods and services adds to the impact. An estimated 44% of the County's service

and trade employment and 15% of total employment are supported by visitors; of this total employment, approximately 92% is contributed by Peninsula hotel/motel and day use visitors.

In 1978 the visitor sector employed approximately 16,000 persons and was the County's third largest industry. Recent trends indicate growth rates in the number of visitors of around 5% per year and an increase in spending of 10% per year. Based on this trend, the long-range forecast indicates that the visitor sector will experience the largest increase of all economic base sectors in the County. Tourism-generated base employment is forecasted to increase 115% by 1995 with the impetus coming from the Peninsula. The area's natural beauty and historical value, its recreational and commercial services, and its proximity to the San Francisco and Los Angeles metropolitan regions will serve as the impetus for this growth.

Although the demand for tourist service amenities will continue to be significant, there can be negative aspects to this industry. Some parts of the tourist industry may not have strong linkages with other industries and may not stimulate the growth of other sectors of the local economy. Moreover, many of the employment opportunities in the retail and service sectors are generally low-skilled, low-paid and seasonal in duration. Regardless of various potentially negative aspects of the tourist industry, the industry is expected to remain strong and a dominant force in the Peninsula economy.

Military establishments form an integral part of the economic structure of Monterey County. The number of their personnel has grown substantially with the establishment and expansion of such major facilities as Fort Ord, the Presidio of Monterey (which includes the Defense Language Institute), and the Naval Postgraduate School.

Currently, the level of personnel at Fort Ord is stabilized because the facility has become the permanent base for the Army's Seventh Infantry Division. The Naval Postgraduate School, as of 1982, employs 2,249 military and civilian personnel.

The current military payroll for fiscal year 1982 was $516 million. This included Fort Ord, Fritzsche Airfield, Fort Hunter-Liggett, and the Presidio of Monterey's civilian and military personnel. Many businesses, banks, trades, and services around the Monterey Peninsula are heavily dependent on military personnel and their families. The Army alone spent $102 million in the community on contractual services and supplies and $5 million on major construction projects in fiscal year 1980. The Naval Postgraduate School spent $10.1 million in the community on contractual services and $1.1 million on supplies. A major withdrawal of personnel and federal funds would create severe economic problems countywide and on the Peninsula but County officials have fought to keep military installations open. Thus, the military is, and will continue to be, an important conponent of the Planning Area's and County's economies.

Monterey Harbor supports a sizeable commercial and sport fishing industry. There are 225 commercial ships based in the Harbor, employing approximately 300 net and line fishermen. Additionally, Monterey Harbor reported approximately 24,000 small craft launched from its ramp in 1980 and 1,700 transient craft visited the harbor. There are 450 ships moored at the Monterey Marina.

CHAPTER IV: AREA DEVELOPMENT

The area development component of the Greater Monterey Peninsula Area Plan includes the subjects of land use, holding capacity, housing, transportation, and public services and facilities. These represent the major considerations in the spatial distribution of human activities and the facilities necessary to support them. Area development encompasses the environment built by man.

The existing land use analysis examines the pattern of existing development; that is, it examines the extent and location of land developed with various uses. Current holding capacity analysis examines the availability of vacant land for various development uses and provides an estimation of total development potential under the existing General Plan. The housing analysis describes characteristics and trends in housing supply and conditions. The transportation section describes the Greater Monterey Peninsula's transportation network for the movement of people and goods. The adequacy of services and infrastructure is analyzed in public services and facilities.

AREA DEVELOPMENT

EXISTING LAND USE

The Planning Area contains a total of 140,222 acres. Of this figure, 20,462 acres (almost 15% of the Planning Area) is contained within the Cities of Carmel, Del Rey Oaks, Marina, Monterey, Pacific Grove, Sand City and Seaside; the remaining 119,760 acres is unincorporated. The following paragraphs describe existing land uses in the unincorporated portion of the Planning Area in descending order of the amount of acreage currently committed to each use. Existing land uses are shown on Figure 9.

Public and Quasi-Public Uses

The largest category of existing land use in the unincorporated area is public and quasi-public use accounting for a total of 45,458 acres (about 38% of the Planning Area).

Vacant/Unimproved Lands

Vacant/unimproved lands total 41,480 acres (about 35%) much of which is located in the steeper southerly portions of the Planning Area. Lands in this use category have traditionally sustained development pressure, primarily for residential purposes.

Agricultural/Grazing/Rangeland

These uses total 25,603 acres (about 21%) and are primarily grazing/rangeland north of Marina, in the hillside areas north and south of Carmel Valley, and to the east of Carmel Valley Village. There are some row crops grown north of Marina near the Salinas River and on the floor of the Carmel Valley at the mouth and in the mid-valley area.

Residential Uses

Although much of the area's residential development is contained in cities, unincorporated area residential development is significant, totaling 5,029 acres (about 4% of the area). A total of 4,576 acres are developed in single family residential uses, and a total of 453 acres are developed in multiple units.

Streets, Highways, and Railroads

Streets, highways, and railroads in the area total 1,760 acres or about 1.5%.

Commercial Uses

Commercial land uses total 188 acres (about 0.16% of the area) and include businesses which serve both residents and the large number of tourists who visit the Planning Area.

FIGURE 9
EXISTING LAND USE

Industrial Uses

Industrial uses total 187 acres (about 0.16% of the area).

Major Water Bodies

Major water bodies in the Planning Area total 55 acres or about 0.05% and are all man-made water storage facilities.

PUBLIC LAND OWNERSHIP

Almost 37% (51,687 acres) of the total Planning Area (incorporated and unincorporated) is publicly owned and, therefore, is not subject to private development. The U.S. Government is the largest public landowner in the total Planning Area with major holdings consisting primarily of Fort Ord and the Los Padres National Forest. Total U.S. Government holdings equal 39,453 acres, or 28.1% of the Planning Area.

Lands within the Planning Area which are owned by the State of California total 1,499 acres, or 1.1% of the total area. Lands owned by the County total 1,078 acres and comprise 0.8% of the total Planning Area. Other major landowners in the Planning Area include the cities (9,117 acres or 6.5% of the total area) and special districts (540 acres or 0.4% of the total area).

CURRENT HOLDING CAPACITY

The term "holding capacity" refers to the sum of existing development (1980 Census) and potential development allowable under the Monterey County General Plan. The calculation of current holding capacity provides a general indication of the amount of development possible if every parcel in the Planning Area were developed to the extent permitted under the adopted General Plan. Since it is difficult to determine the time frame within which a certain holding capacity would be reached, figures represented in this section are considered to represent ultimate holding capacity under the adopted General Plan.

According to Assessor's records, there are 3,143 vacant parcels within the Greater Monterey Peninsula Planning Area. This figure includes 1,631 vacant parcels in the cities and 1,512 in the unincorporated area.

Residential Holding Capacity

Although much of the Planning Area's existing residential development is contained in cities, totaling 39,793 units (78.8%), a significant number of residential units 10,706 are located in the unincorporated area.

The total (existing plus potential) residential holding capacity for the Planning Area is 72,362 units. Of that total, 46,923 units would be within the cities and 25,439 units would be within the unincorporated area. Using 1980 Census information on population per household, the total number of residential units in Table 19 would house a population of 187,000 persons. This represents a 45% increase in population. The incorporated areas would have a total population of 121,000 persons, while the unincorporated area population would be 66,000 persons.

It should be noted that environmental constraints and General Plan policies, such as the slope density policy, may significantly reduce the ability to attain the calculated residential holding capacity in the unincorporated area.

Commercial Holding Capacity

Total commercial holding capacity for the Planning Area is 1,320 acres. The majority of that amount, 809 acres, is in the incorporated cities. The remainder, 511 acres, is in the unincorporated area.

Existing commercial development in the Planning Area is heavily weighted toward the cities, which have four times the amount of existing commercial development contained in the unincorporated area. However, the unincorporated area has more than double the cities' potential for commercial development in terms of land planned and available for commercial uses.

Industrial Holding Capacity

The Planning Area's total industrial holding capacity is 1,046 acres. Of this total, 666 acres are located in the incorporated cities and 380 acres are located in the unincorporated area. A large amount of the land planned and available for future industrial development (598 acres) is located in the Cities of Marina, Monterey and Sand City. There are 193 acres of vacant land planned for industrial development in the unincorporated portion of the Planning Area.

TRANSPORTATION

State Highways

Highway 1 is a principal arterial and is the County's primary coastal route. It is the principal highway connector between the coastal communities of Marina, Sand City, Fort Ord, Seaside, Monterey and Carmel and provides the only access to the Big Sur area. The highway is primarily four lanes divided but widens to six lanes between Marina and Seaside. South of Carmel, Highway 1 is two lanes and provides the primary access to the Big Sur area.

In 1981, annual average daily traffic (AADT) volumes on Highway 1 ranged from a low of 5,500 north of Yankee Point Drive to 60,000 south of the Highway 68 (Monterey-Salinas Highway) junction. Truck volumes on Highway 1 between Carmel Valley Road and the Salinas River Bridge averaged 3.4% of the total traffic.

Highway 68, a principal arterial, is the main connector between Monterey County's two largest urbanized areas--Salinas and the Monterey Peninsula. It serves as one of two main connectors between the Monterey Peninsula, including Ft. Ord, and Highway 101. By its northwesterly extension from Highway 1, Highway 68 also serves Del Monte Forest, Pacific Grove and Asilomar State Beach.

In 1981, annual average daily traffic (AADT) volumes on Highway 68 showed an increase with closer proximity to Salinas. At Canyon Del Rey Road, the AADT was 15,600; at Laureles Grade Road, the AADT was 14,400; at San Benancio Road it was 16,700; and at River Road it was 20,200. Peak hour volume varied accordingly, ranging from 1,600 at Laureles Grade Road to 2,250 at River Road. Higher traffic volumes near Salinas indicate significant commuting by Toro residents to the Salinas area on Highway 68. Eastbound traffic is heaviest during the morning peak hour from 7:00-8:00 a.m. Westbound traffic is heaviest during the afternoon peak hour from 4:00-5:00 p.m.

Weekday volumes are generally higher than weekend volumes on both a daily and a peak hour basis. An exception is when there are major weekend events at Laguna Seca Raceway. The highest volumes then occur for several hours prior to the main events, and they peak as the events end and the crowds disperse.

Truck volumes traversing Highway 68 between Salinas and Monterey account for 5% of the total traffic; and the majority of these are smaller capacity vehicles, indicating short-distance intercity commodity movement.

County Roads

Carmel Valley Road, classified as a minor arterial is a 4-lane divided road from Highway 1 to Via Petra and a 2-lane road from there through the Carmel Valley Village and on into the Cachagua Planning Area. Although Carmel Valley Road is a direct route between Highway 101 at Greenfield and Carmel, its alignment east of the Planning Area discourages through traffic. The intersection of Carmel Valley Road and Highway 1 is currently at Level of Service F. Capacity restrictions also occur east of Laureles Grade due to alignment problems.

In 1981, annual average daily traffic (AADT) volumes on Carmel Valley Road showed an increase with closer proximity to Highway 1. From Esquiline Road to Laureles Grade the AADT was 8,800; from Laureles Grade to Miramonte Road it was 7,500; from Miramonte Road to Robinson Canyon it was 7,300; from Robinson Canyon to Schulte Road it was 10,000; from Schulte Road to Rio Vista Drive it was 14,000; from Rio Vista Drive to Carmel Rancho Blvd. it was 18,600; and from Carmel Rancho Blvd. to Highway 1 the AADT was 17,400.

Laureles Grade Road, also classified as a minor arterial, is a steep, curved road with a design speed of about 25 mph. It currently operates below maximum capacity, although steep grades and slow-moving trucks frequently cause delays. The 1981 AADT for Laureles Grade was 4,000 from Carmel Valley Road to Robley Road and 4,300 from Robley Road to Highway 68.

A proposed Canada de la Segunda Road would provide a new, limited access connection between Carmel Valley Road and Highway 68. It is proposed that such a road be built to County standards on an alternate route (not the currently adopted route). Such a road will relieve traffic congestion on Highway 1, will provide for emergency access, and is already part of the Carmel Valley Master Plan adopted by the Board of Supervisors. The alternate route which is finally selected should be the least environmentally damaging, the least expensive to acquire and develop and should be coordinated with the County Public Works Department.

Del Monte Forest Circulation

The existing road network within the Del Monte Forest is privately owned and maintained by the Pebble Beach Company. Residents pay a yearly fee for upkeep of the road system while visitors are charged a toll for each vehicle entering one of four gates.

The major highways providing access between developed portions of the Forest and the surrounding region are Highway 1 and, to a lesser extent, Highway 68. Thus, most of the traffic to or from the Forest either passes through the interchange of Highway 1 and Highway 68, or through the local street system in Pacific Grove and Carmel.

According to the 1981 traffic counts taken by Pebble Beach Company, about 10,300 vehicles traveled into the Forest on an average day, increasing during the summer months due to increased visitor traffic. The Pacific Grove Gate (Highway 68) accounts for 1,300 vehicles or 13% of the Forest traffic. The Highway 1 Gate accounts for 3,800 vehicles or 37% of the Forest traffic. The two remaining gates, Country Club Gate (Forest Lodge Road) and Carmel Gate (Carmel Way) account for 50% of the remaining Forest traffic. In a peak visitor month such as August, visitors comprise almost 20% of the traffic through the gates while averaging less than 10% on a yearly basis.

Visual Sensitivity

The existing highway and road network in the Planning Area affords residents and visitors the opportunity to view a spectacular range of natural scenery including pine covered ridgelines, rugged hillsides, open meadows and a variety of unique water features. Some of these scenic resources have already been degraded by development of structures, tree removal, road cuts and placement and electric transmission lines. In order to ensure adequate protection of remaining scenic resources through the planning process, an extensive inventory of visually sensitive areas was undertaken. This important task was accomplished by a sub-committee of the Greater Monterey Peninsula Area Plan Citizens Advisory Committee (CAC) composed of chairman Brian Call, vice-chairman Todd Wahle and the late Ansel Adams. As a result of extensive discussions and field surveys, visually sensitive areas were identified as shown on Figure 10 and approved by the full CAC.

Visually sensitive areas are those scenic resources visible from existing, potential and proposed scenic routes. Criteria for visual sensitivity included duration of view, degree of variety involved and uniqueness of view. Areas identified as "highly sensitive" are defined as possessing those scenic resources which are most unique and which have regional or countywide significance. The following areas are shown to be highly sensitive on Figure 10:

1) agricultural lands west of Highway 1 near the Salinas River;

2) sand dunes west of Highway 1 between the Salinas River and Monterey;

3) the Peninsula ridgeline separating the Monterey area from the Carmel area;

4) Asilomar State Beach;

5) near-shore sand dunes at Spanish Bay;

6) 17-Mile Drive from Spanish Bay to Pescadero Point between the road and the ocean;

7) Fish Ranch frontal slopes;

8) Highway 1 from the Carmel River south to Malpaso Creek between the highway and the ocean;

9) the hillsides and ridges between Gibson Creek and Wildcat Creek and between Wildcat Creek and Malpaso Creek;

10) Hudson-Riley meadow opposite the Point Lobos State Reserve entrance;

11) south side of Carmel Valley between the Carmel River and the southerly visible ridgeline of Carmel Valley and from Carmel Bay to the Village;

12) Robinson Canyon;

13) south side of the Highway 68 corridor from the highway to the visible ridgeline and from Laureles Grade to Olmstead Road;

14) southerly portion of Laguna Seca Recreation Area, including the freshwater interior wetlands located on-site; and

15) the bluffs and farmland between the Salinas River and the Planning Area boundary and between East Garrison (Fort Ord) and Highway 68.

Areas identified as "sensitive" possess scenic resources which have local or community significance. The following areas are shown as "sensitive" on Figure 10:

1) agricultural lands east of Highway 1 from the Salinas River to the Marina city limit;

2) sand dunes in the Asilomar area east of Sunset Drive;

3) sand dunes and Monterey pines in the Spanish Bay area, southeast of Spanish Bay Road;

4) Huckleberry Hill via Sunridge and Lopez Roads;

5) the areas immediately east of 17-Mile Drive from the 17-Mile Drive gate to Pescadero Point;

6) the areas north and south of 17-Mile Drive from Pescadero Point to Highway 1;

7) Carmel Bay shoreline from Pescadero Point to the Carmel River;

8) existing Highway 1 from Carmel Valley Road to Carmel Hill;

9) Hatton Canyon;

10) portions of Carmel Valley north of Carmel River from Highway 1 east to the Planning Area boundary;

11) Roach Canyon in Carmel Valley;

12) portions of Carmel Valley south of the southerly ridgeline visible from Carmel Valley Road and from Robinson Canyon east to the Planning Area boundary;

13) the areas east and west of Robinson Canyon Road, from a point approximately 3 miles south of Carmel Valley Road to a point approximately 6 miles south of Carmel Valley Road;

14) the ridge between San Jose and Gibson Creeks, east of the Hudson-Riley meadow;

15) the area adjacent to Highway 1 from Wildcat Creek south to the Planning Area boundary and to a point approximately 2,000 feet east of the highway;

16) areas immediately adjacent to Laureles Grade Road;

17) the frontal portion of Laguna Seca Ranch from Laguna Seca Ranch Estates No. 1 to the easterly property line, for a depth of approximately 1,000 feet;

18) the east valley of Laguna Seca Ranch, portions of Laguna Seca Recreation Area and portions of Fort Ord adjacent to these two areas;

19) the agricultural lands from Highway 68 to Blanco Road and from Reservation Road to the Salinas River; and

20) Palo Corona Peak.

Scenic Highways and Roads

Monterey County has long been identified as among the nation's leaders in the development of scenic roadways. The roots of this blending of landscape and roadway were started in 1937 with County architectural controls along the newly completed Highway 1. The County's ensuing efforts to protect the scenic beauty of Highway 1 initiated the establishment of the California Scenic Highway Program and the Scenic Highway Advisory Committee.

The County's own Scenic Highway System is composed of roads and highways that have been designated by the state as State Scenic Highways or County Scenic Routes. Similar standards for selection apply to both. It is the County's responsibility to protect and enhance the scenic corridors along these highways through policies and programs of the General Plan. Highways and roads in the Planning Area that are already a part of the State Scenic Highway System are described below and are shown on Figure 10.

FIGURE 10
VISUAL SENSITIVITY

OFFICIALLY DESIGNATED SCENIC HIGHWAYS AND ROADS

Highway 1 from the Carmel River in Monterey County to the San Luis Obispo County Line, a distance of 72.3 miles, was designated on June 7, 1965. This section was the first Officially Designated State Scenic Highway in California, an honor befitting a highway which had long been recognized for its scenic corridor of unparalleled beauty. The request was initiated by the County of Monterey and approved by the state under the provisions of the 1963 adopted Master Plan for State Scenic Highways.

Highway 68 from Highway 1 in the City of Monterey to the Salinas River, a distance of 13.9 miles, was designated on June 19, 1968. In 1965 a Scenic Highway Committee was appointed by the Board of Supervisors to work with the Division of Highways and to make recommendations to determine the best methods of retaining the natural qualities of the Salinas-Monterey Highway as it then existed and with proposed freeway development. The committee, working with the County, completed a study of the highway in 1968 to meet the standards for designation as an Official State Scenic Highway. These studies were later used to design the freeway route.

Highway 1 from its intersection with Highway 68 to the Carmel River, a distance of 5.8 miles, was designated on May 21, 1970. The scenic corridor includes picturesque sections of the incorporated cities of Carmel and Monterey, and pine covered hills of unincorporated Monterey County. The official designation of the route was made possible through the cooperation of the cities and the County working together to determine the corridor and in turn working in close contact with the state. The inclusion of this section of Highway One as an Official State Scenic Highway connects two existing sections of Scenic Highways, Highways 1 and 68, to form a continuous Scenic Highway from the San Luis Obispo County line to the Salinas River, a distance of 86.2 miles.

Laureles Grade between Highway 68 and Carmel Valley Road, a distance of 5.5 miles, was designated on May 8, 1969. It was the first Officially Designated County Scenic Route in California. The road rises from an elevation of 420 feet at its junction with Highway 68 to 1200 feet, then descends to an elevation of 250 feet at its junction of the Carmel Valley Road.

PROPOSED SCENIC HIGHWAYS AND ROADS

The adopted General Plan proposes two additions to the officially designated scenic highways and roads in the Planning Area. These proposed additions, shown on Figure 10, are Highway 1 from its intersection with Highway 68 northward to the Monterey/Santa Cruz County line and Carmel Valley Road from Highway 1 east through Carmel Valley into the Cachagua Planning Area and further southeast to the Arroyo Seco. Although these two proposed scenic routes are included in the County General Plan, active steps must be taken by the County in order to achieve official scenic designation. Actions which must be pursued include studies to determine the extent of the scenic corridor for each roadway and formulation of specific land use controls which would be adopted to ensure protection of scenic values.

Road and Highway Improvement

Land use plans for the Highway 68 corridor have been based on the assumption that adequate capacity would be provided by upgrading the highway to a four-lane, access-controlled facility with grade separated intersections. The Regional Transportation Plan (RTP) recommends these improvements and the Regional Transportation Improvement Program (TIP) has included projects working toward freeway construction.

The future route for a 2.7-mile realignment of Highway 1 was adopted by the California Highway Commission on January 18, 1956. The adopted route is a new alignment up to 2,000 feet east of the existing highway and generally follows the slopes on the east side of Hatton Canyon. Construction of the Hatton Canyon realignment is in the State Transportation Improvement Program (STIP) for 1987-88 construction.

Highway 1 between Carmel and Big Sur is now experiencing congestion and safety problems. The Coastal Act, which gives preference to visitor- serving, commercial-recreational uses for the coastal area, limits improvement of Highway 1 by requiring that it remain a rural, two lane road south of the Carmel River.

COUNTY ROADS

Various improvements and additions to the County road system are included in the short and long range RTP, including reconstruction of Carmel Valley Road to four lanes from Via Petra to Valley Greens Drive, reconstruction of Blanco Road to four lanes between the Salinas River and Reservation Road, and replacement of the Schulte Road Bridge and Esquiline Road Bridge over the Carmel River. Although not included in the RTP, the proposed 3.7 mile Canada de la Segunda route which would connect Highway 68 with Carmel Valley Road was adopted as a major arterial route by the Board of Supervisors in April 1973.

Public Transit Services

The existing transit system on the Monterey Peninsula consists of fixed route service provided by Monterey-Salinas Transit, a Special Transportation Program for the elderly and handicapped, Greyhound Lines-West, local taxi companies, Coastlines, the Airport Limousine Service, and various charter bus operations.

Air Transportation

The Planning Area contains two public airports, one at Monterey and one in Carmel Valley. In addition, there is a private airport in the Upper Carmel Valley. A large rotary and fixed wing airfield limited to military operations exists at Fort Ord.

Monterey Peninsula Airport, an unincorporated "island" surrounded by the cities of Monterey, Seaside and Del Rey Oaks, is located within the Monterey city limits adjacent to Highway 68 and is about three

miles southeast of the Monterey central business district. It is owned and operated by the Monterey Peninsula Airport District which has local government authority under state law. The airport has 185-200 permanently based fixed wing aircraft.

Carmel Valley Airport is located in the Carmel Valley Village on the north side of Carmel Valley Road and is completely surrounded by residential development. It is a privately owned facility and is home base for 10 to 12 fixed wing aircraft.

Railroad Transportation

In Monterey County, AMTRAK provides rail passenger service while the Southern Pacific Transportation Company provides rail freight service.

The only rail passenger station currently located within the County is in Salinas. However, future rail passenger service from Monterey to San Francisco is included in the Caltrans Rail Passenger Development Plan Update 1982-87. This is a result of a study conducted by Caltrans which found that the restoration of passenger rail service would be feasible if certain track improvements are made on the Monterey branch and additional station facilities are constructed south of San Jose. The State Legislature has allocated 2.5 million dollars for track and station improvements; an additional 2.0 million dollars may be allocated in the 1984-85 fiscal year.

Water Transportation

Monterey Harbor is located on the shoreline about one-half mile north of the city's central business district consists of two public wharves and a marina owned by the City of Monterey. The facility is classified as a smallcraft harbor and is currently used by commercial fishing boats and pleasure boats.

Water Pipelines

There are thirteen water companies or districts in the County; however, only the California-American Water Company has major transmission lines which extend down Carmel Valley Road and through the Canada de la Segunda to service areas on the Monterey Peninsula.

Gas and Oil Pipeline

The major gas and oil pipelines in Monterey County are those of the Pacific Gas and Electric Company (PG&E) and Mobil Oil Company. Natural gas is supplied to the Planning Area by PG&E. The company brings gas to the Planning area via 20 inch and 12 inch pipelines.

Non-Motorized Transportation

Highway 1 between the San Luis Obispo County line and Carmel is part of the state's Bicentennial Bike Route. The state has tried where possible to provide improved shoulders on this section of existing

highway. However, there remain large sections of Highway 1 which have no paved shoulders. Other existing bikeways along Highway 1 include:

1) bike route on Del Monte Boulevard between Molera Road and Marina (Reservation Road);
2) bike path along the west side of Highway 1 between Del Monte Boulevard in Marina and the Fremont-Del Monte Boulevard off- ramp near the north end of Sand City;
3) bike way near Carmel, from Carpenter Street to Soledad Drive in Monterey along Highway 1;
4) bike lane along Olmsted Road leading to Jacks Peak Park; and
5) bike route along Seventeen Mile Drive between Pacific Grove city limit and Spyglass Hill Road.

Recently the state and the County have succeeded in stretching highway-bike dollars by constructing paved road shoulders which make driving safer and are suitable for bike riding. An example of this is the shoulder along Highway 68 between Toro Park and Monterey. Sections of Carmel Valley Road between the Carmel Valley Village and Highway 1 also include paved shoulders suitable for bicycle use.

PUBLIC FACILITIES AND SERVICES

Fire Protection Services

Fire protection services in the Planning Area are provided by a combination of the California Department of Forestry, fire protection districts, special districts, the fire departments of individual cities and by the military. Not all of the above entities have their own fire companies but instead contract with nearby fire protection service providers. It should be noted that large portions of the Planning Area are without organized structural fire protection.

Such areas are located north of Marina, between Highway 68 and Carmel Valley, south of Carmel Valley, and north/northeast of Carmel Valley Village. State law does not require the provision of fire protection services. Fire protection services desired by a community must be provided by that community through a special assessment district or through a volunteer fire company.

A major fire protection service provider in the Planning Area is the California Department of Forestry. Not only does it provide wildland fire suppression services over most of the unincorporated area but also provides structural fire protection services by contract to County Service Areas 39 and 43 and to the Pebble Beach Community Services District. The Department of Forestry also provides fire fighting support to volunteer fire companies by supplying personnel, training, safety equipment and miscellaneous surplus fire fighting apparatus.

Police Protection Services

The Sheriff's Office of Monterey County is the primary provider of police services to the unincorporated areas of the Greater Monterey Peninsula. The main functions of the Sheriff's Office are located in Salinas but a substation is located at the County Courthouse Annex at 1200 Aguajito Road in

Monterey. Response time from the substation to most areas within the Planning Area is 10 to 15 minutes.

The California Highway Patrol has jurisdiction and law enforcement powers on all County roads and state highways. The Highway Patrol is particularly concerned with enforcement of the vehicle code and other matters related to vehicle use such as traffic accidents. The Highway Patrol services the Planning Area through its substation located at 19055 Portola Drive near Salinas.

Fort Ord Military Police have law enforcement responsiblity for Fort Ord. The Military Police have a station and confinement facility located on the military base. Because of the many state and County parks in the Planning Area, it should be noted that park rangers also have limited law enforcement powers. The law enforcement authority of the state Department of Parks and Recreation is limited to areas within the state parks system. The County Parks Department has a mutual aid agreement with the Sheriff's Office for enforcement of all penal code violations and physical arrests with County parks.

Educational Facilities

There are four unified public school districts within the Planning Area. These include: Carmel Unified which encompasses the City of Carmel, the unincorporated area surrounding Carmel, all of Carmel Valley and Carmel Highlands; Monterey Peninsula Unified which serves the communities of Monterey, Seaside, Marina, Del Rey Oaks, Sand City, Fort Ord and some of the unincorporated areas along Highway 68; North Monterey County Unified which encompasses most of the area north of Marina; and Pacific Grove Unified which serves Pacific Grove and the Pebble Beach area.

The Planning Area encompasses primarily one community college district containing Monterey Peninsula College. The District extends from Marina south to Big Sur, includes virtually all of Carmel Valley and the Cachagua area. The Monterey Peninsula College campus is located off Fremont Street in the City of Monterey. Monterey Peninsula College also offers classes at Fort Ord. A small area north of Marina and portions of the Laguna Seca/Hidden Hills area are located in the Hartnell Community College District. The Hartnell College campus is located within the City of Salinas.

Projections to determine future needs for schools indicate a trend in declining enrollments because of demographic changes reflecting smaller families, two working parents, and smaller numbers of women at child bearing age.

It should be noted that these are numerous private schools within the Planning Area as well as two military educational facilities--the Defense Language Institute and the Naval Postgraduate School.

Health and Medical Services

There are three acute care hospitals within the Planning Area. Two, Monterey Peninsula Hospital and Community Hospital of the Monterey Peninsula, primarily serve civilians while Silas B. Hayes Army Hospital at Fort Ord serves only military personnel. According to local health planning agencies, the presence of two hospitals is adequate to meet the needs of the civilian population.

Mental health services in the Monterey Peninsula area are handled by the Community Hospital of the Monterey Peninsula. It currently devotes 20 hospital beds to mental health patients. Although there are many forms of mental health services available, the hospital provides mainly short-term acute care facilities. These provide for the most critical and immediate needs of those undergoing mental or emotional problems. It should also be noted that the U.S. Army operates three mental health clinics at Fort Ord but these are not available to civilian personnel.

A major health provider in the Planning Area is the Monterey County Health Department located at 1200 Aguajito Road in Monterey. The Health Department has many health maintenance and disease prevention programs and services with some services limited to low income families. These include child health screening, communicable disease control, emergency and disaster services, environmental health services, health services for the elderly, maternal and child health care, perinatal services, mental health services and community health field services.

Social Services

Social Services are currently provided by a branch office of the County Social Services Department located at 1281 Broadway in Seaside. The Department divides its services into two major activities, benefit payment programs and social work services. Benefit payment programs provide direct aid payments to individual and families in need. These include payments for families with dependent children, general assistance, and for food stamps and medicare. The Department also provides assistance to those who need more information about available public and private resources which can help with social or health related problems. In addition, counseling services are also provided to veterans and the unemployed.

County Library Services

Public libraries are generally regarded as a valuable community resource. Three libraries provided through the County's library system are located in the Planning Area. The system is composed of branch libraries which are large in size and station libraries which service rural areas and are usually smaller. Station libraries may be located in rural areas or small cities and may not be open everyday. The Planning Area has a branch library in Seaside which serves a population of about 34,000, and maintains over 40,000 volumes. There are two station libraries located in the Planning Area, one in Marina and one in the Carmel Valley Village. The station library in Marina serves about 20,500 people and maintains over 9,000 volumes while the one in Carmel Valley serves about 10,000 and maintains 15,000 volumes.

County Government Facilities and Services

As mentioned previously, the County operates a Courthouse Annex at 1200 Aguajito Road in Monterey. The Courthouse Annex provides a location within the Planning Area where residents may make use of County services without traveling to Salinas. Other than those mentioned previously, services are available from the following County departments: Agricultural Commission, Assessor, Building Inspection, Communications, County Clerk, District Attorney, Probation, and Public Defender courthrooms for both the Municipal and Superior Courts are located at the Courthouse Annex. The Annex also contains the offices of County Supervisors from Districts 4 and 5. Although the Assessor maintains an office at the Courthouse Annex, this office is not open to the public.

Park and Recreation Facilities

As shown in Table 4 the Planning Area has nearly 15,000 acres of existing publicly owned and operated parkland. The Planning Area also contains a large portion of the County's private recreation facilities as well. These primarily take the form of private golf courses and tennis facilities.

Historic Sites

Figure 4 shows the location and Table 5 provides a listing of existing structures in the Planning Area which have survived from either the Spanish Colonial, Mexican, American settlement, or early 20th century periods of local history. Only those structures in the unincorporated portions of the Planning Area are shown. Of these, the Berwick farm and orchard, Tor House and the Olvida Penas home are listed on the National Register of Historic Places. Figure 4 and Table 5 also identify eleven historic sites, including the sites of six historic adobes which are no longer in existence. Of special interest are the four bridges shown on Figure 4 and listed at the bottom of Table 5. These were ingeniously designed by Chester Dudley to be constructed of war surplus landing craft components, and have attracted the attention of engineers nationwide during four decades of service.

Domestic Water Services

Most water users within the Planning Area obtain water from private wells or wells owned and operated by water service providers. Most water provided in the Planning Area is derived from the Carmel Valley Basin/Carmel Valley Aquifer, although other water is supplied from the Salinas Valley Basin/Salinas Valley Aquifer and the Canyon del Rey Basin/Seaside Aquifer.

By far the largest supplier of water from the Carmel Valley Basin/Carmel Valley Aquifer is the California-American Water Co. (Cal-Am) which serves most of the valley and the Monterey Peninsula from reservoirs and numerous wells throughout the valley. Current withdrawal from the reservoirs and aquifer is estimated at 15,000 to 16,000 acre feet per year.4/

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4/ Sedway/Cooke, Carmel Valley Master Plan Environmental Impact Report, 1982.

In order to provide additional supplies, major capital improvements will be required. Two basic alternatives are available. The first and most feasible is withdrawal of more water from the aquifer through additional large wells. This is a short-term solution since water quality, sustainable yield, environmental impacts ranging from effects on riparian vegetation to adverse drawdown on nearby wells, and other factors appear to limit further annual pumping to only about 4,000 acre feet. Cal-Am has, in fact, drilled four new wells in the lower portion of the Carmel Valley to tap this additional supply. Once these wells are at full production, safe yield of the Carmel Valley aquifer will have been reached.

Safe yield is defined as the amount of pumping draft that can be recharged by average long-term conditions of precipitation and runoff. The Public Utilities Commission (Case #9530) has determined that the safe yield of the Carmel Valley aquifer is approximately 11,000 acre feet per year.

A long-term solution to limited supplies is to increase the current reservoir capacity within the Carmel Valley Basin. This alternative has been explored many times by various agencies resulting in several proposals ranging from only modest increases in storage capacity to projects incorporating enormously increased storage, substantial flows for enhanced fisheries, all-year flow of the lower river, increased recreation opportunities, and significant flood control capacity. The major stumbling block to all such long-term solutions is the enormous cost and financing problems of even the most minor improvements. Over the life of the Plan, these limitations to development of additional surface and groundwater supplies will be a major factor in determining the amount and location of growth within that portion of the Planning Area which receives water from the Carmel Valley Basin and Aquifer.

The City of Marina is served by the Marina County Water District, a water supply and sewage disposal agency formed long before incorporation as a city to serve the needs of the growing urban area. According to the District, it utilizes about 1,700 acre feet of water per year. This is supplied from one producing well and one standby well approximately 600 feet in depth which tap the Salinas Valley Basin/Salinas Valley Aquifer in the Marina area.

Although the District is able to meet current demand, a new well is being planned to accommodate future needs. As the City expands north into the Armstrong Ranch additional wells could be developed in this area. The only apparent limiting factor to the District's ability to serve current and future needs is the danger of increasing sea water intrusion. Such problems have been experienced, but newer and deeper wells may be able to provide a short term solution until an alternative source of water is determined. The Marina County Water District is currently supporting the Arroyo Seco Dam proposal from which they hope to obtain water supplies to accommodate their long term needs.

Although the developed area of Fort Ord is within the incorporated limits of the cities of Seaside and Marina, it has developed its own water supply system. The system includes wells near Seaside and Marina to serve both the domestic and facility needs. East Garrison is served by wells on the Salinas Valley floor just off Reservation Road.

TABLE 4

Public Recreation Areas in The Greater Monterey Peninsula Planning Area

FEDERAL	***ACREAGE***
Los Padres National Forest	8,320
STATE	
Asilomar State Beach	104
Carmel River State Beach	105
Marina State Beach	127
Monterey State Beach	14
Point Lobos State Reserve	1,325
COUNTY	
Carmel Del Mesa	15
Laguna Seca Recreation Area	553
Jacks Peak Regional Park	525
SPECIAL DISTRICTS	
Monterey Peninsula Regional Parks District	
Garland Ranch Regional Park	3,169
Del Rey Park	17
Laguna Grande Park	36
INCORPORATED CITIES	
Carmel	62
Del Rey Oaks	34
Marina	6
Monterey	176
Pacific Grove	179
Seaside	26
TOTAL	**14,793**

Source: Monterey County Planning Department, 1980.

TABLE 5
TABLE (ARCHAEOLOGICAL/HISTORICAL SITES IN
THE GREATER MONTEREY PENINSULA PLANNING AREA)

Use of the Canyon del Rey Basin/Seaside Aquifer water supply is limited to a few individual wells in Canyon del Rey; several large wells supplying Laguna Seca Park and the adjacent Laguna Seca Ranch including the portion which has been subdivided; several large wells in the Seaside area serving Cal-Am, the City of Seaside, and a portion of Fort Ord; and the Carmel Valley Mutual Water Company which serves the Hidden Hills area. Thorup estimated that the Canyon del Rey area has an annual recharge of 3,528 acre feet and an annual pumpage of 791 acre feet leaving a surplus of 2,737 acre feet which would be available for future development.

In response to the severe drought condition experienced in the mid-1970s, the residents of the Monterey Peninsula voted in June 1978 to create the Monterey Peninsula Water Management District. The District is mandated to coordinate the collection, conservation, storage, reclamation, treatment, disposal and distribution of water and sewage on the Peninsula.

The District has adopted an annual allotment of water for each jurisdiction within its boundaries, including the unincorporated area. The District allotted Monterey County 6,501 acre feet of water per year for use in the unincorporated portion of the Cal-Am service area. As of January 1, 1982, 5,272.17 acre feet is currently being used annually, leaving 1,228.83 acre feet for future development. Because there is not enough water to serve all potential development, the Board of Supervisors adopted a priority distribution for water allocation within the Cal-Am service area. A copy of the adopted distribution priority is available for review at the County Planning Department office.

The Board of Supervisors and the Monterey County Flood Control and Water Conservation District is pursuing development of a dam and reservoir on the Arroyo Seco River for the purposes of flood control, water supply, hydroelectric power generation and recreation. The major purpose of the dam and reservoir is to provide additional quantities of good quality water to serve areas in the lower Salinas Valley and along the coast.

Development of the Arroyo Seco dam and reservoir is significant because the project includes a proposal to convey water to the Greater Monterey Peninsula through a pipeline. Delivery of additional water to the Peninsula would help to relieve, at least in part, the water supply and water quality problems which exist or which are forecast for the Peninsula. It is estimated that between 10,500 acre feet and 21,500 acre feet of water per year could be conveyed to the Planning Area from the Arroyo Seco project. This water would be supplied to Marina, Fort Ord, and the Cal-Am service area.

Wastewater Treatment

The Monterey Regional County Sanitation District has purchased and operates all sewage treatment plants in the Planning Area except for the plants owned and operated by the Marina County Water District, the Carmel Sanitary District and the Carmel Valley County Sanitation District. The Regional District Board determines who receives sewer connections to the plants which are under their jurisdiction.

The major existing sewage treatment plant in the Planning Area is the Monterey plant. This plant currently treats 4.5 million gallons per day and has a reserve capacity of 1.5 million gallons per day.

The reserve capacity will be used by member agencies in the Regional District on a first come, first served basis.

The Planning Area may have some additional capacity from a regional sewage plant to be constructed near Marina. The regional plant is being considered for Federal funding within the next two to three years. The plant, if funded, will have a dry weather flow capacity of 20.9 million gallons per day. This capacity will be used by pumping effluent from existing plants into the regional plant for treatment. Such action would place the regional plant at 75% capacity upon opening. The plant thus has a primary function of improving water quality in Monterey Bay and is not expected to stimulate or accommodate a substantial amount of additional growth. If the plant is not funded (at a cost of about $50 million) then it is possible that the Monterey treatment plant may be expanded to accommodate some future growth on the Peninsula.

Sewage treatment for portions of Carmel Valley is provided by the Carmel Sanitary District which operates a secondary level sewage treatment plant and which is not part of the regional system discussed above. The District currently treats most of the liquid wastes generated in the valley from the homes located west of Roach Canyon and Rancho San Carlos Road.

The treatment plant, located beside the Carmel River west of Highway 1, has a capacity of 2.4 million gallons per day. The plant is currently up to 92% of capacity and discharges about 2.2 million gallons per day of treated wastewater into Carmel Bay.

Continued effluent discharges at this level could, in the long run, reduce water quality in Carmel Bay. In fact, in 1975 the State Water Resources Control Board passed a resolution which designated Carmel Bay as an Area of Special Biological Significance. This action was directed at addressing the potential of pollution in Carmel Bay from sewage discharges and from non-point sources within the watershed. The Carmel Sanitary District is required to reduce wastewater discharges into the Bay by 1989 through a program of wastewater reclamation. It is anticipated that about 62% of the current discharge volume will be disposed by reclamation.

The Carmel Sanitary District wastewater reclamation project was designed at a cost of $1.7 million and is awaiting a federal grant of $13.9 million so that the project may be constructed. The reclamation project involves selling tertiary treated effluent to Pebble Beach Corporation for the purpose of golf course irrigation within Del Monte Forest from May to October. During the remainder of the year, the Sanitary District is allowed to discharge treated effluent into Carmel Bay because the winter flow of the Carmel River creates enough turbulence to dilute the effluent to a point at which potential pollution of the Bay is not a problem. Although water conservation is not the purpose of the project, a side benefit will be that during the May through October period, the potable water previously used to irrigate golf courses will be available for other uses.

Solid Waste Disposal

Solid wastes in the Planning Area are collected and disposed of at the Marina solid waste disposal site. The site, which is operated by the Monterey Peninsula Garbage and Refuse Disposal District, is located on 580 acres and accepts about 600 tons of solid wastes per day (six days per week).

The District includes Carmel, Del Monte Forest, Del Rey Oaks, Monterey, Marina, Pacific Grove, Sand City, Seaside, Big Sur, Carmel Highlands, Carmel Valley, Toro Park, Moss Landing and Castroville. Portions of Oak Hills and Prunedale are not within the District, but are within the service area. In servicing the above areas, the disposal site will have a life of about 90 more years.

There are two solid waste transfer sites in the Planning Area, one in the Carmel Valley Village and one in Sand City. Solid waste is collected at these sites and then transported to the Marina disposal site.

Fort Ord operates two solid waste disposal facilities located on the military base. The sites are sanitary landfills located on a combined total of 34 acres, accept a total of 49 tons of waste per day, and have a combined life of only two years. Currently, Fort Ord is studying the feasibility of a new landfill on the installation. Alternative disposal sites off the installation are also being investigated.

Gas and Electrical

The Planning Area is provided with electrical power and natural gas by the Pacific Gas and Electrical Company (PG & E).

Television, Radio and Telephone

Residents of the Planning Area can receive the transmitted signals of three television stations each affiliated with one of the major national networks. In addition, Monterey Peninsula TV Cable and Monterey Remote TV serve the Peninsula with cable television service. Most of the County's 17 local radio stations are received on the Peninsula with varied reception in Carmel Valley and the southerly portions of the Planning Area. Telephone services are provided throughout the Planning Area by Pacific Telephone.

HOUSING

As illustrated in Table 6, the 1980 U.S. Census figures show that the unincorporated portion of the Planning Area contains 9,361 households with a total household population of 22,037 people. The average household size is 2.35 persons per household. The combination of an increase in the number of households and a decrease in household size will likely mean a need for smaller individual housing units in the Planning Area.

Between 1970 and 1980 the Planning Area's housing stock increased 26.5% while the County's housing stock increased by 36.6%. About 49% of the County's housing is located here with 38.4% in the incorporated cities and 10.6 in the unincorporated area. Census figures show that the largest portion of homes in the unincorporated portion of the Planning Area were single family homes, making

up about 88% of the housing stock. The next largest portion, 8% were 2 to 4 unit complexes, followed by 2.8% for 5 to 9 unit complexes, and 1.2% for mobile homes.

The Planning Area as a whole has an even split of owner-renter proportions. Most of the rental unit availability, however, comes from the incorporated cities where 57% of the housing stock is rentals. The unincorporated area's housing stock is favored toward owner occupied units with 77% of stock in that category while only 23% is in rentals.

The most recent available income data for the unincorporated portion of the Planning Area is provided by the 1980 Census. Median income for the unincorporated portion of the Planning Area, $27,045, is 53% higher than the County median income of $17,661. The 1980 U.S. Census figures show that homes in the unincorporated portion of the Planning Area were valued at a median of $186,500--quite high when compared to the County median home value for that year of $86,500. The incorporated cities in the Planning Area have a median home value of about $115,700.

A "balanced" housing market has an effective vacancy rate of three to five percent in for sale units and five to seven percent in rental units with an overall effective vacancy standard of about five percent. The effective vacancy rate for the Planning Area shows that housing availability in this area has reached critical lows. The Planning Area has an effective vacancy rate of 1.1% in for sale units and 2.1% in rental units with an overall effective vacancy rate of 3.2%. The high cost of housing in the Planning Area is largely due to the lack of available housing for a growing number of households.

The low percentage of homes which lack plumbing in the Planning Area seems to indicate that the overall physical quality of the housing is good. Overall home quality is reinforced by the higher than average home values and rent prices.

TABLE 6
SELECTED HOUSING INFORMATION

CHAPTER V: THE PLAN

THE PLAN

This plan focuses on the balancing of present character and future needs, conservation of resources and opportunities for development, and the sentiments of the local community. The foundation of the plan is the body of goals, objectives and policies of the Monterey County General Plan. All of those goals, objectives and policies shall apply to the Greater Monterey Peninsula and shall be supplemented by the policies in this plan. The Greater Monterey Peninsula land use plan, however, shall supercede the countywide land use plan for this area. The goals, objectives, policies and land use plan which comprise the Greater Monterey Peninsula Area Plan do not supercede the Carmel Valley Master Plan or the LCPs except in those cases in which the area plan addresses subject matter not addressed by the Carmel Valley Master Plan or the LCPs.

The Greater Monterey Peninsula Area Plan, including the land use plan, has been adopted as an amendment to the Monterey County General Plan and is consistent with the intent and overall direction of the countywide plan.

Major assumptions of the Greater Monterey Peninsula Area Plan include the following:

1. Scenic qualities and open space within the Greater Monterey Peninsula area valued resource, worthy of protection.

2. Specific areas may be found unsuitable for the type or density of development proposed by the Greater Monterey Peninsula land use map as more detailed information is generated through individual project environmental impact reports, soil studies, geological reports and water studies.

3. The regional sewage treatment system will be completed but will not offer major increases in sewage treatment capacity unless treatment plant capacity is expanded.

4. There will be some increase in water supply and distribu tion for the Planning Area.

5. The cities of Carmel, Monterey and Marina will expand their jurisdictional boundaries.

6. The Hatton Canyon alignment of Highway 1 will be constructed.

7. There will be no major reduction in Fort Ord operations.

8. Federal, state and county standards for public health, safety and welfare will not be significantly changed, and will be judiciously administered and enforced.

9. There will be no major changes in environmental regulations.

10. There will be no major increases in funds available to local government.

11. County, state and federal budget limitations will continue to significantly constrain construction of major capital improvements.

ISSUES

NATURAL RESOURCES

Open Space Conservation

1. One of the Planning Area's premier assets is its vast land area devoted to open space land uses. How can this open space be used to conserve the Planning Area's natural resources and enhance its scenic qualities?

2. What measures can be taken to protect visually sensitive and highly sensitive areas?

Geology, Minerals and Soils

1. How can better soil management of agricultural lands be encouraged or required where soil erosion is a problem? What recommendations should be made to limit soil erosion associated with other types of land use activity?

Water Resources

1. Several means are available to increase the effective supply of water in deficient areas, including importing water from outside the Planning Area, building new canals or pipelines to redistribute water, enlarging existing reservoirs or creating new ones, tapping new aquifers, and water reclamation and conservation.

Vegetation and Wildlife Habitats

1. What recommendations can be made to ensure the preservation of natural vegetation, particularly the coastal strand, wetland, riparian, maritime chaparral and redwood commu nities?

2. Recognizing its critical influence on fish and wildlife in the Planning Area, what recommendations can be made to prevent the degradation or elimination of habitat?

3. Coastal and interior wetlands provide important habitat for many wildlife species and contribute substantially to scenic resources within the Planning Area. What recommendations can be made to ensure the preservation of habitat and scenic values of wetlands such as the Carmel River lagoon, El Estero Lake, Laguna Grande, the Del Rey Oaks "Frog Pond", wetlands along Highway 68 in the Laguna Seca area, the Marina dune area wetlands and the estuary/ lower reaches of the Salinas River?

Ocean Resources

1. One of the greatest potentials for damage to the Planning Area's marine environment is from oil spills, whether from offshore drilling, shipping, or underwater pipelines.

Environmentally Sensitive Areas

1. While there are several programs which identify natural areas, as well as rare and endangered plants and animals, few of these environmentally sensitive areas and species have actually achieved protective status in the Planning Area.

Archaeological Resources

1. Many archaeological resources have been destroyed or altered through development. This destruction is partially a result of the limited land area surveyed by archaeologists in the Planning Area.

Energy Resources

1. One of the greatest potentials for reducing energy costs is through energy conservation. As prices for gas and electricity continue to increase the development of renew able energy resources such as solar, biomass, wind, and hydropower becomes more feasible.

ENVIRONMENTAL CONSTRAINTS

1. Much of the Planning Area is subject to the effects of seismic and geologic forces. What precautions should the County institute to ensure human safety and limit damage to structures?

2. Additional technical information is necessary to adequately locate and evaluate faults, slope stability, liquefaction, and tsunami hazards.

Flood, Fire, Miscellaneous Hazards and Emergency Preparedness

1. The Planning Area has a broad range of fire hazards; land use regulations can reduce the hazard from fire.

2. Existing and proposed development does not always include adequate access, water supply, fire-retardant materials, and fuel management for efficient for protection.

3. A comprehensive fuel management program is needed to reduce fire hazards.

4. Hazardous materials are used, stored, and transported in portions of the Planning Area creating exposure risk. What action should the County take to ensure the public's safety?

5. Is Monterey County prepared to respond to natural disasters and other emergencies in a coordinated, timely fashion? If not, what can be done to improve emergency preparedness within the Planning Area?

6. To what extent should the area plan address emergency access?

Air and Water Quality

1. The Monterey Bay Unified Air Pollution Control District has identified the transport of air pollutants into the Monte rey Bay area from the San Francisco Bay area as a contributor to local air quality degradation. What recommendations can be made to alleviate this problem?

2. In some portions of the Planning Area, inadequate information on groundwater systems hinders the County's efforts to analyze the groundwater quality impacts of proposed development. Without additional information on groundwater systems in such areas, groundwater degradation could result.

3. Overdrafting of groundwater reserves leading to saltwater intrusion is a problem in portions of the Planning Area.

Noise Hazards

1. Development near the Planning Area's airports could pose grave noise concerns.

AREA DEVELOPMENT

Land Use

1. Should the Plan include adequate areas for expansion of the Peninsula cities?

2. How can the County balance the need for growth and development in the Planning Area with maintenance of a rural atmosphere?

3. Should residential development be concentrated wherever possible to use land more efficiently and to allow for more effective provision of public services?

4. Should Laguna Seca Ranch, portions of Carmel Valley, or any other areas be designated as areas of development concen tration?

5. As the Planning Area develops, there will be a need for more recreational areas, a coordinated trails system, more open space, and more public facilities. In what manner and in what locations should opportunities for public use of land be increased?

6. What types of land uses are most compatible with areas of high natural resource value?

7. What land use designations can be used to protect sensitive and highly sensitive resources?

Current Holding Capacity

1. Unlike commercial and industrial development, residential development potential is spread throughout the Planning Area. Should development potential be reduced in areas where development is not desirable or feasible?

2. Should more or less commercial development be allowed in the unincorporated area?

3. Should more or less industrial development be allowed in the unincorporated area?

Transportation

1. The trend of increasing traffic loads to, from, and within major urban centers has resulted in congestion on many of the area's major roads and highways. How can increases in traffic be best accommodated on roads serving growth areas?

2. State and local funding of major road and highway improve ment projects may not be forthcoming. How will budget constraints affect implementation of the County's Transportation Plan?

3. What can the County do within its own resources to alleviate transportation system deficiencies?

4. The Planning Area contains several state highways and county roads which are shown as proposed scenic routes on the countywide General Plan. To what extent should steps be taken to officially designate these scenic routes?

5. To what extent should mass transit systems be promoted in the Planning Area?

6. Land use compatibility related to noise and safety has become a critical issue at Monterey Peninsula Airport due to increasing pressure for development.

7. Should the County and the Peninsula cities actively pursue reinstatement of Monterey-San Francisco passenger rail service?

8. The establishment of bicycling as a vehicular transporta tion alternative in the Planning Area has been hindered by the lack of adequate bicycle facilities such as bikeways and sheltered parking. Where are these facilities most needed and how can they be funded?

9. Should people be given the opportunity to walk by encouraging the location of commercial and employment facilities, schools and public facilities, schools and public facilities within neighborhoods?

Public Services and Facilities

1. Countywide there are about 290,000 acres in federal, state, county, municipal and special district park lands--about one acre of parkland for every county resident. By contrast, the Planning Area as a whole has about 15,000 acres in various types of publicly owned park lands--about one tenth of an acre of park land for every Planning Area resident. What emphasis should be given in the Planning Area to (1) park land acquisition programs and (2) the development of recreation facilities within parks now existing or subsequently acquired?

2. The unincorporated portion of the Planning Area contains about 40 historic sites which have been identified to date. Most of the identified sites are historically significant to the County, but not prominent enough to be protected by national and state historical registers. Should the County preserve these sites and, if so, how?

3. The Planning Area has 24 water service providers and numerous private wells which draw from several common water tables. Are the Monterey Peninsula Water Management District and the Monterey County Health Department adequately equipped to promote areawide coordination among those who draw from various common water tables in the Planning Area?

Housing

1. What should be the County's role in the development of affordable rental housing?

*SUPPLEMENTAL POLICIES**

NATURAL RESOURCES

Open Space Conservation

1.1.3 (GMP) The County shall take comprehensive measures to ensure protection of sensitive and highly sensi tive scenic areas as shown on the Greater Monterey Peninsula Visual Sensitivity Map. Implementing policies are located in the transportation section of this plan.

Geology, Minerals and Soils

3.1.1.1 (GMP) Erosion control procedures shall be established and enforced for all private and public land clearing projects.

3.2.4.1 (GMP) Except in areas designated as medium or high density residential or in areas designated as commercial or industrial where residential use may be allowed, the following formula shall be used in the calculation of maximum possible resi dential density for individual parcels based upon slope:

a) Those portions of parcels with cross-slope of between zero and 19.9 percent shall be assigned 1 building site per each 1 acre.

b) Those portions of parcels with a cross-slope of between 20 and 29.9 percent shall be assigned 1 building site per each 2 acres.

c) Those portions of parcels with a cross-slope of 30 percent or greater shall be assigned zero building sites.

d) The density for a particular parcel shall be computed by determining the cross-slope of the various portions of the parcel applying the assigned densities listed above accord ing to the percent of cross-slope and by adding the densities derived from this process. The maximum density derived by the procedure shall be used as one of the factors in final determination of the actual density that shall be allowed on a parcel.

Where an entire parcel would not be developable because of plan policies, an extremely low density of development should be allowed.

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* These policies are supplemental to the goals, objectives and policies of the countywide General Plan; the reader is reminded to use both documents (General Plan and Greater Monterey Peninsula Area Plan) when reviewing planning matters in the Greater Monterey Peninsula Area.

Water Resources

5.1.3 (GMP) Monterey County will encourage development projects to be served by water from public utilities or mutual water companies. If this is not possible, the County shall consider the cumulative effects of the development's water use on wildlife, fish and plant communities and the supply available to existing users.

Vegetation and Wildlife Habitats

7.1.3 (GMP) In recognition of its status as a threatened resource, its function as riparian habitat and its important role in watershed protection, redwood forest habitat should be retained as open space through conservation easements or, where necessary, fee acquisition.

7.1.4 (GMP) Redwood forest and chaparral habitat on land exceeding 30 percent slope should remain undisturbed due to potential erosion impacts and loss of visual amenities.

7.1.5 (GMP) In recognition of their function as important habitat for many wildlife species and their substantial contribution to scenic resources within the Planning Area, coastal and interior wetlands should be retained as open space through conservation easements or, where necessary, fee acquisition.

7.1.6 (GMP) A setback of 100 feet from all wetlands shown on Figure 3 (Environmentally Sensitive Areas Map) shall be provided and maintained in open space use. No new development shall be allowed in this setback area. No landscape alterations will be allowed in this setback area unless accomplished in conjunction with a restoration and enhancement plan approved by the California Department of Fish and Game.

7.1.7 (GMP) The County shall encourage other local agencies to take appropriate measures for the protection of wetlands under their jurisdiction.

7.2.3 (GMP) Plant materials shall be used to integrate the manmade and natural environments, to screen or soften the visual impact of new development, and to provide diversity in developed areas.

9.1.1.1 (GMP) Open space areas should include a diversity of habitats with special protection given to ecologically important zones such as areas where one habitat grades into another and areas used by wildlife for access routes to water or feeding grounds.

Ocean Resources

10.2.4 (GMP) The County shall work with appropriate state and federal agencies to ensure that oil transport activities near the Monterey County coast include adequate procedures to protect marine bird and mammal (particularly sea otter) populations and to clean up oil spills.

10.2.5 (GMP) The County shall work with the United State Coast Guard to assure that sea lanes for tanker traffic off the Monterey County coast are well outside the three-mile limit in order to protect the entire shoreline from possible spills or coincidental pumping of bilges.

Environmentally Sensitive Areas

11.1.6 (GMP) Environmentally sensitive areas as shown on the Greater Monterey Peninsula Environmentally Sensitive Areas Map should be preserved as open space. When an entire parcel cannot be developed because of this policy a low intensity, clustered development may be approved. However, the devel opment should be located on those portions of the land least biologically significant.

Archaeological Resources

12.1.4.1 (GMP) The Greater Monterey Peninsula Archaeological/ Historical Sites Map shall be used in interpret ing General Plan policies which address the requirement for field inspections in moderate and high archaeological sensitivity zones.

Energy Resources

14.2.2 (GMP) The County shall work cooperatively with the Monterey Peninsula Garbage and Refuse Disposal District to facilitate development of a methane gas conversion project at the District landfill.

ENVIRONMENTAL CONSTRAINTS

Seismic and Other Geologic Hazards

15.1.1.1 (GMP) The Greater Monterey Peninsula Seismic Hazards Map and Landslide and Erosion Susceptibility Map shall be used to delineate high hazard areas addressed by the countywide General Plan and this area plan. Hazard categories IV, V, and VI from these maps shall be considered to be "high hazard" areas for the purpose of applying General Plan and/or area plan policies in the Greater Monterey Peninsula Planning Area. These maps may be revised as new, accepted investigations dictate.

15.1.11.1(GMP) For high hazard areas, the County shall require, as a condition of development approval, a detailed geological investigation and soils report and shall further require, as a condition of approval, that the recommendations of that report be followed.

Fire Hazards

17.2.1.1 (GMP) Areas of high and extreme fire hazard as addressed by policies in the countywide General Plan and this area plan shall be defined and interpreted by the California Department of Forestry.

17.3.1.1 (GMP) All new development shall be required to provide an adequate road for fire protection which meets or exceeds the following standards:

a) For all roads and driveways serving more than two habitable structures, the road width shall be a minimum of 20 feet. Where it is environmentally infeasible to meet this requirement (due to excessive grading or tree removal), a 12-foot wide road with a 12-foot wide by 30-foot long turnout located approximately every 500 feet may be provided with the approval of the local fire protection agency.

b) For all roads and driveways serving two or less habitable structures, the road width shall be a minimum of 12 feet.

c) The road shall be all weather and shall be surfaced with a granular material having a weight bearing capability to support the loads of fire-fighting equipment used by the local fire protection agency.

d) In the case of new single family dwellings on existing lots of record, the provisions of subsections (a) and (b) above may be waived or modified by the Director of Plan ning after consultation with the local fire protection agency.

17.3.1.2 (GMP) Alternate routes of escape that will safely handle evacuations and emergency equipment should be established. In areas of high and extreme wildland fire hazard as designated by the California Department of Forestry, no dead-end road or cul-de-sac should be over 1,000 feet in length. In cases where development is to be served by a dead-end road over 1,000 feet in length, the County Planning Department staff shall meet with a representative of the local fire protection agency and the developer to formulate a plan for provision of secondary access. Such a plan for secondary access shall be implemented by the developer during pending and/or subsequent phases of development. If secondary access cannot be developed or if, in the case of individual lots of record the requirement for secondary access would place an unfair economic

burden on the property owner, other alternatives to mitigate safety concerns should be considered. For the purpose of this policy only, development shall be defined as the subdivision of land and/or the construction of one or more structures intended for human occupancy.

17.3.1.3 (GMP) In high and extreme wildland fire hazard areas, roof construction of fire retardant materials shall be required as per Section 3203 (e) (excluding 11) of the Uniform Building Code, or as approved by the fire protection agency. For existing wood roof replacement and new exterior wall construction, use of fire resistant materials is recommended but not required.

17.4.1.1 (GMP) In high and extreme fire hazard areas, where practical, development should be clustered and should be separated from the wildland by fuel modification zones in order to facilitate fire protection and prevention.

17.4.13 (GMP) If a fuel modification zone is to be established, provision must be made for its permanent maintenance.

Miscellaneous Hazards and Emergency Preparedness

18.1.2 (GMP) The County shall establish land use controls and other regulations to reduce undesirable effects of hazardous materials.

18.1.3 (GMP) The Board of Supervisors shall direct the County Health Department to inventory all abandoned dump and landfill sites in the Planning Area. The Health Department shall report the results of its inventory to the Board of Supervisors and shall recommend criteria for determining the magnitude of possible health hazard present at each site, a procedure for determining which abandoned sites should be tested, and criteria which must be met as a condition of development approval on or adjacent to abandoned sites. The Health Depart ment report shall also contain recommendations regarding payment for required testing.

19.1.5 (GMP) The County, in conjunction with health care providers and local fire protection agencies, shall develop an emergency medical services plan which shall be reviewed on a yearly basis.

Air and Water Quality

20.2.3.1 (GMP) The County shall request that the Monterey Bay Unified Air Pollution Control District take actions necessary to reduce the transport of air pollutants into the Monterey Bay area from other air basins.

21.1.6.1 (GMP) The County shall require water quality analysis for all new domestic wells.

Noise Hazards

22.2.1.1 (GMP) Development in the vicinity of the Monterey Peninsula Airport, Fritzsche Army Airfield and areas adjacent to the Fort Ord boundary should be sited, designed and/or constructed to minimize noise hazards from aircraft and other sources. The County should consider adopting the Airport Noise Control and Land Use Compatibility (ANCLUC) standards for the areas in the vicinity of the Monterey Peninsula Airport.

AREA DEVELOPMENT

Land Use

26.1.4.3 (GMP) A standard tentative subdivision map and/or vesting tentative and/or Preliminary Project Review Subdivision map application for either a standard or minor subdivision shall not be approved until:

1) an applicant provides evidence of an assured longterm water supply in terms of yield and quality for all lots which are to be created through subdivision. A recommendation on the water supply shall be made to the decision making body by the County's Health Officer and the General Manager of the Water Resources Agency, or their respective designees.

2) The applicant provides proof that the water supply to serv the lots meets both the water quality and quantity standards as set forth in Title 22 of the California Code of Regulations, and Chapters 15.04 and 15.08 of the Monterey County Code subject to the review and recommendation by the County's Health Officer to the decision making body.

26.1.6.1 (GMP) Development proposals should include compatible open space uses located between other developed areas in order to maintain a rural atmosphere and to protect scenic resources.

26.1.6.2 (GMP) Open space, low intensity educational and recrea tional uses should be considered to be appropriate and compatible land uses in environ mentally sensitive areas and areas of high visual sensitivity.

26.1.9.1 (GMP) Development on canyon edges and hilltops shall be designed to minimize the visual impact of the development.

27.1.5 (GMP) The undeveloped portion of High Meadow I shall receive density credit for the open space originally dedicated as part of the entire High Meadow I development approval not to exceed a total of 18 units.

28.1.6 (GMP) Bed and breakfast uses may be considered in any land use category provided that such use is compatible with existing land uses in the area.

Current Holding Capacity

36.0.4.1 (GMP) Except in areas designated as medium or high density residential or in areas designated as commercial or industrial where residential use may be allowed, an applicant wishing to apply for a subdivision under the countywide General Plan and the Greater Monterey Peninsula Area Plan must use the following procedures to calculate the maximum density that can be considered in order to prepare an application consistent with, or less than, the maximum allowable density:

a) One factor in density determination shall be the land use designation. The maximum density allowable under the Area Plan for a parcel shall be divided into the total number of acres found within the parcel. For example, a 100-acre parcel with a maximum density of 1 unit per 2.5 acres would have a potential of 40 building sites.

b) The slope of the property shall be deter mined and the slope-density formula defined in this Area Plan applied. For example, a 100-acre parcel might consist of 50 percent of the land having a slope of over 30 percent and the other 50 percent below 19 percent. The maximum density allowable on that parcel as calculated according to slope would be 50 sites.

c) All of the policies of the Area Plan and countywide General Plan must be applied to the parcel. Any policies resulting in a decrease in density must be tabulated. This decrease in density would then be subtracted from the maximum density allowable under the slope formula.

d) The maximum density allowable according to the Area Plan land use designation (Step A above) and the maximum density allowable according to the Plan policies (Steps B and C above) shall then be compared. Whichever of the two densities is the lesser shall be established as the maximum density allowable under this Area Plan.

e) The calculations of maximum density made by an applicant will be reviewed during public hearings prior to the approval of any permits or quota allocation pursuant to this Area Plan.

Transportation

39.1.1.1 (GMP) The County shall prepare an overall financial plan in order to expedite funding and construc tion of road and highway improvements in the Planning Area.

39.1.1.2 (GMP) The County shall be encouraged to work with the state, local agencies and citizens groups to alleviate traffic congestion and promote traffic safety on Highway 68 while maintaining its scenic beauty.

39.1.1.3 (GMP) Improvement of Highway 68 intersections, construction of alternate passing lanes, public transit roadway improvements, and improved bicycle safety measures should be undertaken at the earliest time that funding becomes available.

39.1.1.4 (GMP) The County shall promote the use of Blanco and Reservation Roads as alternate routes between the Monterey Peninsula and Salinas to alleviate traffic on Highway 68.

39.1.1.5 (GMP) Employers in surrounding areas should be encouraged to stagger employees' work hours in order to ease peak hour traffic congestion on Highway 68 and in other areas.

39.1.1.6 (GMP) As an interim measure before completion of the Hatton Canyon route for Highway 1, a climbing lane for the existing Highway 1 from Carmel Valley Road to Morse Drive should be built or a merge lane 800' to 1,000' in length if a climbing lane is not possible.

39.1.1.7 (GMP) Laureles Grade should be improved through better management of shoulders and better maintenance.

39.1.1.8 (GMP) The County shall adopt official plan lines for a Canada de la Segunda Road.

39.2.5.1 (GMP) To minimize traffic safety hazards, creation of new direct access points should be prohibited, where feasible, from single-family residences onto Highway 68 and Laureles Grade.

40.1.2 (GMP) The County shall take all measures necessary to obtain official state scenic highway designation for Highway 1 north of the Highway 68 junction and to obtain official county scenic route desig nation for Carmel Valley Road, Robinson Canyon Road and Reservation Road.

40.2.3 (GMP) The County shall encourage creative public and private efforts to restore the scenic beauty of visually impacted areas.

40.2.4 (GMP) The Greater Monterey Peninsula Visual Sensitivity Map shall be used to designate visually "sensi tive" and "highly sensitive" areas generally visible from scenic routes. However, due to map scale, coding an area as visually "sensitive" or "highly sensitive" does not necessarily mean all of that area is visible from the scenic route. However, due to map scale coding an area as visually "sensitive" or "highly sensitive" does not necessarily mean all of that area is visible from the scenic route. All subsequent uses of the terms "sensitive" or "highly sensitive" shall be interpreted within the meaning of this policy.

40.2.5 (GMP) Landowners will be encouraged to dedicate scenic easements to an appropriate agency or non-profit organization over portions of their land shown as "sensitive" or "highly sensitive" on the Greater Monterey Peninsula Visual Sensitivity Map or, where easements already exist, to continue this protection.

40.2.6 (GMP) Areas shown as "highly sensitive" on the Greater Monterey Peninsula Visual Sensitivity Map should be preserved as open space to the maximum extent possible through scenic easements or, if neces sary, fee acquisition.

40.2.7 (GMP) New development should not be sited on those portions of property which have been mapped as "highly sensitive." Where exceptions are appro priate to maximize the goals, objectives and policies of this plan, development shall be sited in a manner which minimizes visible effects of proposed structures and roads to the greatest extent possible and shall utilize landscape screening and other techniques to achieve maximum protection of the visual resource.

40.2.8 (GMP) In cases where the extent of visibility of development proposed in "highly sensitive" areas is not clear, individual on-site investigations by the Planning Department staff shall be required.

40.2.9 (GMP) New development to be located in areas mapped as "sensitive" or "highly sensitive" and which will be visible from the scenic route shall maintain the visual character of the area. In order to adequately mitigate the visual impacts of development in such areas, the following shall be required.

a) Development shall be rendered compatible with the visual character of the area using appropriate siting, design, materials and landscaping;

b) Development shall maintain no less than a 100' setback from the scenic route right-of- way;

c) The impact of any earth movement associated with the development shall be mitigated in such a manner that permanent scarring is not created;

d) Tree removal shall be minimized;

e) Landscape screening and restoration shall consist of plant and tree species consistent with surrounding native vegetation;

f) Architectural review of projects shall be required to ensure visual compatibility of the development with the surrounding area; and

g) New development in open grassland areas shown as "sensitive" or "highly sensitive" on the Visual Sensitivity Map should minimize its impact on the uninterrupted viewshed.

h) Exceptions to the above may be considered if compelling circumstances are demonstrated.

40.2.10 (GMP) The County shall place properties north and south of Highway 68 and west of Laureles Grade in an "SC" or other appropriate zoning district to regulate the location, height and design of structures.

41.1.2.1 (GMP) If new sites for office employment, services, and local conveniences are found to be appropriate, such sites should incorporate designs and be located to allow use of alternate modes of transportation such as public transit buses, bicycles and walking.

Features to encourage the use of public transit should include a road system sufficient to allow reasonable access by transit buses and should also include provision for bus pullouts, bus stops, pedestrian access, wheel chair access, transit information signs and passenger shelters.

42.1.2 (GMP) Development directly beneath runway approaches of the Monterey Peninsula Airport and Fritzsche Army Airfield shall be of low intensity, shall not generate electrical interference to radio commu nication between pilots and the air traffic control tower, shall not contain sources of glare which would blind or confuse pilots and, as a condition of development approval, shall be required to grant avigation easements to the Monterey Peninsula Airport District or other appropriate entity.

43.1.3 (GMP) The Peninsula cities and the County should actively pursue reinstatement of rail service between San Francisco and the Monterey Peninsula provided it can be scheduled at times satisfactory to Monterey Peninsula users and/or visitors.

45.1.6 (GMP) Construction and expansion of all highways and major arterials should provide for bike paths. It is desirable that bike paths be physically separate from motorized traffic.

51.1.4 (GMP) Riding and hiking trails should be acquired and developed with the intent of creating a coordi nated, areawide trails system. All motorized vehicles shall be prohibited from using these trails.

In supporting a coordinated areawide trails system, the County should give the highest priority to establishing the following trails systems:

a) establish a permanent riding and hiking trail from Roach Canyon to Jacks Peak Park;

b) establish an easterly ridgeline trail from Jacks Peak Park to Laureles Grade;

c) establish a major trail link which generally traverses in a southeasterly direction from Carmel Valley and forms a trail connection with the Los Padres National Forest trail system; and

d) establish a connection trail from the Jacks Peak Park/Laureles Grade ridgeline trail to the entrance of Laguna Seca Recreation Area to be used as a point of departure to Toro Regional Park along Highway 68.

51.1.5 (GMP) The County, through the Parks Department, shall address the following fundamental elements with regard to trail acquisition, development and use as expeditiously as possible:

a) design standards,
b) trail location,
c) construction standards,
d) liability questions,
e) patrol and enforcement,
f) trail restrictions or limitations,
g) maintenance and operation plan, and
h) burden of cost.

51.2.1.1 (GMP) The County, Monterey Peninsula Regional Parks District and the Peninsula cities should develop a joint program to increase the amount of useable park and recreation facilities within the Plan ning Area.

51.2.4.1 (GMP) Each development proposal shall be evaluated to determine the extent to which such development may help further the County's park and recreation facility goals, objectives and policies.

52.1.1.1 (GMP) The County Parks Department shall evaluate the various historic sites located in the unincorpo rated portion of the Planning Area shall determine which sites are significant and warrant protective efforts. Once these sites have been evaluated, the County shall take necessary steps to protect these historic resources.

53.1.3.1 (GMP) At the County's discretion, applicants may be required to submit a hydrologic report certifying sustained yield of the water source to serve new development outside of existing water utility service areas.

53.1.6 (GMP) The County shall, to the maximum extent possible, coordinate with the Monterey Peninsula Water Management District when reviewing development proposals for properties located outside the Water Management District boundaries but within the watershed of tributary streams and/or aquifers which recharge the Carmel Valley Aquifer.

56.2.2.1 (GMP) Placement of existing utility lines underground shall be encouraged, particularly along Carmel Valley Road, Laureles Grade and Highway 68.

Housing

62.1.13 (GMP) Where established as part of an Area of Develop ment Concentration, a Development Incentive Zone must be used exclusively for the development of affordable housing.

62.1.14 (GMP) All development proposals shall make provision for low or moderate income housing in accordance with the Inclusionary Housing Ordinance.

AREA LAND USE PLAN

The Greater Monterey Peninsula Planning Area land use plan, as represented by Figure 11, is a graphic representation of the general distribution and location, extent, and intensity of future land uses and transportation routes in the Planning Area. The land use plan, which must be used in conjunction with countywide General Plan goals, objectives, and policies and the supplemental area policies contained within this Plan, constitutes a "blueprint for the future" of the Greater Monterey Peninsula for the next 20 years.

The Greater Monterey Peninsula Area Plan is intended to provide refinement of the countywide General Plan in order to reflect local concerns which could not be addressed at the countywide level. However, changes at the area plan level must be consistent with the intent and overall direction of the countywide plan. Thus, changes at the area plan level which require changes in land use type or intensity must be

consistent with the General Plan's goals, objectives, and policies, the County's adopted Growth Management Policy and the adopted Economic Development Policy.

PREPARATION OF THE LAND USE PLAN

The land use plan was prepared after careful consideration of various factors which are critical with regard to the County's planning program. These factors include countywide General Plan policies and land uses, the Growth Management Policy, the Economic Development Policy, spheres of influence and general plans for various cities, the existing land use pattern and emergency growth centers in the Planning Area, and county and state plans for improvement and realignment of roads and highways. Finally, aspects of a land suitability study were incorporated into land use and density decisions.

Land Suitability

The first step in developing a land use plan for the Greater Monterey Peninsula Planning Area was a comprehensive study of the area's resources and environmental constraints. The best available information for the area was collected, studied, and mapped where appropriate. Some of the subjects of study were soil characteristics, geologic and seismic hazards, topography, vegetation, flood hazards, fire hazards, road capacities and access, water resources, and public services. Findings on these topics are summarized in the inventory and analysis section (Chapters 1 through 4) of this document.* Areas subject to erosion, landslide, and seismic hazards are identified in Figures 5 and 6. Flood prone areas are mapped in Figure 7. Areas of high and extreme fire hazards are identified in Figure 8.

Some of the above subjects were examined more closely to determine the relative suitability of all areas for three general land uses: development, farmland, and grazing.

Once the relative suitability of different areas for these three general land uses has been determined, policy decisions based on countywide and area policies must be made to weigh the relative values of each suitable use for different areas. By considering the suitability maps, the existing land use pattern, and the capacity of present and anticipated public services, a sound land use map may be developed.

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* The complete Greater Monterey Peninsula Area Plan Inventory and Analysis is available at the Monterey County Planning Department.

Of the three land use types considered in the land suitability analysis, inherent physical characteristics of the Planning Area show that grazing and development have the largest degree of potential. A significant amount of the Planning Area, however, has extremely low suitability for development.

There is a limited amount of excellent to good quality farmland remaining in the Planning Area. The largest amount of land suitable for farming was once located in the Carmel Valley; most of that potential farmland has long since been converted to developed uses. Based on the Important Farmlands Inventory, no large scale potential for farmland suitability currently exists in the Planning Area.

A significant amount of the Planning Area exhibits a moderate to high degree of suitability for grazing. Depending upon its location, surrounding land uses, and the property owner's level of commitment, it appears that a number of parcels in the Planning Area can be grazed as a long term, intermittent or temporary land use. Good rangeland management is the key to grazing viability on lands which have been ranked as having a moderate or high degree of grazing suitability. Also, the fact that grazing may be the most appropriate use on lands of low grazing suitability should be reiterated. Many of the low grazing suitability lands are too steep and/or remote to be acceptable for any other land use and are in many cases found to have extremely low development potential.

Analysis of the development suitability findings shows that a large part of the Planning Area falls into one of two categories: either moderate or extremely low development suitability. Due to the topography and other natural features of the Planning Area, the areas of moderate development suitability are quite scattered and are generally interspersed with areas of extremely low development suitability. Some of the largest areas that have site characteristics which render them suitable for development, such as properties northeast of the Carmel Valley Village and Rancho San Carlos south of Carmel Valley, are relatively remote. If developed to any significant degree, intensive development in such area will place strains on public facilities and services.

Even though the land suitability study may show that a given parcel has on-site characteristics which render it relatively developable, any land use plan for the Peninsula must consider how that development will function as part of the larger land use pattern of both the Planning Area and the County as a whole. Because it could not be quantified as part of the land suitability mapping process, special attention must be paid during land use plan formulation to the adequacy of public services and facilities in the Planning Area.

LAND USE DESIGNATIONS

All major land uses are indicated by one of seven basic designations: residential, commercial, industrial, agricultural, resource conservation, public/quasi-public, and transportation. These basic designations, along with an overlay designation for urban reserve, are discussed in the following paragraphs. It should be noted that all references to development densities are expressed in gross acres and all densities are maximum densities. These maximum densities will be allowed only where there is provision for an adequate level of facilities and services and where plan policy requirements and criteria can be met.

Residential

This category applies to areas to be used for the development of housing at various densities. Within the time frame of this plan, the County will direct residential development into areas designated according to the following density categories*:

Rural Density--greater than 5 acres per unit;
Low Density--5 acres per unit up to 1 acre per unit;
Medium Density--less than 1 acre per unit up to 0.2 acres per unit (i.e., more than 1 unit per acre up to 5 units per acre); and
High Density--less than 0.2 acres per unit up to 0.05 acres per unit (i.e., more than 5 units per acre up to 20 units per acre).

Commercial

This category applies to areas which are suitable for the development of retail and service commercial uses, including visitor accommodation and professional office uses. In general, building intensity for commercial areas shall conform to standards which limit building height to a maximum of 35 feet and lot coverage to a maximum 50 percent, excluding parking and landscaping requirements.

Industrial

This land use category applies to areas designated for the development of suitable types of manufacturing, research, mineral extraction, and processing operations. In general, building intensity for industrial areas shall conform to standards which limit building height to a maximum range of 35 feet to 75 feet and lot coverage to a maximum of 50 percent, excluding parking and landscaping requirements.

Agricultural

This category includes the sub-categories of farmlands, rural grazing, and permanent grazing.

The farmlands sub-category includes those farmlands designated by the State Department of Conservation as prime, of statewide importance, unique, or of local importance. The minimum parcel size for these farmlands shall be 40 acres.

The permanent grazing sub-category is applied to those portions of the Planning Area in which grazing or other agricultural uses are to be preserved, enhanced, and expanded. On permanent grazing lands, minimum parcel sizes shall be 40 acres and larger. Subdivision of land may be allowed only for agricultural purposes, for farm labor housing, or in order to create a building site for immediate family members and spouses.

The rural grazing sub-category is applied to grazing lands which are located in the County's developing areas, which are not restricted by a 20-year Williamson Act contract, and on which the County intends to allow mixed residential and agricultural land uses. In rural grazing areas, minimum parcel sizes shall

range from 10-acre minimum to a 160-acre minimum. Clustering of residential uses shall be encouraged provided that total site density shall not exceed that allowed by the appropriate rural grazing land use category. Density for clustering shall be numerically consistent with minimum lot size; e.g., in an area which is designated rural grazing with a 10-acre minimum, allowable density shall be 10 acres per unit. As a condition of clustered residential development approval, the developer shall be required to enter into a permanent restriction to ensure continued grazing use on those portions of the property not developed for residential use.

Resource Conservation

This category is intended to ensure conservation of a wide variety of the Planning Area's resources while allowing for some limited use of these properties. Typical of lands included in this category are watershed areas, riparian habitats, scenic resources, and lands which are generally remote, have steep slopes, or are inaccessible. This category also includes the floodways of the Planning Area's major rivers as well as its major water bodies. Uses in resource conservation areas must be in keeping with the conservation intent of this category. For example, allowed uses may include grazing and other agricultural uses and passive recreation such as camping, riding, and hiking.

Minimum parcel sizes in resource conservation areas shall range from 10-acre to 160-acre minimums. Residential uses are not a primary use in this category and will be allowed only if the applicant can demonstrate that conservation values are not comprised. Density for residential uses, if allowed, shall range from 10 acres or more per unit to 160 acres or more per unit.

Public/Quasi-Public

This category is applied to a wide variety of existing and proposed uses which are either operated by a public agency or which serve a large segment of the public. Public/quasi-public uses include the following:

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* Where clustering is allowed, total site density shall not exceed the density allowed by the appropriate residential category. In addition, on development sites where cluster ing is allowed, minimum lot sizes may be reduced consistent with environmental, health, and other planning requirements.

1) Schools (public and private)
2) Parks, Recreation Areas, and Public and Privately Operated Recreational Facilities (i.e., tennis clubs and golf courses with accessory uses such as a clubhouse, pro shop, restaurant and/or administrative/business office)
3) Natural Reserves (includes areas such as Point Lobos State Reserve and undeveloped portions of Los Padres National Forest)
4) Emergency Services (i.e., police, fire, and hospital)
5) Solid and Liquid Waste Disposal
6) Military
7) Religious Facilities
8) Other Public Facilities

Transportation

This category includes highways, major arterials (i.e., major county roads), scenic routes, recreational trails, railroads, airports, and harbors.

Urban Reserve

This is an overlay designation which may be used in conjunction with any of the County's land use categories. It is used to denote areas which the County believes should be annexed and developed in a phased manner as part of an incorporated city in order to ensure effective provision of urban services. Until such time as annexation occurs, the County will allow those land uses which are shown on the land use plan in conjunction with the urban reserve overlay. While under County jurisdiction, allowed land uses within urban reserve areas are specified at densities which will not compromise the future annexation plans of any city, will promote beneficial county traffic patterns, and will enhance emergency preparedness.

Area of Development Concentration

Areas of development concentration are those portions of the unincorporated area within which development is to be concentrated in order to better achieve other aspects of growth management such as preservation, enhancement, and expansion of agricultural lands and protection of other natural resources. Areas of development shall provide adequate infrastructure to the development such as water, sewage treatment, roads, commercial facilities, schools, and fire protection. Developments of this type should be proposed as specific plan amendments to the General Plan, shall be in consonance with the goals, objectives, and policies of the General Plan, and must meet criteria delineated in the Monterey County Growth Management Policy.

Comprehensive Planned Use

The Comprehensive Planned Use overlay is intended to be used in conjunction with the underlying land use designation. Its purpose is to facilitate a comprehensive approach for specifically designated properties where a mix of uses is permitted and/or where there are unique natural and scenic resources

or significant recreational/visitor serving opportunities. Particular attention is to be given towards siting and planning development to be compatible with existing resources and adjacent land uses.

Properties designated for Comprehensive Planned Use include the portion of Rancho San Carlos located within the Greater Monterey Peninsula Area, consisting of 16,967 acres.

Rancho San Carlos

Rancho San Carlos shall be designated as a 'Comprehensive Planned Use' area. The following specific policies shall regulate the uses within the Rancho San Carlos Comprehensive Planned Use area.

a. Uses which may be considered for Rancho San Carlos may consist of residential, visitor accommodation, neighborhood serving commercial, and recreational uses on approximately 2,500 acres. The balance of no less than 14,467 acres shall be retained in perpetuity for grazing, recreation and resource conservation.

b. At 40 acres per unit the maximum potential allowed density for that portion of Rancho San Carlos within the Greater Monterey Peninsula Area Plan, subject to policy 1-c below, is 424 units which may consist of a mix of residential and visitor accommodation units with a maximum of 150 visitor accommodation units. In the event the developer of Rancho San Carlos prepares and submits, and the County approves, a comprehensive development plan pursuant to policy 1-c below, the developer may transfer development rights of up to 76 residential units from portions of Rancho San Carlos located within the Carmel Valley Master Plan and within the coastal zone to that portion of Rancho San Carlos located within the Greater Monterey Peninsula Area Plan; however, no more than 350 single family residential units shall be developed on Rancho San Carlos.

c. The density provided in policy 1-b above shall be allowed only if:

(1) An application for development includes a comprehensive development plan for the 16,967 acres of Rancho San Carlos within the Greater Monterey Peninsula Area Plan, the approximately 2,400 acres of the Rancho San Carlos within the Carmel Valley Master Plan, and the approximately 600 acres of the Rancho San Carlos within the coastal zone;

(2) The total density included within the entire comprehensive development plan does not exceed 150 visitor accommodation units and 350 single-family residential dwelling units; and,

(3) Each owner of property within Rancho San Carlos applies for and agrees to be bound by the comprehensive development plan.

If all of the conditions of this policy 1-c are not complied with, the total potential allowed density for the 16,967 acres of Rancho San Carlos within the Greater Monterey Peninsula Area Plan

shall be 160 acres per unit, for a maximum of 106 units, the transfer of development rights pursuant to policy 1-b above shall not be allowed, and visitor accommodation and neighborhood serving commercial shall not be allowed.

d. Development shall be located in one or more clusters located in the least environmentally sensitive portions of the property.

e. Any discretionary development application for the property shall include a proposed draft Resource Management Plan which is consistent with the mitigation measures identified in EIR #87-013 (Rancho San Carlos Subsequent EIR), and consistent with the mitigation measures identified in the project level environmental impact report. The Resource Management Plan shall:

(1) Identify unique and valuable resources to be protected, including but not limited to, all sensitive habitats, wetlands, riparian corridors, wildlife corridors, watersheds and visually sensitive areas;

(2) Establish standards for building and road construction, design and siting such that the resources are not adversely impacted;

(3) Specify one-time and on-going actions to protect the resources from development;

(4) Propose implementation for resource protection and conservation measures identified, and coordination of implementation programs at each stage of development;

(5) Develop a monitoring program to assure compliance with the standards set forth in the Resource Management Plan.

f. To reduce traffic impacts, development shall include employee housing.

g. Rancho San Carlos Road shall be improved and serve as the main access for Rancho San Carlos. Robinson Canyon Road should be used for emergency access and agricultural ranch operations on Rancho San Carlos. The design and improvement of any project shall minimize the use of Robinson Canyon Road for traffic associated with, or generated by, uses maintained on Rancho San Carlos. Minimization of use may be achieved through various techniques, including, but not limited to, dedication of access rights, development of interior roads and alternative access, and installation or construction of such other improvements as may deter or discourage the use of Robinson Canyon Road.

h. (1) Development shall be permitted on Rancho San Carlos to a level consistent with safe yield of the proven water resources, provided that the level of development has no adverse impact on off-site water resources. Before deeming a discretionary development application complete, an applicant must submit a comprehensive hydrological study to the Director of Environmental Health and the Water Resources

Agency for review and approval. Unless modified by the Director of Environmental Health and the Water Resources Agency, the comprehensive hydrological study shall include, at minimum, the following:

(a) Delineation of aquifers and hydrogeologic units where any production well is located.

(b) Detailed hydrogeologic characterization of aquifer and hydrogeologic units including transmissivity and storage capacities.

(c) Delineation of recharge areas for aquifers and hydrogeologic units on the ranch.

(d) Detailed water balance for the ranch as a whole and for each aquifer or hydrogeologic unit where any production well is located for existing and proposed uses. The water balance should quantify precipitation, recharge, runoff, evaporation, evapotranspiration, soil absorption, as well as domestic and grazing demands, and should quantify in case the safe yield and cumulative impacts of all wells in production.

(e) Extended pumping tests of up to 30 days shall be conducted on selected wells to be performed during the driest time of the year.

(f) Delineate interconnection of each aquifer and hydrogeologic unit to off-site basins and aquifers. Quantify development impacts to off-site basins and aquifers and development impacts to on-site and off-site vegetation within the accuracy limits of standard hydrogeologic practices, as determined by the Director of Water Resources and the Director of Environmental Health.

(g) Evaluate the impact of the occurrence of a drought of record on the water resources of the ranch and the order of magnitude impact, if any, to related off-site basins and aquifers.

(2) The Comprehensive hydrogeologic study shall be submitted to the Monterey Peninsula Water Management District for review and comment. The Division of Environmental Health or the Water Resources Agency may, at their discre tion, request a third party review of the hydrology report prepared by the applicant's consultant. The third party review will be at the expense of the applicant. If the reviewing hydrologist reasonably determines that additional data is required to provide the conclusions required under section (E), the applicant shall provide said data at applicant's expense.

(3) Water systems serving development on the ranch shall be coordinated and managed on a ranch-wide basis. Formation of mutual water system(s) will be prohibited.

(4) Wastewater systems serving development on the ranch shall be coordinated and managed on a ranch-wide basis.

(5) Before deeming a development applicant complete, an applicant must submit to the Director of Environmental Health for review and approval a comprehensive wastewater disposal plan which includes the following:

(a) Adequate soil testing to establish that the soils are capable of receiving the expected wastewater flow.

(b) Estimated sewage flow from the proposed uses and a plan which details the proposed method of disposal from each use.

(c) A nitrogen loading study for each of the aquifers and/or hydrologic units identified in the hydrology report. The nitrogen study must identify and consider all sources of nitrogen, including background levels; provide a nitrogen equilibrium level based on full buildout of the development.

(6) Community septic systems are prohibited. Collection and treatment facilities (other than individual) shall be privately owned and operated, or fall within a County Service Area.

(7) Wastewater, other than individual systems, shall be reclaimed to the maximum extent feasible, as determined by the Director of Environmental Health. Reclamation shall be in a manner consistent with Federal, State, and local regulations.

i. To ensure that the level of service does not fall below County standards on any County or State road within the County that may be affected by development within Rancho San Carlos, all road improvements which may be required as a condition of approval of any discretionary entitlement or development, shall be:

(1) installed and constructed, or

(2) guaranteed through an appropriate agreement and secured by adequate security prior to the issuance of any grading or building permit for any development within Rancho San Carlos.

In the event improvements are located outside the boundaries of Rancho San Carlos which may be affected by development within Rancho San Carlos, such improvements may be provided through

(1) the payment of appropriate fees as may be, or may have been, established by the Board of Supervisors and/or

(2) an agreement or covenant with the County consenting and agreeing to participate in improvement financing techniques, including, but not limited to, assessment districts, that the Board of Supervisors may approve or establish.

j. The Comprehensive Development Plan shall include an open space component which shall specifically describe the manner in which at least 14,467 acres of Rancho San Carlos will be retained in perpetuity for grazing, recreation and resource conservation. The open space component shall be submitted to the Monterey Regional Parks District for review and comment.

Special Use

Schools, churches, hospitals, and public facilities such as community halls, although classified as public/quasi-public uses, may be considered in any land use category provided that such use is compatible with existing land uses in the area.

Spheres of Influence and Coastal Zone Boundary

Two important boundary lines are shown on the land use plan which, although not land use designations per se, are of critical concern for the County's planning program. The first of these are adopted or proposed sphere of influence boundaries. These represent the probable 20-year growth areas for the cities and must be approved by the Monterey County Local Agency Formation Commission (LAFCO). The second important boundary shows the Coastal Zone within Monterey County as established by the California Coastal Act of 1976. Within the Coastal Zone, the County has adopted detailed land use plans as part of the previously discussed Local Coastal Program.

LAND USE PHILOSOPHY

The Greater Monterey Peninsula Area Plan reflects a strong desire to maintain the area's quality of life while still recognizing and planning for a moderate amount of future growth. The Planning Area's scenic vistas, wooded hillsides, clean air, ocean and river waters, and wildlife habitat are among the resources which are of paramount importance in defining the area's character. As such, these resources warrant and are afforded a high degree of protection in the land use plan.

In general, growth within the Planning Area should occur within one of the Peninsula's seven incorporated cities. Specific areas are designated in the land use plan which are reserved for future expansion and growth of the cities through the annexation process. In the unincorporated area, growth is directed away from remote areas and is directed toward areas where some development has already occurred and where public services and facilities are available.

Growth which is allowed under the Plan must be accomplished in a manner which achieves protection for the Peninsula's quality of life. Such growth must also be accomplished within the limits of the Planning Area's natural and manmade constraints, which are considerable. Fire hazards, seismic and geologic hazards, transportation system capacity, water and sewer system capacity and critical habitat

areas are some of the constraints which must be evaluated before development may be authorized as shown on the land use plan.

MAJOR LAND USE RECOMMENDATIONS

The following sections describe major recommendations for each of the designations shown graphically on the land use plan (Figure 11). The land uses and designated densities must be reviewed in conjunction with policies of both the General Plan and this area plan. For descriptions of land uses in Carmel Valley and the Coastal Zone, please refer to the Carmel Valley Master Plan and the appropriate LCP document.

Residential

The plan concentrates new residential development in areas which are already committed to some degree of residential development.

Rural density residential is designated south of Highway 68, in portions of the Hidden Hills area and in the Aguajito area at a density of 5+ acres per unit. The Monterra Ranch is shown as rural density residential, 10 acres per unit. The Garvy parcel and portions of Laguna Seca Ranch East are shown as rural density residential, 10 acre minimum.

In the countywide General Plan, the low density residential category has a density range of 5 acres per unit to 1 acre per unit. The land use plan designates the central portion of the Hidden Hills area and a small area located just outside the Carmel Valley Master Plan boundary at a density of 2.5 acres per unit. Rancho Mar Monte, located east of Highway 1 just outside the Carmel Valley Master Plan boundary is designated at 1 acre per unit.

A substantial portion of Laguna Seca Ranch is designated for residential development in the low and medium density categories. A more detailed description of all allowed uses on the Laguna Seca Ranch property is contained on at the end of this chapter.

The medium density residential category in the countywide General Plan has a density range of 0.99 acre per unit to 0.2 acre per unit. The Josselyn Canyon area and the area between Highway 1 and Hatton Canyon are planned for a density of 0.99 acre per unit. The High Meadow area is also shown in the medium density residential category. In addition, Policy 27.1.5 (GMP) governs development density for the undeveloped portions of High Meadow I.

The Country Club portion of Del Monte Forest is also shown in the medium density range. This area is outside the Coastal Zone and is almost completely built out. Future development will constitute infilling on lots of record at densities consistent with those of surrounding land uses.

Commercial

Figure 11 shows two areas designated as commercial which were not shown on the countywide General Plan. This location is the Laguna Seca Office Park which was approved as a general plan amendment by the Board of Supervisors on December 20, 1983 and is incorporated into the land use plan.

Industrial

All industrial uses shown on the countywide land use plan are retained in the Area Plan. No new industrial uses are shown.

Agricultural

Farmland is retained on the land use map north of Marina near the Salinas River. Minimum parcel size for farmland is 40 acres.

Permanent grazing is retained in the area north of Marina and east of Carmel Valley Village. Minimum parcel size for these areas is 40 acres. South of Carmel Valley, permanent grazing is retained at a 160 acre minimum parcel size.

Rural grazing is shown for Rancho San Carlos south of Carmel Valley and all surrounding areas to the west, south and east. Residential density for these properties is 160 acres per unit.

Resource Conservation

Figure 11 shows resource conservation areas at Tarpey Flat and the southerly portion of Hidden Hills with a 10-acre minimum. If cluster development is proposed, the density allowable is 10 acres per unit.

Areas south of Carmel Valley and north of Los Padres National Forest are shown with a 160-acre minimum parcel size requirement. Clustering is allowed in these areas at a density of 160 acres per unit.

Public/Quasi-Public

All public/quasi-public uses shown on the countywide General Plan are retained as part of the Area Plan. In addition, such use is shown at Laguna Seca Ranch East (to allow a golf course with clubhouse), on the Monterra property (to allow a private recreational and equestrian facility for use of the residents and their guests only) at the SPCA facility (to reflect existing use) and to properly show the Sand City solid waste transfer site as part of the County's Solid Waste Management Plan. The regional sewage treatment plant is also shown.

Transportation

All transportation provisions of the countywide General Plan are retained in the Area Plan. As part of implementation, official plan lines for a Canada de la Segunda Road shall be adopted once the precise route location has been selected. Outlook Drive should be connected for emergency access only, at

least until the Hatton Canyon Freeway is completed. Following the construction of both the Hatton Canyon Freeway and Outlook Drive, a traffic study will be made to determine whether or not to open Outlook Drive to through traffic.

Robinson Canyon Road is designated as a County scenic route from its intersection with Carmel Valley Road to the end of the County maintained portion, a distance of 9.07 miles. As part of implementation, the County shall seek State-designated status for the Robinson Canyon scenic route.

It should be noted the State Law (Public Utilities Code Section 21670.1 et sec) provides for the creation of an airport land use commission (ALUC) in each County which contains at least one airport operated for the benefit of the general public and served by an air carried certified by the Public Utilities Commission on the Civil Aeronautics Board. The seven member ALUC is responsible for formulating a comprehensive land use plan to provide for the orderly growth of each public airport and the area surrounding the airport. The ALUC has reviewed this area plan and their comments are incorporated herein. It is intended that pertinent portions of this area plan shall serve as the basis for the comprehensive land use plan to be prepared by the ALUC to address the area surrounding the Monterey Peninsula Airport.

Recreational Trails

Figure 12 shows existing and proposed recreational trails in the Planning Area. Although the trails are mapped separately for clarity, they are considered an integral part of the land use plan. All trails shown on the countywide trails plan are incorporated into the area trails plan. In addition, two new trails are proposed. One is a loop trail providing access from Garland Park to Robinson Canyon and the second is a trail connecting future ownership of Garland Park to San Clemente Reservoir and then, via an existing trail, providing access to the Los Padres National Forest.

Urban Reserve

The urban reserve overlay, used to designate an unincorporated area which should ultimately be developed through annexation to an incorporated city, is shown for the Armstrong Ranch (Marina sphere of influence) and along Highway 68 and the Aguajito/ Josselyn Canyon areas (Monterey sphere of influence).

Area of Development Concentration Study Area

The countywide General Plan lists Laguna Seca Ranch as an area of Development concentration study area. During preparation and adoption of the area plan, it has been found that an ADC designation for Laguna Seca Ranch is undesirable and unnecessary. Therefore, no ADC is shown for Laguna Seca Ranch.

Additional Land Use Regulation for Laguna Seca Ranch

Within Laguna Seca Ranch East an application may be considered for development of residential, public/quasi-public (golf course and clubhouse), and resource conservation uses. Residential use shall be limited to a maximum of 257 residential units and shall, to the maximum extent possible, be located outside of or on the periphery of the visually sensitive east valley shown on the Greater Monterey Peninsula Visual Sensitive Map (Figure 10). Building sites and access roads must be located on the periphery of the east valley. A golf course may be permitted in the east valley as a compatible use. Development of the hotel at Laguna Seca Ranch must provide adequate services with regard to traffic, sewage treatment and water quality/quantity.

Non-Conforming Uses

Owners of the Daniels property (Assessor's Parcel Numbers 101-231-02, 07, 08 and 09) shall retain the ability to apply for a use permit to rebuild existing structures on the property in the event of a disaster.

FIGURE 11
LAND USE PLAN

FIGURE 12
RECREATIONAL TRAILS PLAN

CHAPTER VI: PLAN IMPLEMENTATION

PLAN IMPLEMENTATION

As in the Monterey County General Plan, the Greater Monterey Peninsula Area Plan consists of policies and a future land use map, and is a comprehensive long-range plan designed to guide the area's development and resource conservation. It is the product of an analysis of information found in a background report and resource maps compiled in a study of the Planning Area. It reflects physical opportunities and limitations for growth.

The Greater Monterey Peninsula Area Plan, as part of the General Plan, is to be used as the basis for discretionary actions by the Board of Supervisors, the Planning Commission, and other decision making bodies. While the General Plan sets the framework for community development, the day-to-day actions of the County truly shape the community. Thus, the manner in which the Plan is implemented is the real test of the worth of its goal, objectives, and policies, and eight area plans.

The following sections discuss aspects of implementing the countywide General Plan which will also apply to the eight area plans. Because each area plan is a sub-unit of the General Plan, references to the "General Plan" are intended to include the Greater Monterey Peninsula Area Plan.

Most tools for implementation of the General Plan derive from the County's corporate powers and police powers. State law requires the County to have subdivision and building regulations; most other measures are optional. If the goals, objectives, and policies of the General Plan are to be served effectively, the implementing measures must be carefully chosen, adapted to local needs, and carried out as an integrated program of complementary and mutually reinforcing actions. In addition to the requirements that the General Plan address nine specific elements and be internally consistent, implementing measures must be consistent with the General Plan. Ordinarily an action, program, or project is consistent with the General Plan if it will further the objectives and policies of the General Plan and not obstruct their attainment.

Some of the more important implementation measures for the County include zoning regulations, subdivision regulations, capital improvements programming, delineation of urban service boundaries, preparation of specific plans, and project review under the California Environmental Quality Act.

ORDINANCES

Zoning Ordinances

Zoning is the primary tool for implementing the General Plan. In its simplest form, zoning is the division of a geographical area into districts, accompanied by a written description of allowable land uses and development standards for each of the districts. The function of zoning is to translate the comprehensive, long-range, and relatively broad policies of the General Plan into single purpose, short-

range, and specific development standards for each piece of property in the County. Proper zoning will help to ensure that development on any parcel in the County is in conformance with the updated General Plan.

Planning law stipulates that no open space zoning ordinance may be adopted, no building permits issued, and no subdivision map approved unless consistent with the Plan's policies regarding open space. Revising the zoning ordinance to secure conformity with the General Plan will include the establishment of appropriate zoning districts and densities to implement the Plan, specification of zoning for each parcel, and continued enforcement and amendment as appropriate.

Subdivision Ordinance

In order to ensure conformity to the General Plan, the County is directed to regulate the "design and improvement" of subdivisions, which includes the physical layout of lots, dedication of public improvements and easements, and other measures. Furthermore, the County is authorized by the Subdivision Map Act to require dedication of public improvements or require payment in-lieu fees for improvements such as streets, drainage, local transit, school sites, parks and recreation, coastal access, and erosion control.

The subdivision ordinance should address the issues of on-site improvements, off-site improvements, and protection of environmentally sensitive areas. Specific subdivision proposals must demonstrate consistency with the General Plan on these points as well as on the issue of proper timing or other issues addressed in the subdivision ordinance.

Other Ordinances

Other existing ordinances and policies which will be reviewed in the interest of consistency with the General Plan and to facilitate its implementation include the Erosion Control Ordinance, the Noise Pollution Ordinance, the Official Plan Line (OPL) Ordinance, the Building Ordinance, energy policies, and the Growth Management Policy. These must reflect the goals, objectives and policies adopted in the Monterey County General Plan.

CAPITAL IMPROVEMENTS PROGRAM

The network of publicly owned facilities such as roads, streets, water and sewer facilities, public buildings, and parks forms the skeletal structure of a community. Certain public facilities, particularly water and sewer facilities and roads and streets, play a minor role in determining the location, intensity, and timing of future development.

Because of their importance in the growth of the community, state law requires that decisions about capital facilities be reviewed for consistency with the adopted General Plan. All departments within the County and all other local governmental agencies, including cities, school districts, and special districts

that construct capital facilities, must annually submit to the Planning Commission a list of projects being planned or constructed in the coming year. The Planning Commission must review the projects for conformity to the General Plan. A similar review for individual capital projects is also required.

Rather than consider individual capital improvement projects or only those projects to be undertaken in a single year, the County will prepare and annually revise a Capital Improvements Program (CIP) covering a period of at least six years. Because of the tremendous influence that capital improvement projects have on physical development within a jurisdiction, the Capital Improvements Program has important strategic value for implementing General Plan policies. It can help shape and phase growth according to adopted policies.

Major steps in the development of a CIP are (1) selection of necessary improvements and projects to implement the General Plan, (2) establishment of priorities to promote staged development of capital facilities in a manner consistent with the General Plan, and (3) devel opment of adequate and equitable financing for each project. The CIP should be reviewed annually and revised to reflect the County's evolving needs and fluctuating budgetary constraints.

ONGOING REVIEW

Due to the nature of the General Plan, most of its implementation is an ongoing process. Further specification and guidance is extended through the development of urban service boundaries/ spheres of influence, specific plans, and review under the California Environmental Quality Act (CEQA).

A sphere of influence represents the probable 20-year physical boundaries and service area for local cities or special districts. Within a sphere of influence, urban development will be directed to areas adjoining existing urban areas that are within the urban service boundary of a city or special district. The urban service boundary concept is designed to accommodate urban development phased over a five-year time period. It is anticipated that incorporating the urban service boundary concept into the overall General Plan framework will provide a valuable tool for controlling the location and timing of urban development in Monterey County.

Specific plans may be used in all or part of the County to ensure systematic execution of the General Plan. A specific plan must include all detailed regulations, conditions, programs, and proposed legislation to implement each of the required General Plan elements. By coordinating efforts of the public and private sectors in a detailed manner, specific plans provide for the efficient and focused application of General Plan policies in developing portions of the County.

Every proposed development project must be evaluated for potential environmental effect under regulations set forth in the California Environmental Quality Act. This review ensures that the same concern for the environment which went into the formulation of the General Plan will be brought to bear on each development project proposed under the Plan. Preparation of an environmental impact report will be required for those projects which may have significant effects on the environment.

The General Plan may be amended to reflect changing community values, conditions, and needs. With a few exceptions, no mandatory element may be amended more frequently than four times during any calendar year. Each amendment may encompass several different changes. General Plan amendments are considered projects and are subject to environmental review under CEQA. The Plan should only be considered for amendment when the County determines, based on new information, that a change is necessary.

Monterey County's Growth Management Policy and its General Plan must be consistent with one another. Data and policies in the Plan supporting the objectives of growth management can provide a solid rationale upon which the regulations may rest. A share of the countywide growth management allocation shall be incorporated into each area plan.

The Growth Management Policy and the General Plan should be in harmony to avoid conflicts. Competing interests, obligations, and objectives are balanced in the General Plan. Furthermore, tools used to implement the General Plan are often used to implement the Growth Management Policy: zoning and subdivision regulations and capital improvements program. Use of all implementation tools must be consistent with the General Plan.

CHAPTER VII: ENVIRONMENTAL IMPACT REPORT

CHAPTER VII

GREATER MONTEREY PENINSULA AREA PLAN

ENVIRONMENTAL IMPACT REPORT

INTRODUCTION

An Environmental Impact Report (EIR) is an informational document required by Section 21083 of the California Public Resources Code. On May 25, 1982, the Board of Supervisors directed staff to prepare and circulate an EIR for the new countywide General Plan. The Plan and its EIR were adopted on September 30, 1982.

Similarly, an EIR for the Carmel Valley Master Plan (CVMP) was certified by the Board of Supervisors in June of 1982; that EIR is hereby incorporated by reference. The CVMP EIR and this Area Plan EIR shall both supplement the 1982 General Plan EIR.

It is the purpose of this EIR to address all significant effects on the human or biotic environment which may result from the implementation of the Greater Monterey Peninsula Area Plan, yet which were not addressed in the 1982 countywide General Plan EIR.

The Greater Monterey Peninsula Area Plan presents policies which are supplemental to those of the 1982 County General Plan. As required by the California Environmental Quality Act (14 Cal. Admin. Code, Sec. 15037), this EIR assesses the potential of the Area Plan to have a significant adverse impact on the environment. Only changes to the adopted 1982 General Plan and countywide land use plan, as listed below and on the Policy Change Matrix and Land Use Plan Change Matrix (Tables 7 and 8), are addressed by this report. The reader is directed to the EIR for the 1982 Plan for an assessment of the environmental effects which could result from the land use designations and plan policies of the 1982 countywide General Plan.

PROJECT DESCRIPTION

The "project" discussed in this EIR consists of two sections: a list of policies supplemental to those listed in the 1982 countywide General Plan and a list of changes to the land use plan which accompanied the 1982 countywide General Plan. The supplemental policies are listed on pages 69 through 79 of the Greater Monterey Peninsula Area Plan text. Environmental effects of these policies are shown on Table 7. The changes to the 1982 countywide land use plan are similarly listed in Table 7 of this report, are further described in Table 8, and are mapped in Figure 13.

ENVIRONMENTAL SETTING

A description of the Greater Monterey Peninsula Planning Area is given in various section of this area plan, with descriptions of climate, geography, soils, farmlands and water resources on pages 3 through 9. Vegetation and wildlife are generally discussed on pages 9 through 11. Seismic, geologic, flood and other hazards are discussed on pages 19 through 26.

For a more specific description of the Carmel Valley, the reader is directed to Section 1.2 (page 2) of the Carmel Valley Master Plan EIR, which was adopted by the Board of Supervisors in June of 1982.

IMPACTS AND MITIGATION MEASURES

The EIR for the 1982 Countywide General Plan is a list of those environmental concerns resulting from the full implementation of the 1982 General Plan. As per the State EIR Guidelines (Section 15000 et seq. of the Public Resources Code) only significant adverse environmental impacts were addressed. It is assumed that beneficial impacts and those impacts having only a negligible impact are not sources of concern.

The 1982 General Plan EIR addressed the areas of environmental concern that have been specified for all EIRs by the State Guidelines: Natural Resources, Geology, Soils, Vegetation, Wildlife, Hazards, Air and Water Quality, Noise, and Housing. Concerns in each of these categories are identified, and the proposed General Plan policies which would reduce each to an insignificant level are specified. Page numbers locating these policies in the General Plan text are also given.

Table 7 of this report, the Environmental Impacts Matrix, addresses only the supplemental policies and land use plan changes which differ from those approved for the 1982 General Plan. Table 7 identifies the impacts of these supplemental policies and Land Use Plan changes as being positive (beneficial) or negative (adverse). These impacts are discussed below with the appropriate mitigating General Plan and Area Plan policies referenced. In addition, Figure 13 identifies those portions of the Land Use Plan for the 1982 countywide General Plan which are being supplemented by the Greater Monterey Peninsula Area Plan.

Only those proposed policies and land use plan changes listed in Table 7 and 8 which were found to have significant adverse impacts are discussed as follows in numerical order.

TABLE 7
ENVIRONMENTAL IMPACTS MATRIX

TABLE 7 (CONTD)

TABLE7 (CONTD)

Open Space Conservation

Impact

1.1.3 (GMP) The requirement for the County to protect designated sensitive scenic areas could reduce the residential densities, thereby, increasing the cost of housing throughout the Greater Monterey Peninsula Planning Area.

Mitigation Measure

1. Impacts to the supply of housing could be mitigated by the County's policy of density transfer within each proposed development, and by policy 58.1.5 on page 148 of the countywide General Plan which allows the granting of density bonuses in return for development of affordable housing units.

Geology, Minerals, Soils

Impacts

3.1.1.1 (GMP) The establishment of specific erosion control procedures for land clearing projects could increase development costs, with a corresponding increase in housing costs.

Mitigation Measure

1. Mitigation measure for housing costs same as for policy 1.1.3 (GMP).

Water Resources

Impact

5.1.3 (GMP) Requiring some projects to demonstrate that new or increased water usage would not have significant environmental effects could increase the cost of development, resulting in increased housing costs.

Mitigation Measure

1. Mitigation measure for housing costs same as for policy 1.1.3 (GMP).

Vegetation and Wildlife

Impact

7.1.3 (GMP) The retention of all redwood forests as open space areas would preclude their use as renewable lumber resources.

7.2.3 (GMP) The requirements for use of plant materials to integrate manmade and natural environments and to screen visual impacts of development could increase housing costs.

9.1.1.1 (GMP) Requiring varied habitats, where possible, in open space areas could also lead to increased housing costs.

Mitigation Measures

1. Owners of redwood timber lands could recover lost timber value by selling development or logging rights to private, non-profit trusts as promoted by policy 34.1.7 of the General Plan.

2. Mitigation measure for housing costs same as for 1.1.3 (GMP).

Seismic and Geology

Impact

15.1.11.1(GMP) The detailed geologic investigation required in high seismic hazard areas could increase housing costs by mandating expensive geologic studies and eliminating developable area, hence lot yield.

Mitigation Measure

1. Mitigation measure for housing costs same as for policy 1.1.3 (GMP).

Miscellaneous Hazards

Impacts

18.1.2 (GMP) The establishment of land use controls regarding the storage and handling of certain hazardous materials could act as a disincentive to industrial development, hampering efforts to provide new jobs and diversify the economic base in the Planning Area.

Mitigation Measures

1. Policy 24.1 of the General Plan places a high priority on efforts to stabilize and expand county employment in manufacturing and other areas.

2. Policies 29.1 through 29.3.4 on pages 101 and 102 of the General Plan serve to promote new industrial development countywide.

Noise Hazards

Impact

22.2.1.1(GMP) The siting of developments near airports in a manner which minimizes noise impacts could reduce development potential, increasing development costs.

Mitigation Measures

1. Mitigation Measure for housing costs same as for policy 1.1.3 (GMP).

Land Use

Impacts

26.1.6.1 (GMP) The requirement of open space uses between development areas could result in increased housing costs.

26.1.9.1 (GMP) The requirement that development on canyon rims and hilltops be unobtrusive could also result in increased housing costs.

Mitigation Measures

1. Mitigation measure for housing costs same as for policy 1.1.3 (GMP).

Current Holding Capacity

Impacts

36.0.5 (GMP) The proposed subdivision evaluation system could reduce residential densities, thus, increasing the cost of housing throughout the Planning Area.

Mitigation Measure

1. Mitigation measure for housing costs same as for policy 1.1.3 (GMP).

Transportation

Impacts

39.1.1.6 (GMP) The pursuit of the construction of an interim climbing or merging lane from Carmel Valley Road to Highway 1, until the Hatton Canyon Freeway is constructed, could adversely impact the scenic resources of the project area.

40.2.5 (GMP) Encouraging landowners to dedicate scenic ease ments in areas designated as "sensitive" or "highly sensitive" on the Greater Monterey Peninsula Visual Sensitivity Map could reduce development densities, with a corresponding increase in housing costs.

40.2.6 (GMP) The statement that areas shown as "highly sensitive" on the Greater Monterey Peninsula Visual Sensitivity Map should be preserved as open space could likewise increase the cost of housing by reducing development densities.

40.2.7 (GMP) The criteria which must be met in order to develop on those lands designated as “highly sensitive” on the Visual Sensitivity Map could also increase housing costs by removing developable land from proposed projects.

40.2.9 (GMP) The requirement for development in "sensitive" and "highly sensitive" areas as shown on the Visual Sensitivity Map to maintain the visual character of the area could increase housing costs by reducing development densities within those areas.

Mitigation Measures

1. Policy 40.3.1 (page 121) of the General Plan specifies that the agencies establishing the scenic highway shall coordinate their efforts for the design and construction of any new or relocated roads within the scenic corridor.

2. Policy 40.3.2 (page 121) of the General Plan states that the County shall promote special treatment and design within the scenic route right-of-way, including signs, structures, grading, lighting, vegetation, and road construction.

3. Mitigation measure for housing costs same as for policy 1.1.3.

Public Services and Facilities

Impacts

51.1.5 (GMP) The acquisition, design, and development of trails could adversely impact police services in the Planning Area.

51.2.4.1 (GMP) The evaluation of development proposals to deter mine their individual ability to further park and recreation goals could result in increased housing costs.

53.1.3.1 (GMP) The requirement of hydrologic reports for certain development proposals could result in increased housing costs.

Mitigation Measure

1. Proposed Policy 51.1.5 (GMP) of this Area Plan offers some degree of self-mitigation by mandating the consideration of "patrol and enforcement" prior to the acquisition, development, and use of the trails system.

2. Policy 46.2.1 of the General Plan (page 131) encourages the promotion of efforts to orga nize neighborhood and rural crime prevention techniques, security surveys, and public awareness programs.

3. Mitigation measure for housing costs same as for policy 1.1.3.

LAND USE PLAN CHANGES (refer to Figure 13 and Table 8)

The following modifications to the countywide land use plan related to the Greater Monterey Peninsula Planning Area are identified on the Land Use Plan Changes Map (Figure 13) and are briefly discussed and evaluated in Table 8, the Land Use Plan Change Matrix.

Those changes in the countywide land use plan which were identified in Table 8 as having a change in unit yield from that allowed in the countywide General Plan are discussed below.

Modification:

5. This reduction of the ultimate unit yield of the Josselyn Canyon area from 1,745 to 353 units, a loss of 1,392 units, could have an adverse impact on the supply of housing, and consequently the cost of housing.

8. Similarly, the reduction of the area between Highway 1 and Hatton Canyon from a yield of 405 units to 82 units, a loss of 323 units, could have an adverse impact on housing cost by restricting supply.

10. The increased development potential of Laguna Seca Ranch east from a unit yield of 54 to 151, an increase of 97 units, could result in adverse impacts to hydrology, transportation, traffic impacts, public services and facilities, and visual resources.

11. Designating the SPCA property as "Public/Quasi-Public" reduces this parcel's residential unit yield to 0, for a loss of 35 units. However, this designation more accurate ly represents existing and anticipated future land use.

12. The reduction of the "SPCA environs" from a yield of 58 units to 15 units, a loss of 43 units, could adversely affect housing cost and supply.

14. The increase of the Hidden Hills--central lot yield from 142 units to 290 units, adding 148 units to the yield, could result in adverse impacts on water supply, traffic, public services and facilities, and visual resources.

16. The reduction of the lot yield in Hidden Hills--south from 58 to 29, a loss of 29 units, could adversely affect housing cost and supply.

18. The reduction in the ultimate unit yield of this area from 73 to 29 units, a loss of 44 units, could adversely impact the supply and cost of housing.

TABLE 8

FIGURE 13

21. The reduction in the ultimate unit yield of Rancho San Carlos from 2,000 to 500 units, a reduction of 1,500 units, could adversely impact the supply and cost of housing. The 200-room hotel site designated on the land use plan is not a completely new impact because the countywide General Plan does contain enabling language which would allow for consideration of "visitor serving facilities" of an unspecified size. The hotel could, however, adversely impact traffic, water supply, air quality and public facilities and services.

22. The reduction in the ultimate unit yield of this area from 637 to 342 units, a loss of 295 units, could adversely impact the supply and cost of housing.

24. The reduction of the Garvey parcel from a unit yield of 2 to 1, a loss of 1 unit, could cumulatively contribute to increased housing costs throughout the Planning Area. However, this change is not considered a significant adverse impact.

27. The reduction of the High Meadow II parcel from 360 to 122 units, a loss of 238 units, could adversely impact the supply and cost of housing.

Mitigation Measures

1. The significance of the adverse impacts re sulting from proposed land use plan modifications 5, 8, 11, 12, 16, 18, 21, 22 24, and 27 is difficult to determine, since it was never the intent of the countywide land use plan to propose site-by-site lot yields. The scale of the countywide land use plan, in fact, makes such determinations practically impossible. In fulfilling its purpose to be more specific in designating proposed land uses and densities, the Area Plan should be expected to reduce lot yields when such limiting factors as circulation, water supply, and geotechnical hazards are considered. However, any impacts to the supply of housing would be mitigated by policy 58.1.5 of the General Plan (page 148), which states that density bonuses may be granted in exchange for development of affordable housing units.

2. Impacts to hydrology, water supply, traffic, public services, and visual resources resulting from items 10, 14 and 21 are mitigated by the density reductions overall in the Planning Area.

Table 8 shows the ultimate lot yields that would be permitted under the proposed changes to the adopted 1982 countywide land use plan compared to the existing designations. It is important for the reader to understand that the intent of these sixteen proposed changes is to refine the 1982 land use plan to more realistically reflect the optimum lot yield of the Planning Area. Consequently, most of the changes are a reduction in density from the 1982 Plan.

Lot yields based on land use plan designations are, not surprisingly, higher than the actual number of lots that will be created with full build-out. This is primarily due to on-site limitations that will be evaluated on a site-by-site basis during the subdivision review process. In addition, individual choice on the part of developers and owners of large parcels may further reduce the final lot yield of the Planning Area.

UNAVOIDABLE ADVERSE IMPACTS

In spite of the mitigation measures proposed in the preceding section, there will be several significant adverse environmental impacts resulting from these proposed supplemental changes to the 1982 General Plan's policies and land use plan. These are listed by subject heading as follows:

Soils:	1.	The removal of viable grazing lands from production due to development.
Vegetation:	2.	The proliferation of non-native plant species as the result of a non-selective plant materials policy.
Visual Resources:	3.	The unique visual resources of the Planning Area would be effected by the visual impacts of concentrated develop ment.
Wildlife:	4.	Degradation of wildlife habitat would result from concentrated development.
Transportation:	5.	Increased traffic congestion on major roads as a result of more concentrated development.
Public Services	6.	Increased demand for public sewer and & Facilities water utilities as a result of more concentrated residential development.
Housing:	7.	Housing costs in the Planning Area may be affected by increased development costs and reduced availability due to a reduction in lot yield.

These impacts are supplemental to those resulting from the 1982 countywide General Plan itself, as listed in Table 12 on page 196 of that Plan.

IRREVERSIBLE CHANGES TO THE ENVIRONMENT

Those irreversible changes which would have resulted from the implementation of the 1982 countywide General Plan are discussed on pages 195-197 of that Plan and are hereby incorporated into this EIR by reference. Given the overall reduction in the total number of housing units from the 1982 Plan to the proposed Greater Monterey Peninsula Area Plan, the irreversible changes to the environment discussed in the EIR for the 1982 Plan would be significantly reduced as a result of the implementation of the Greater Monterey Peninsula Area Plan as proposed.

SHORT-TERM USES VERSUS LONG-TERM PRODUCTIVITY

This section of an EIR is intended to discuss the need both for growth and development, and for the conservation of resources in the future. The EIR for the 1982 countywide General Plan discusses short-term uses versus long-term productivity on page 197 of the Plan. These sections are hereby incorporated by reference. Given the overall reduction in the total number of housing units from the 1982 countywide General Plan to the proposed Area Plan, the balance between short-term uses and long-term productivity as discussed in the 1982 Plan EIR would not be worsened by the implementation of the proposed Greater Monterey Peninsula Area Plan. It is reasonable to assume, in fact, that this balance would improve.

GROWTH-INDUCING IMPACTS

The tendency for the countywide General Plan to induce growth and development as provided for in its policies and Land Use Plan is discussed on pages 198-199 of the 1982 General Plan EIR. Those growth-inducing impacts which apply to the Greater Monterey Peninsula area are generally concerns for increased development pressure once limiting constraints (traffic, water and sewer systems, etc.) are removed.

In considering the proposed amendments to the countywide General Plan policies and Land Use Plan, contained in the Greater Monterey Peninsula Area Plan, no new growth-inducing impacts can be foreseen. While it may be argued that the supplemental policies proposed in the Area Plan may lead to higher-density developments in some portions of the Planning Area, the overall density shall remain unchanged. It may also be argued that the proposed amendments to the Land Use Plan could so limit future supplies of available housing that development pressure would increase else where in the County. This is highly unlikely since the new General Plan, recently adopted countywide, will be followed with more detailed area plans. Any redirected residential growth, for example, in the Cachagua or North County Planning Areas, must conform to the 1982 countywide General Plan and the appropriate area plans as adopted.

ALTERNATIVES TO THE PROPOSED PROJECT

1. ***No Project***. Under this alternative to the project, the proposed supplemental policies and modifications to the 1982 countywide Land Use Plan would be discarded. The 1982 countywide General Plan would then be used exclusively as the policy basis to direct growth in the Planning Area and the current Land Use Plan would remain unchanged. The residential densities then allowed would be much greater than under the proposed Area Plan. The impacts discussed in the EIR for the countywide plan would then be maximized in the Greater Monterey Peninsula area.

2. ***Modification of Area Plan Proposal***. This alternative involves changes to the Area Plan proposal in a manner which could either increase or decrease development poten tial. A decrease in development potential would cause a reduction in environmental impacts at the risk of increasing

housing costs and lowering economic development potential. Conversely, a plan which increases development potential would lower housing costs, bolster economic development and increase adverse environmental impacts.

APPENDIX A

GLOSSARY

ACTIVE FAULT: A fault along which there has been displacement during the last 11,000 years.

AFFORDABILITY: The ability of low and moderate income households to accommodate housing costs without having to pay a disproportionate share of their income. Those households occupying housing units whose housing costs are greater than 25% to 30% of their gross income are considered to be "overpaying"

AGRICULTURAL LAND USES: Those uses of an agricultural nature which occur on farmlands designated as prime, of statewide importance, unique, or of local importance. Agricultural land uses also include grazing and any other uses which occur on properties designated as "agricultural" on the General Plan and/or area plan land use map(s).

AMBAG: Association of Monterey Bay Area Governments--a voluntary association of local governments organized under the California Joint Powers Authority for the purpose of providing regional planning services in the areas of the economy, transportation, land use, housing, air quality, and water quality.

AVERAGE DAILY TRAFFIC (ADT): The average number of vehicle traveling (in both directions) on a particular section of road during a 24-hour period.

BROADLEAF EVERGREEN: A plant community encompassing the evergreen oak woodlands and forests whose representative species include madrone, tan oak, live oak, blue oak, and valley oak.

CEQA: California Environmental Quality Act of 1970--a public law requiring all public agencies (state and local) to prepare and certify an environmental impact report on any project they propose to carry out which may have a significant effect on the environment.

CHAPARRAL: An evergreen plant community of drought-adapted shrubs usually found on dry slopes and ridges.

APPENDIX B

MONTEREY COUNTY GENERAL PLAN

BACKGROUND REPORTS

Monterey County Planning Department, Agricultural Background Study of Monterey County, January, 1982.

Monterey County Planning Department, Current Holding Capacity Analysis of Monterey County, January, 1981.

Monterey County Planning Department, Demographic Analysis of Monterey County, April, 1980.

Monterey County Planning Department, Environmental Constraints Analysis of Monterey County: Part I--Seismic and Geologic Hazards, December, 1980.

Monterey County Planning Department, Environmental Constraints Analysis of Monterey County: Part II--Flood, Fire and Miscellaneous Hazards; Emergency Preparedness, April, 1981.

Monterey County Planning Department, Environmental Constraints Analysis of Monterey County: Part III--Air and Water Quality, April, 1981.

Monterey County Planning Department, Environmental Constraints Analysis of Monterey County: Part IV--Noise Hazards, March, 1981.

Monterey County Planning Department, Evaluations of Past Planning Documents, December, 1979.