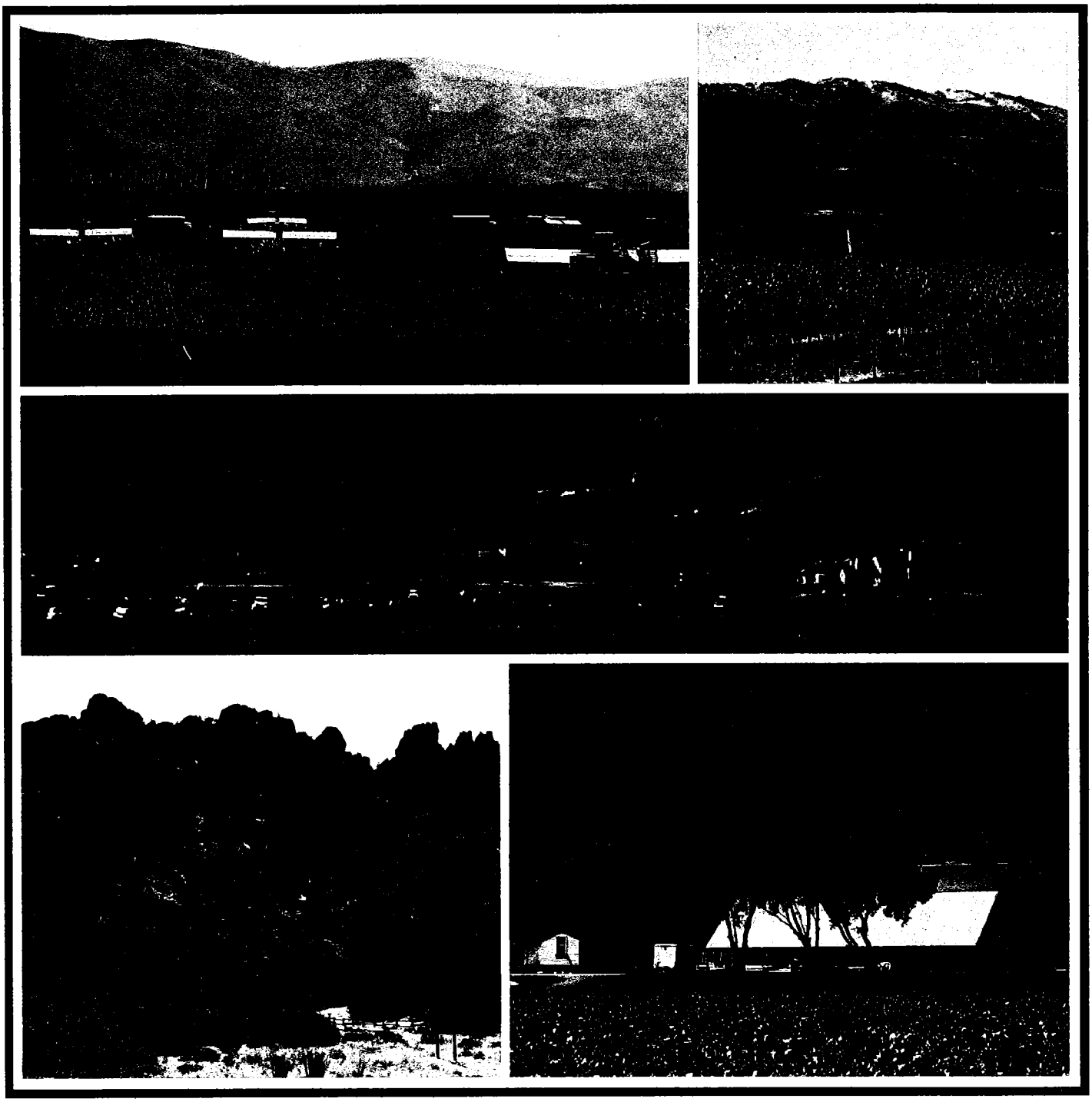
CENTRAL SALINAS VALLEY AREA PLAN



A PART OF THE MONTEREY COUNTY GENERAL PLAN

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Approved by the Planning Commission on September 9, 1987
Adopted by the Board of Supervisors on November 24, 1987

UPDATE INDEX

CENTRAL SALINAS VALLEY AREA PLAN - AMENDMENTS

As Adopted by the Monterey County Board of Supervisors for the following date(s):

1. ***August 30, 1988*** *- MAP CHANGE - APN 235-071-16 - Change Land Use Designation from "Farmlands, 40 Acre Minimum" to "Commercial".*

2. ***December 12, 1989*** *- MAP CHANGE - APN 145-052-03, 04 - Change Land Use Designation from "High Density Residential, 10 Units/Acre" to "HDR 12 Units/Acre" 12 units or 17.5 units.*

3. ***December 12, 1989*** *- MAP CHANGE - APN 418-401-23 - Change Land Use Designation from "Farmlands, 40 Acre Minimum" to "Industrial".*

4. ***December 11, 1990*** *- MAP CHANGE - APN 257-031-02 - Change Land Use Designation from "Industrial" to "Farmlands, 40 Acre Mininum".*

5. ***December 15, 1992*** *- MAP CHANGE - APN(s) 257-121-006; 007; 009; 011; 013; 015-023 - Change Designation for 78 acres southeast of Soledad on Metz Road from "Farmlands, 40 Acre Minimum" to "Low Density Residential, 2.5 Acres/Unit".*

6. ***August 24, 1993*** *- MAP CHANGE - APN 020-021-11 - Change Land Use Designation from "Farmlands, 40 Acre Minimum" to "Industrial", Board Resolution 93-338.*

7. ***August 24, 1993*** *- MAP CHANGE - APN 420-063-033-000M - Change Land Use Designation from "Permanent Grazing, 40 Acre Minimum" to "Rural Grazing, 40 Acre Minimum", Board Resolution 93-339.*

8. ***December 14, 1993*** *- CHANGE LAND USE DESIGNATION - APN 137-051-028 - Change Land Use Designation from "Farmlands, 40 Acre Minimum" to "Industrial" for a 11.9 acre parcel located in the Potter Road area south of Salinas.*

9. ***June 14, 1994*** *- MAP CHANGE - 145-021-001 - Change Land Use Designation from "Farmlands, 40 Acre Minimum" to "Industrial" for a 2.5 acre parcel immediately west of Chualar.*

10. ***December 5, 1995*** *- MAP CHANGE - APNs 420-051-011-000; 420-051-012-000; 420-051-013-000; 420-051-014-000 - Change land use designation from "Public/Quasi-Public" to "Resource Conservation, 40 Acre Minimum."*

11. ***December 5, 1995*** *- MAP CHANGE - APNs 419-101-001-013-000; 017-000; 057-000; 060-000; 419-081-012-000; 062-000; 063-000; 418-361-006-000; 418-381-026-000; 111-021-006-000; 109-491-005-000 - Change land use designation from "Permanent Grazing, 40 Acre Minimum" and "Farmlands, 40 Acre Minimum" to "Rural Grazing, 40 Acre Minimum."*

CENTRAL SALINAS VALLEY AREA PLAN

PHILOSOPHY

The Central Salinas Valley Area Plan was prepared under the guidance of the Central Salinas Valley Citizens' Advisory Committee (CAC), appointed by the Board of Supervisors on December 6, 1983. The thirteen member CAC represents a cross section of individuals in an area with a long tradition of working with the land. The process of developing this area plan provided a high degree of citizen involvement allowing many residents the opportunity to help shape future development. The Central Salinas Valley Area Plan reflects the values and desires of many local residents sharing common concerns for the Central Salinas Valley and Monterey County as a whole.

The ideological foundation of the Central Salinas Valley Area Plan is preservation of the area's agricultural vitality and rural character. Accommodating growth within this context will maintain the economic stability and quality of life for present and future residents of Central Salinas Valley.

Expansive agricultural areas, open spaces, scenic hillsides, clean air and water are among the resource attributes from which Central Salinas Valley derives its special sense of place. Protection of these resources will reinforce County efforts to conserve agricultural lands and the Planning Area's agricultural economy.

The County's population will continue to grow. The rural lifestyle, relatively low cost of land, and job opportunities in the agricultural and service industries will attract families to settle in Central Salinas Valley.

The Plan attempts to accommodate these often inconsistent land uses by directing growth to areas where development will have the least impact on agricultural activities. The majority of growth in the Planning Area is expected to occur within the jurisdiction of the valley cities. Specific areas are designated on the land use plan which are reserved for future expansion and growth of the cities through the annexation process. In the unincorporated area, the Plan directs growth away from remote areas and towards areas where some development has already occurred and where public services and facilities are available. The Plan provides for residential development within the unincorporated area in sufficient quantity to accommodate the housing needs of present and future County residents. The Plan also provides areas for the expansion of industries currently experiencing growth and providing jobs.

Growth within the Planning Area must be accomplished within the limits of the Area's natural and constructed constraints. Fire hazards, seismic and geologic hazards, transportation system capacity, water and sewage system capacity, and environmentally sensitive areas are some of the constraints which must be evaluated before development may be authorized as shown on the land use plan.

The Plan, therefore, attempts to accommodate the growth and maintenance of existing and expected land uses while preserving the quality of life for all residents of the Planning Area.

TABLE OF CONTENTS

LIST OF TABLES

Page

LIST OF FIGURES

INTRODUCTION

The Central Salinas Valley Area Plan is part of the Monterey County General Plan.[1/] The General Plan addresses all aspects of future growth, development, and conservation. State law requires that the County adopt such a plan and that the plan must meet minimum requirements regarding its content. A general plan must address seven specific subject areas or elements: land use, circulation, housing, conservation, open space, noise, 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. The matrix in Chapter VII, Appendix A, shows how the organization of this area plan relates to the seven elements currently required by state law. The matrix also shows the additional "permissive" elements addressed in this plan.

Monterey County's General Plan represents the long-range goals, objectives, and policies for the County. Users of this area plan are referred to the background reports, prepared for the Monterey County General Plan, for a discussion of countywide concerns and issues which led to the formation of the countywide policies listed in the General Plan.

The Central Salinas Valley Area Plan is the fifth of eight area plans of Monterey County which address local issues. Area plans are more specific than the General Plan due to their smaller geographic focus. Since development opportunities, constraints, and natural resources of the Central Salinas Valley[2/] are unlike those in other parts of the County, the policies for this area plan are more precisely adapted to the characteristics of this area than are the more general policies of the General Plan. Area plans must be consistent with the General Plan and must address all subjects required by state planning law.

Citizen participation is an integral part of the planning process. Citizen Advisory Committees help guide the formation of goals, objectives, and policies of both the General Plan and the eight area plans. The public also has the opportunity for comment during the public hearings of the County Planning Commission and Board of Supervisors. After considering all public comments, the Planning Commission will formally forward the Plan along with its recommendation to the Board of Supervisors. It is the Board's responsibility to take final action on each plan.

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1 "Monterey County General Plan" or "General Plan" refers to any part of the body of information which includes the countywide policy plan, the countywide land use plan, and the eight area plans.

2 Throughout this report, the geographical area defined as the "Central Salinas Valley" (Figure 1) shall be also referred to as the "Planning Area".

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

PART I: Inventory and Analysis

CHAPTER I: NATURAL RESOURCES

In preparing an area plan for the Central Salinas Valley, it is essential to have an understanding of the characteristics of the land, the physical features and natural resources. These characteristics determine the area's land use opportunities and limitations, thereby shaping the setting in which man's physical development takes place. The unique combination of natural resources in the Central Salinas Valley 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. Geology and climate are natural phenomena which have remained essentially unchanged by man's activities. The remaining categories of this section -- minerals, soils, water, vegetation, wildlife, environmentally sensitive areas, and archaeological resources -- may be significantly altered or even destroyed through misuse.

NATURAL RESOURCES

GEOGRAPHY AND CLIMATE

Figure 1 shows that the Central Salinas Valley contains roughly all lands between the communities of Chualar in the north and San Lucas in the south. The San Benito County line forms the eastern boundary, while the boundary to the southwest is formed by the Hunter-Liggett Military Reservation and the Los Padres National Forest.

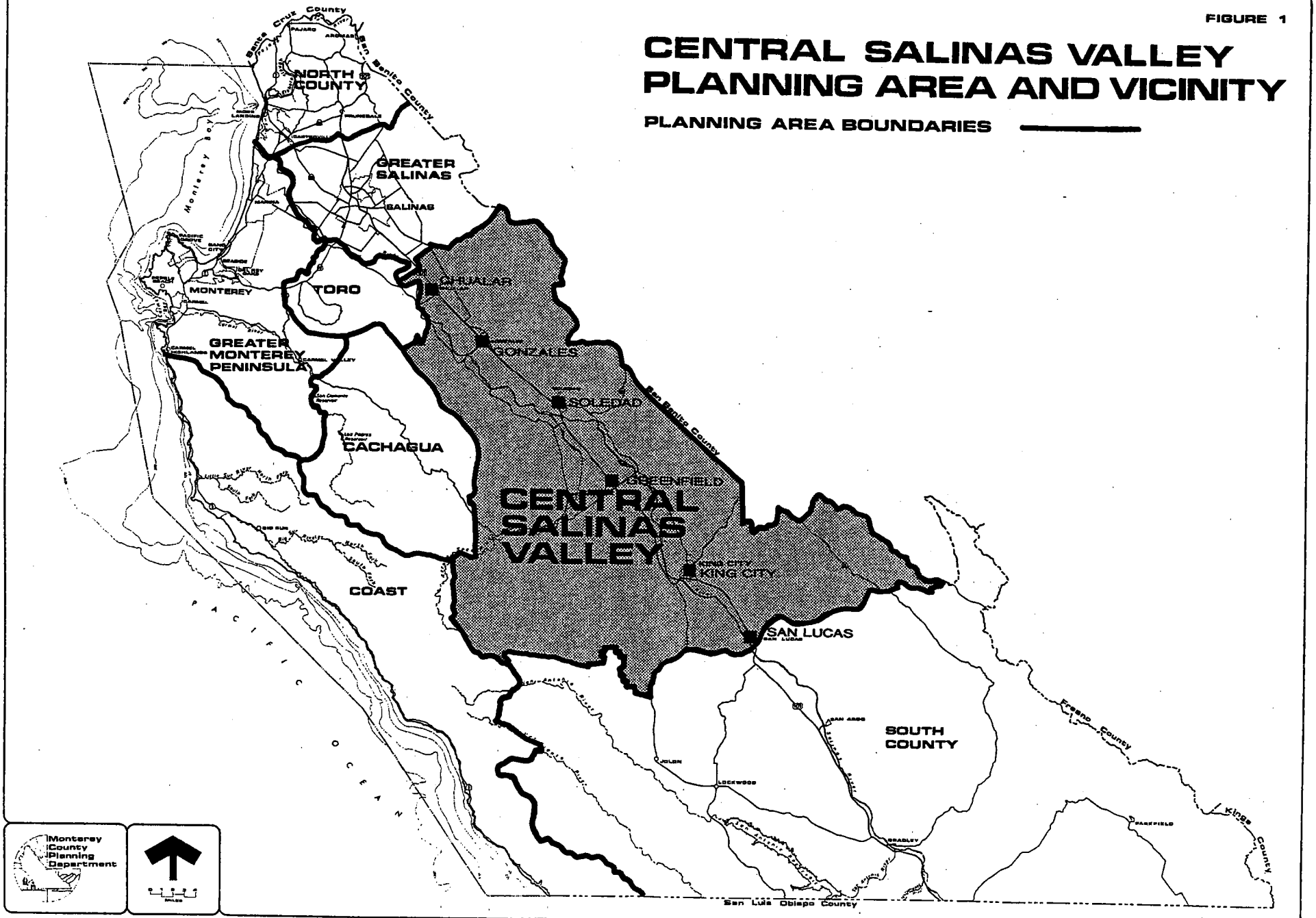
The most prominent feature of the 857 square mile Planning Area is the floor of the Salinas Valley, which is approximately seven miles wide at Chualar, nine miles wide at Greenfield, and four miles wide at King City. The remainder of the Planning Area is mountainous with steep ravines and hillsides with slopes often exceeding 30%. The Gabilan Range forms the eastern wall of the valley, reaching an elevation of 3,000 feet, while the Sierra de Salinas and Santa Lucia Ranges to the west exceed 3,600 and 5,800 feet respectively. Junipero Serra Peak is the highest point in the planning area. Several large canyons accentuate the topography. These, along with the smaller canyons, drain the higher elevations, becoming tributaries to the Salinas River, which flows year-round although primarily below-surface, during the summer months. The Arroyo Seco River joins the Salinas River about midway through the Planning Area. The only major highway through the valley is U.S. 101, which follows the course of the Salinas River. The incorporated cities of Gonzales, Soledad, Greenfield, and King, as well as the unincorporated urban centers of Chualar and San Lucas, are all located along 101. The remainder of the Planning Area is essentially rural and agricultural.

The Central Salinas Valley enjoys a Mediterranean climate with moderate temperatures throughout the year, mild winter rainy seasons, and cool, dry summers. Average annual precipitation varies, ranging from 10 inches at Greenfield and King City to 20 - 25 inches at Pinyon Peak. Between the months of March and October, the prevailing northwest winds funnel directly into the Salinas Valley, carrying the summer fog inland from Monterey Bay. As the wind passes through the narrowing valley, the wind velocity increases and moisture holding capacity decreases. Consequently, this wind is relatively hot and dry in Soledad, and temperatures in the southern valley tend to be warmer in the summer and cooler in the winter than those experienced closer to the coast. During the winter months, prevailing wind will reverse and blow from the south in response to the rainstorms which are typical of the season.

FIGURE 1

CENTRAL SALINAS VALLEY PLANNING AREA AND VICINITY

PLANNING AREA BOUNDARIES ——————



GEOLOGY

The Central Salinas Valley is underlain by Mesozoic granitic rocks. In the Sierra de Salinas and Santa Lucia Ranges, this granitic base is still covered by Pre-Cretaceous metamorphic rocks and by middle and lower Miocene marine tertiary formations. In the northern half of the Gabilan Range, most of these ancient marine sedimentary formations have eroded away, leaving the newer granitic strata beneath the soil layers. In the southern portion of the Gabilan Range, the granitic rocks are still primarily covered by middle or lower Pliocene sedimentary formations, from a point roughly east of Greenfield to the southern boundary of the Planning Area. The Salinas Valley floor consists of recent Quaternary alluvium and river terrace deposits, reaching depths of up to several thousand feet in the lower valley. Several active and potentially active faults occur throughout the Planning Area.

MINERAL RESOURCES

The most notable examples of mineral extraction in the Planning Area are the oil fields located at Monroe Swell, south of Greenfield, and King City. Like the Paris Valley and San Ardo fields further south, these fields are located along the geologic feature known as the King City Hinge Line and draw from upper and lower Miocene sedimentary formations. Operating fields are expected to continue producing for at least another 40 years. A considerable amount of "wildcatting," or single exploratory wells, is now occurring in the central valley. Oil companies have long expected to find oil in the Reliz Canyon, Paraiso Canyon, and Gonzales areas. The extraction of other mineral resources in the Planning Area is now limited to a few sand and gravel extraction operations. Historically, bituminous sandstone, diatomite, feldspar, chromate, gold, stone, phosphate, and mineral water have also been mined and quarried throughout the area. The complexity of geology in the County, caused by the extensive faulting and deformation, often makes geologic investigations difficult and inconclusive.

SOILS AND SLOPE

A wide variety of soils are present in the Planning Area. The characteristics of the soils and the slope of the land are significant determinants of appropriate land uses. Certain soils, due to their composition, drainage, and gentle slope, are suited for either agricultural or urban uses. The soils found in the Salinas Valley are some of the better agricultural soils in the nation and help make the Salinas Valley the most productive vegetable district in the world. These soils are also suitable for urban uses. Other soils pose severe limitations to the agricultural or urban uses of the land. Soils found along the rugged eastern slopes of the Sierra de Salinas and along the

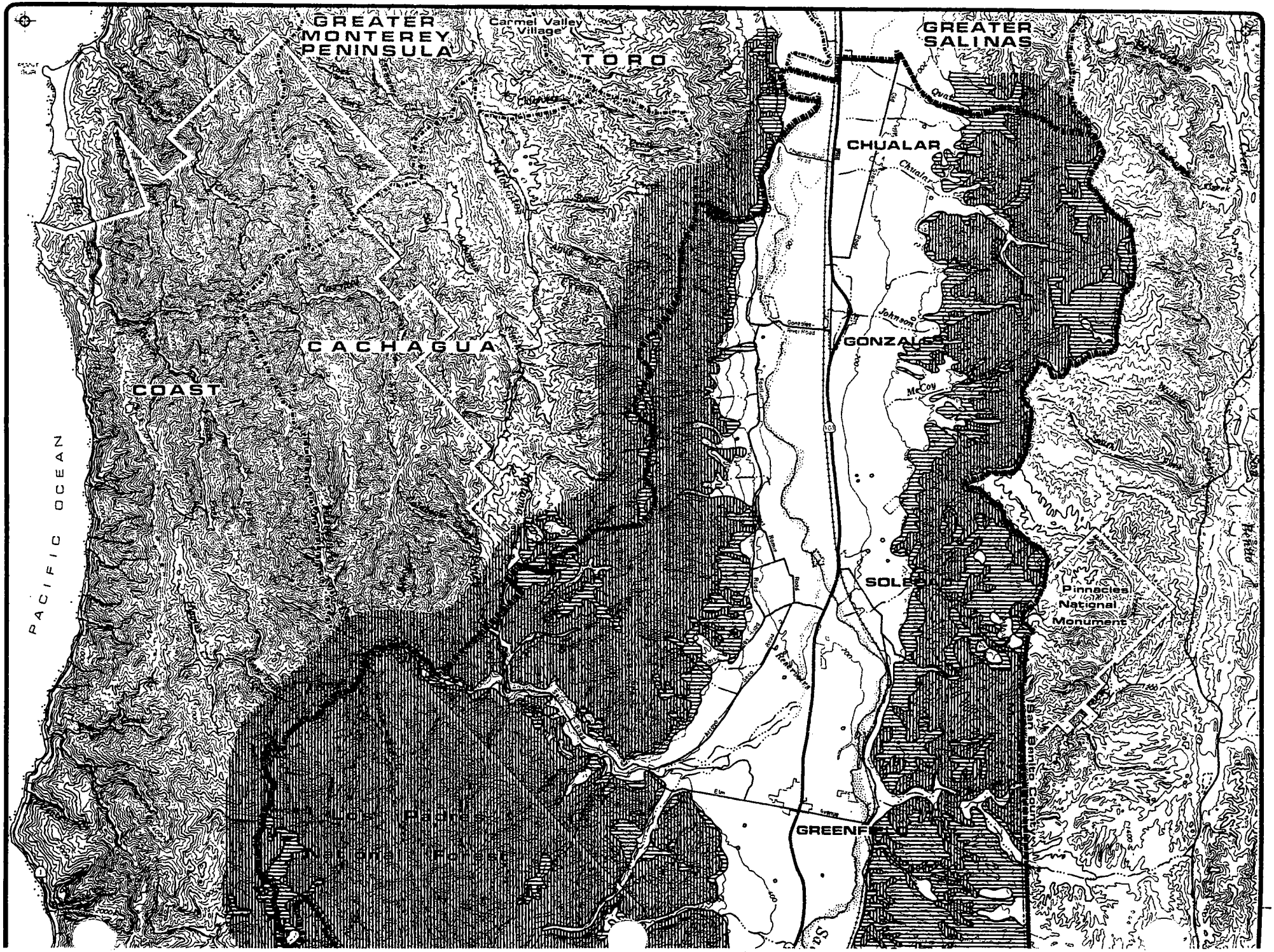
western slopes of the Gabilan Mountains have severe limitations. The development suitability of soils found in the Planning Area are divided into three categories based on suitability for septic system effluent absorption, dwellings without basements, and development of roads and streets. Soil constraints considered in determining suitability include slope, depth to bedrock, soil strength, shrink-swell potential, and the presence of water. Categories of soil constraints were rated as low, moderate, and high. Soils in areas with a low constraint rating are generally suited 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 unfeasible. Soils exhibiting low constraints are located in the flat valley lowlands near the Salinas and Arroyo Seco Rivers, and Quail, Chualar, and San Lorenzo Creeks. Moderate constraints predominate the floor of the Valley, the slopes of the Gabilan and Sierra de Salinas foothills, and extend up the larger canyons. Areas of severe soils constraints are found in the steep uplands, which constitute the bulk of the Planning Area, and in the immediate area of the river beds.

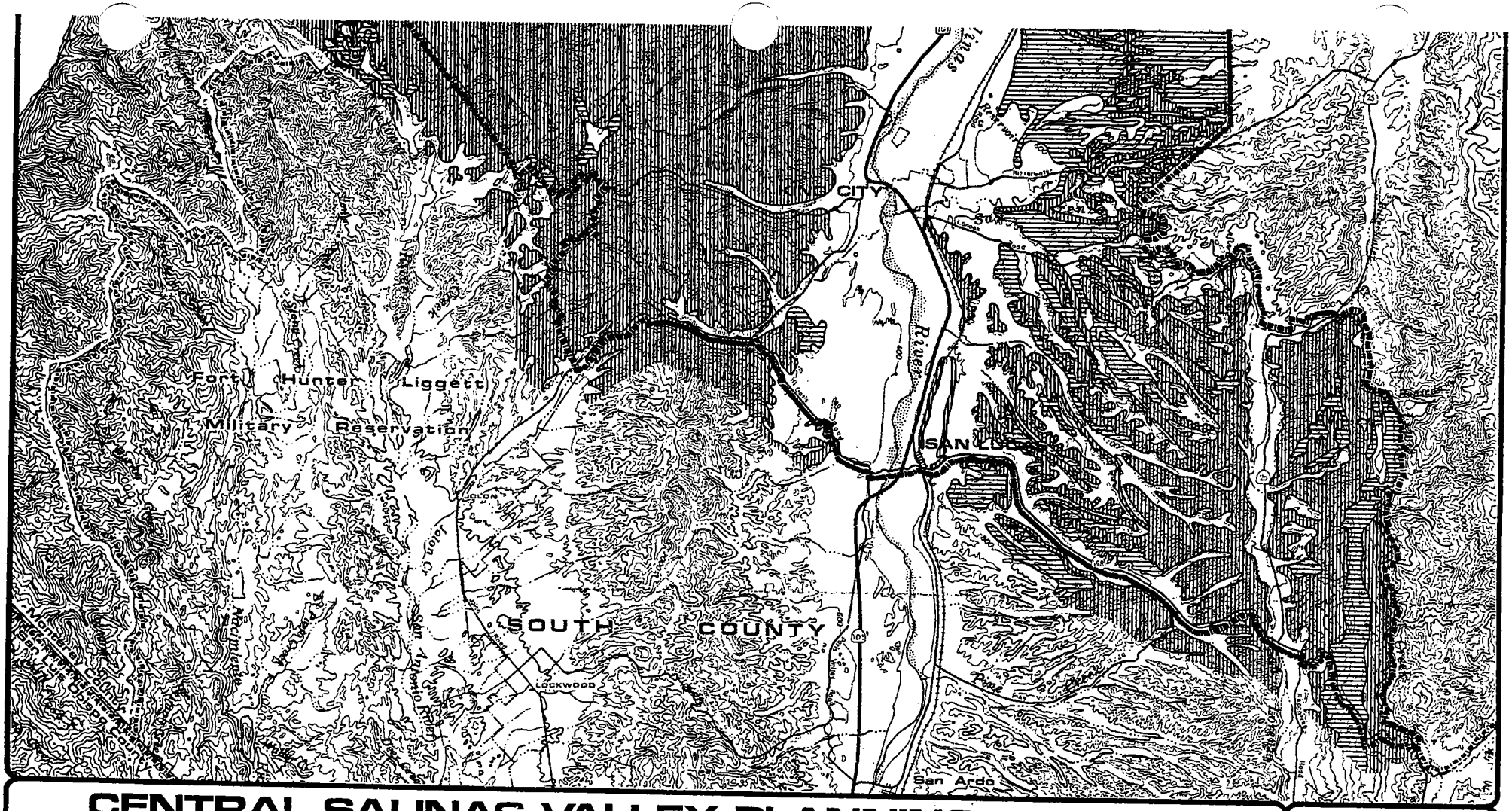
Slope is a significant factor in soil stability, rate of erosion, and runoff velocity. Figure 2 shows slopes in the Planning Area. Generally speaking, areas of low and moderate slopes correspond roughly to areas of low and moderate soil constraints. Likewise, areas with steep slopes, greater than 30%, tend to have high soil constraints for development. Areas having slopes of 30% percent or more are not considered suitable for development and are more appropriate for open space uses such as grazing and watershed.

Farmlands

Farmlands are the most vital resource of the Central Salinas Valley. They are a result of climate, availability of irrigation water, and soils. The U.S.D.A. Soil Conservation Service has developed and implemented a system for categorizing important farmlands for California and the rest of the nation. The Important Farmlands Inventory (IFI) System distinguishes three categories of farmlands, each with specific criteria. The categories are "prime farmlands", "farmlands of statewide importance", and "unique farmlands." Prime farmlands are lands best suited for producing food, feed, forage, fiber and oilseed crops. Farmlands of statewide importance are lands other than prime that have 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. The Central Salinas Valley contains about 56% of the prime farmlands and farmlands of statewide importance in the County, or about 108,000 acres of prime soils and 20,400 acres of soils of statewide importance. Unique farmlands are lands other than prime and farmlands of statewide importance that are currently used for the production of specific high value food and fiber crops.


GREATER MONTEREY PENINSULA
Carmel Valley Village
TORO
GREATER SALINAS
CHUALAR
CACHAGUA
COAST
GONZALES
SOLEDAD
Pinnacles National Monument
GREENFIELD
PACIFIC OCEAN



CENTRAL SALINAS VALLEY PLANNING AREA

PLANNING AREA BOUNDARY

FIGURE 2

SLOPE

0 - 10%

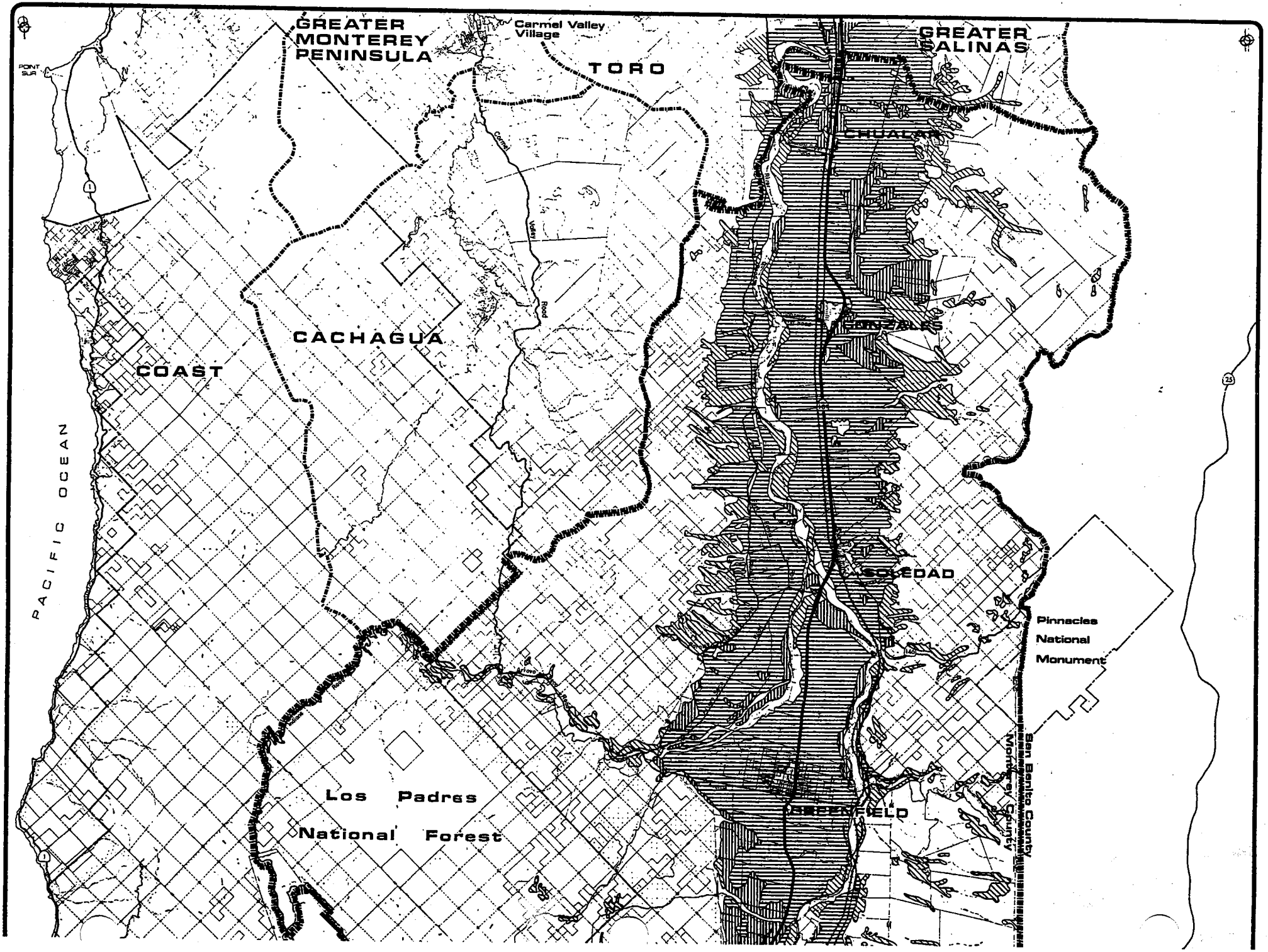
10 - 30%

30% OR GREATER

0 6000 12000
FEET
DECEMBER 1981

Monterey County Planning Department

SOURCE: MONTEREY COUNTY PLANNING DEPARTMENT, 1983.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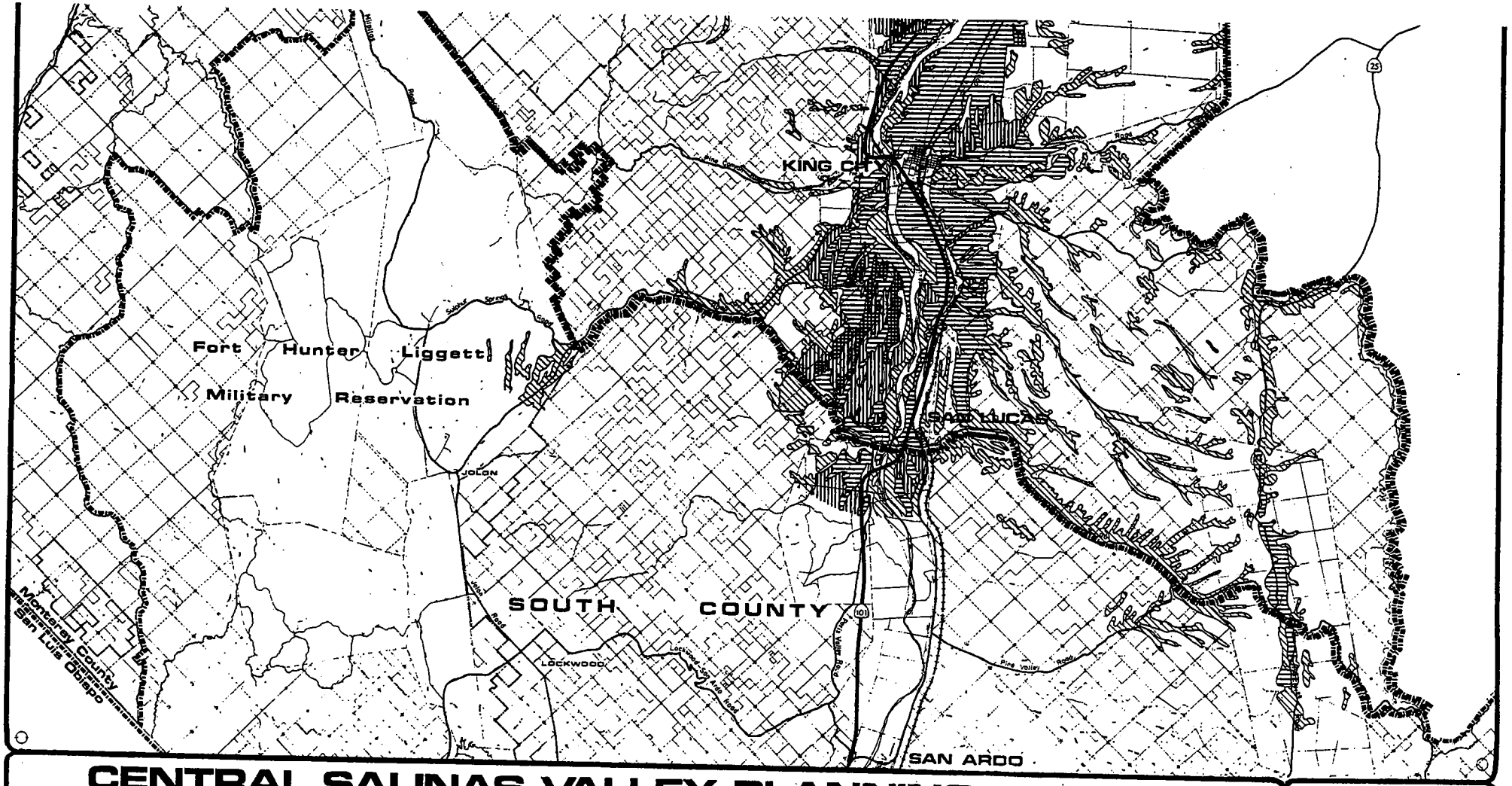


CENTRAL SALINAS VALLEY PLANNING AREA

PLANNING AREA BOUNDARY

FIGURE 3

IMPORTANT FARMLANDS

- PRIME FARMLANDS
- UNIQUE FARMLANDS
- FARMLANDS OF STATE-WIDE IMPORTANCE
- FARMLANDS OF LOCAL IMPORTANCE

SOURCE : U.S. DEPARTMENT OF AGRICULTURE, SOIL CONSERVATION SERVICE, 1982.

0 8000 16000
FEET
DECEMBER 1981

Monterey County Planning Department

As shown on Figure 3, most of the Central Salinas Valley floor is classified as important farmlands, with the largest amount of prime farmlands located north of the City of Greenfield. As the local climate and soil conditions vary from one end of the valley to the other, dominant crops also vary. Broccoli and cauliflower are cultivated at the northern end of the valley where the temperatures are cooler. Carrots are grown on the east side of the central portion of the Planning Area, and beans and potatoes are planted in much of the drier south valley. Extensive plantings of wine grapes have replaced pasturage on the lower slopes and terraces of the valley from the Soledad area southward. Due to the development of new seed varieties, lettuce is now planted throughout the Planning Area and is the valley's principal cash crop. In 1981, total cash value resulting from agricultural production in the Planning Area was $389,000,000. This value amounted to almost 43% of the total county agricultural cash value for that year.

WATER RESOURCES

Rivers and Streams

The surface water of the Central Salinas Valley Planning Area is divided among portions of three major watersheds: the Salinas Valley Basin, the Arroyo Seco Basin, and the San Antonio Basin. All of the watersheds in the Planning Area ultimately drain into the Salinas Valley Basin. The Salinas River has a year-round flow, although during the dry months the river is reduced generally to a subsurface flow regulated extensively by releases from San Antonio and Nacimiento Reservoirs. With the exception of the Arroyo Seco River, all other surface rivers and streams are intermittent, carrying surface flows during the wet winter months yet dry during the summer months. Direct surface flows to the Salinas River occur only at the height of the winter rainy season with the San Lorenzo Creek and the Arroyo Seco River as the main tributaries.

The Paraiso Hot Springs, located on the eastern slope of the Sierra de Salinas foothills about 12 miles northwest of Greenfield, are a unique resource in the Planning Area. The Springs consist of hot, warm, and cold mineral water ideal for drinking, swimming, and taking the cure.

No significant reservoirs are located in the Planning Area, although releases from San Antonio and Nacimiento Reservoirs are timed to recharge the Salinas Valley aquifers.

Groundwater Resources

The water supply for the Central Salinas Valley is almost exclusively derived from groundwater. The existence of groundwater is the result of water percolating into alluvial materials and porous geologic structures. The occurrence of groundwater basins in the Planning Area follows the general pattern of surface water floodplains. The largest groundwater basin in the County, the Salinas Valley Basin, has been divided into subareas for the monitoring of groundwater. The

Planning Area overlays portions of the Upper Valley, Forebay, East Side, and Pressure subareas. Since there are no geologic barriers dividing these subareas, there is free groundwater movement between them. The valley should, therefore, be considered as a single hydrologic unit.

Infiltration in the Salinas River channel is the principal source of groundwater recharge for the Salinas Valley groundwater basin. The recharge area is generally believed to end at a point between Chualar and Salinas. Both natural runoff and conservation releases from Nacimiento and San Antonio Reservoirs contribute to the flow in the Salinas River. Infiltration from other smaller tributaries that drain the highland areas also provide recharge to the groundwater basin. The down-valley movement of this subsurface water is essential to the containment of saltwater intrusion into the Pressure subarea. Higher elevations tend to have little potential for groundwater recharge due to either shallow or non-existent soils and steep slopes. These same characteristics pose problems for septic suitability and limit water availability.

Groundwater consumption in the Planning Area has increased over time as the amount of valley croplands under irrigation has continued to increase annually. Continued residential, commercial and industrial development has also increased groundwater consumption, but with agriculture accounting for at least 90% of the area's water consumption, demand generated by these sources has been relatively small.[1] Agricultural and urban consumers are now using more water than is recharged annually, resulting in a groundwater overdraft.

A recent study estimated that groundwater overdraft in the entire Salinas Valley amounts to about 20,000 acre-feet annually.[2] Other studies estimate the overdraft to be much larger. The July, 1984, Land and Water Resources - Monterey County report, by the Department of Water Resources (DWR) estimated that the overdraft in 1979 for the four subareas amounted to 58,100 acre-feet. Table 1 shows the 1979 Hydrologic Balance for the four Detailed Analysis Units (DAUs) which correspond to the four sub-basins of the Central Salinas Valley.

1. Monterey Peninsula Water Management District, Water Conservation Plan for Monterey County (1985), p.71.

2. CHZM Hill, Arroyo Seco Dam Feasibility Study Final Report (1982), p. III 8.

Table 1

1979 HYDROLOGIC BALANCE

Item	Pressure Area (DAU 48*)	East Side (DAU 49**)	Forebay Area (DAU 50)	Upper Valley (DAU 51***)
1979 Water Supply (1000 ac-ft/yr)	207.7	131.9	184.3	163.7
Base Period 1970 - 1975	**207.7**	**129.2**	**184.5**	**164.4**
Total Net Water Demand (1000 ac-ft/yr)	230.8	144.2	194.4	176.3
Net Change in Total Groundwater Storage	-12.1	-12.3	-10.1	-12.6
Seawater Intrusion	-11.0	0.0	0.0	0.0
Total Net Change in usable Groundwater Storage	-23.1	-12.3	-10.1	-12.6

* - Shared with Greater Salinas and Toro Planning Areas
** - Shared with Greater Salinas Planning Area
*** - Shared with South County Planning Area

Source: DWR, Land and Water Resources - Monterey County, July 1984.
AMBAG, Systems Capacity Analysis, Part I, June 1986.

Because water supplies may vary from year to year, the Table also shows the water supply for a base period, which approximates the long-term historical yearly average supply. The Table indicates that 1979 was close to being an average year in terms of supply meaning the overdrafts for that year were not caused by below average water supplies.

The overdraft situation is exacerbated as agricultural and urban water demand increases. According to DWR projections, agricultural and urban uses will increase water demand by 27,000 acre-feet by the year 2000.[3]

In the East Side area, where there is little natural recharge of the groundwater basin, pumping lowers the groundwater levels and causes large sub-surface flows to the East Side area from the Pressure area. This combined with excessive pumping in the Pressure area has lowered the groundwater table below sea level near the coast allowing seawater to intrude into that portion of the Pressure sub-basin.

Sustained overdrafting may result in irreversible detrimental effects to the basin in addition to seawater intrusion. Other effects include increases in total dissolved solids, nitrate build-up, higher pumping costs, and land subsidence.

Future Supplies

It is evident that additional supplies of water will be necessary if irrigation and development are to increase in the Central Salinas Valley. Urban water conservation is not expected to be a significant factor in water supply as per capita water uses in the Planning Area are already quite low.[4] Several water projects that would affect the Central Salinas Valley have been discussed.

A major reservoir on the Arroyo Seco River has been proposed since the 1930s, although its exact location has yet to be determined. The yield from such a project could range from 40,000 to 90,000 acre-feet annually. Releases from this reservoir would join releases from Nacimiento and San Antonio reservoirs in the Salinas River. Widespread support for this project has been lacking in the past, however, as groundwater overdrafts an water quality problems in the Salinas Valley become more serious, construction of the dam may become more feasible.

A surface water canal delivery system to supply agricultural water needs in the overdrafted East Side area has also been discussed. Decreasing East Side overdrafts would decrease the subsurface flow from the Pressure area to the East Side area, reducing both the water loss and saltwater intrusion in the Pressure area. The possibility of an East Side project is remote without the construction of an additional water supply such as the Arroyo Seco Dam. Ground water from the Arroyo Seco Cone area has been proposed as another possible water source for this project.

3. Department of Water Resources, Land and Water Resources - Monterey County (July, 1984), pp. 8 & 16.

4. Ibid, p. 7.

Wastewater reclamation and treatment of imported surface flows in the Central Salinas Valley have not been proposed, but could become economically feasible at some time in the future.

VEGETATION

The Central Salinas Valley contains four major plant communities common to the South Coast Mountain Range: foothill woodland, chaparral, riparian woodland, and grassland. The foothill woodlands are found in the more protected areas including the canyons, coastal terraces, and sheltered valleys. Trees in this community include coast live oak, buckeye, madrone, and California bay laurel with an understory of herbs, grasses, and small shrubs such as toyon, coffeeberry, and poison oak. The foothill woodland community supports an abundance of wildlife. Chaparral communities are composed of a uniform covering of hardy evergreen shrubs forming dense, impenetrable thickets. Chaparral may be found on dry slopes and on slopes with rocky or infertile soil. Chaparral species common in the Planning Area include chamise, manzanita, coast live oak, interior live oak, toyon leather oak, and knobcone pine.

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. Dense stands of trees and a thick understory of shrubs are often present. Wildlife tends to be particularly abundant here. Fresh water, 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. Characteristic trees include black cottonwood, white alder, box elder, California sycamore, California buckeye, California bay tree and willows. Common shrubs include California wild rose, wild blackberry, snowberry and mugwort. Riparian corridors may extend through other plant communities forming long linear tracts of similar vegetative resources. Grasslands in the Planning Area are declining due to increased urbanization and agricultural uses. They are, therefore, generally located where soils and topography prohibit cultivation. Existing grassland was created in large part through burning practices of the early American Indians and agricultural practices of the white settlers. Many of today's annual grasses such as rye, wild oats, bromegrass, meadow fescue, needle grass, bluegrass, and blue bunch grass were introduced by white settlers. Native bunch grasses are still found in a few remote locations or among the non-native grass species. Grassland often contains native herbaceous plants such as lupine, clarkia, clover, storksbill, bird's foot trefoil, and owl's clover. Two rare and endangered plant species, Arroyo Seco Bush Mallow and Hickman's Checker Mallow, occur in the Arroyo Seco watershed above the "Pools" site near Indians Road.

WILDLIFE

Wildlife in the Central Salinas Valley is diverse and abundant despite the intense cultivation of the valley floor. Throughout the natural and cultivated areas, small mammals, reptiles, and birds

typical of central California are found in fairly consistent populations. Wildlife in riparian areas is even more abundant. Larger predators tend to avoid urbanized and cultivated areas, and they are trapped and hunted in the grasslands. Nevertheless, significant populations of mountain lion, bobcat, and coyote are thought to inhabit the mountainous areas of the Planning Area. Wild boar are a popular game animal on the eastern slopes of the Valley. Raptors are also represented by large populations of red-tailed hawk, turkey vulture, and several owl species. Golden eagles are less frequent but known to occur. The San Joaquin kit fox is also known to occur in the eastern and southern portions of the Planning Area and has been classified as a rare species. Continued grazing and watershed use of the grasslands and brushland hills appears to protect this species, but it has been geographically cut off from the rest of the state population, preventing genetic mixing. Southern bald eagles occur in the valley during migration in the winter, and Peregrine falcons have been sighted near the Pinnacles area. Both of these species are currently endangered and efforts are underway to restore populations of both raptors to non-endangered status.

ENVIRONMENTALLY SENSITIVE AREAS

Although several rare or endangered species of plants and animals have been identified in the Planning Area, all the ecosystems in the Central Salinas Valley have yet to be surveyed. Consequently, specific "environmentally sensitive areas" have not been identified. Various public and private organizations such as the California Native Plant Society, the California Department of Fish and Game, the California Natural Areas Coordinating Council, the Heritage Conservation and Recreation Service, and the California State Water Resources Control Board have programs that identify both natural areas and rare and endangered flora and fauna. The inventories developed by these organizations can serve as the initial step in preserving these areas and the plant and animal species dependent upon them. The State Department of Fish and Game considers all riparian habitats in the County to be Areas of Special Biological Importance (ASBI). Areas of Special Biological Importance are those areas determined by the Department of Fish and Game (DFG) to be of special importance to one or more kinds of wildlife and are thus considered by the DFG to be particularly sensitive to development. Special consideration should be given to ASBI if wildlife dependent upon these areas is to thrive. Designation of an area as an ASBI is intended to serve as an "early warning" so that potential adverse impacts on ASBI from land use changes can be reduced or avoided. These areas should be the first to be designated as environmentally sensitive areas. The ecological vitality, as well as the practical value of environmentally sensitive areas for sport and recreation, provide sufficient incentive for their long term preservation.

ARCHAEOLOGICAL RESOURCES

The history of the Central Salinas Valley has been traced at least 6,000 years, and perhaps as much as 10,000 years prior to the Spanish colonization of Monterey County. Evidence of the

original Native Indian civilizations is scarce, but the locations of some village sites are known. More evidence of the introduction of European culture exists in the valley. The trails of Portola, Father Junipero Serra, and Juan Bautista De Anza all pass through the Planning Area. These resources provide a source of heritage and identity for present and future residents.

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 during the initial environmental review. Additional professional studies may be required for any project on a site where there is a high probability of archaeologically significant resources.

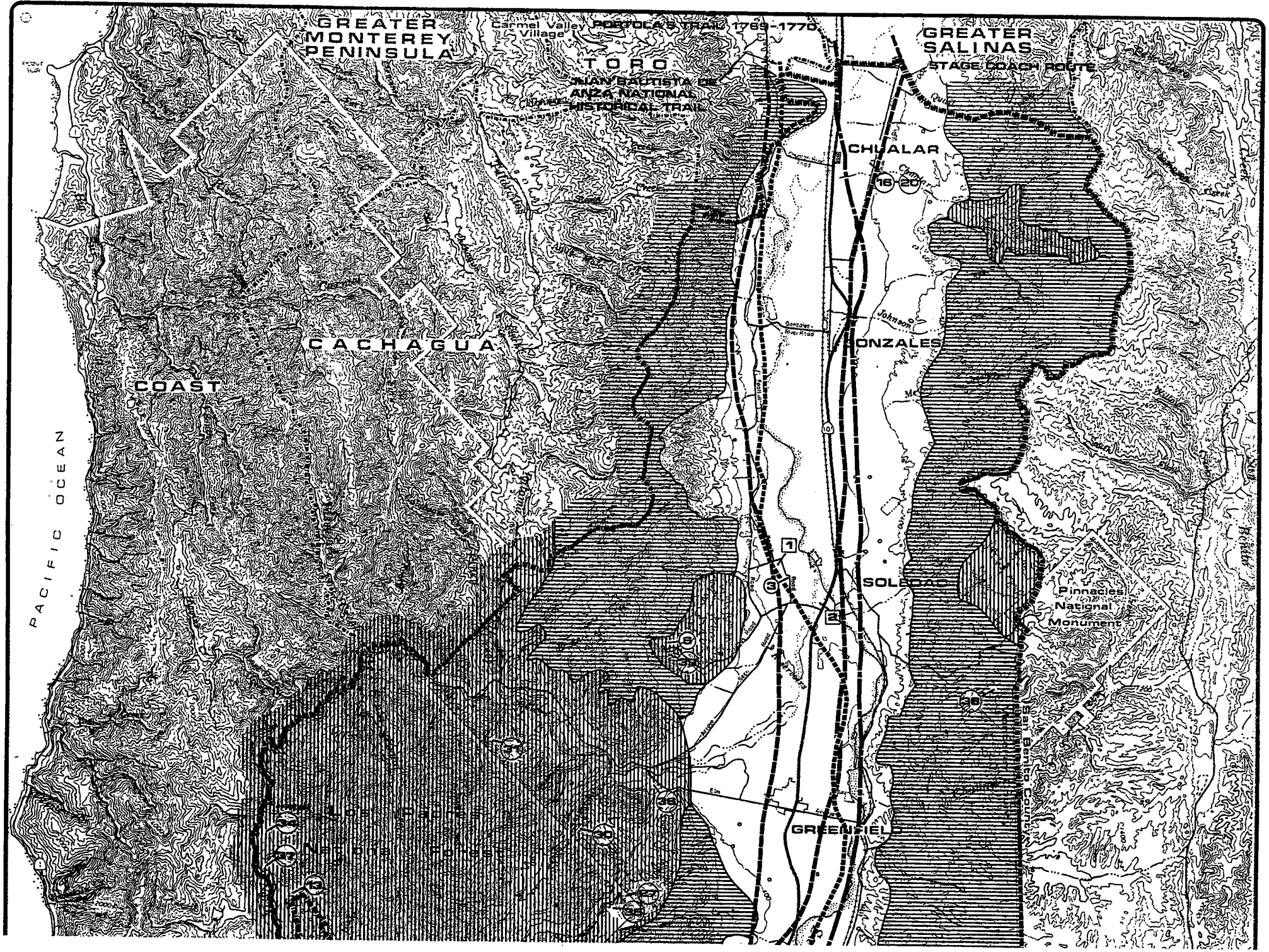
Using available information and applying the various topographic characteristics most often associated with such sites, the County has delineated archaeological sensitivity zones. Three zones, low, moderate, and high, have been established to indicate the probability of an archaeological site in a given location. Zones of high sensitivity are found along the southern reaches of the Sierra de Salinas, in Pine Canyon, and along Highway 25. The valley area has a low sensitivity because, after being intensively farmed, any archaeological sites which may have existed were probably destroyed long ago.

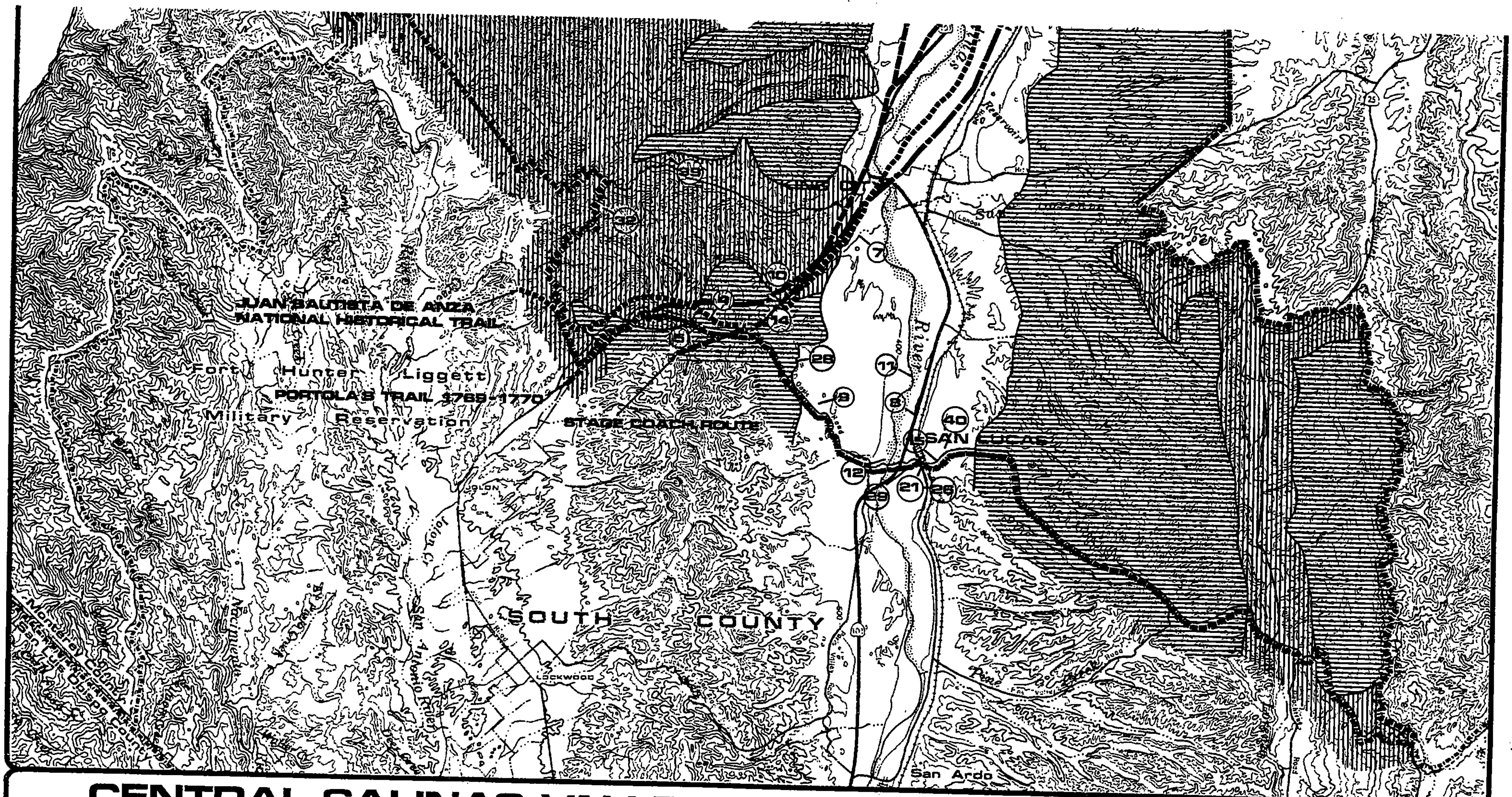
HISTORIC SITES

The Central Salinas Valley contains many vestiges of California's early settlement by non-indigenous peoples. Figure 4 shows the location, and Table 2 provides a listing of historic sites, existing structures, and natural land features 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 Soledad Mission and Richardson Adobe are historic sites of statewide significance. Figure 4 and Table 2 identify nine historic sites, including the sites of three historic adobes, which are no longer in existence. Of special interest in Table 2 are the Indian rock shelters, painted caves, and Pinnacles National Monument. Figure 4 also shows historic routes through the Planning Area taken by early explorers and Spanish missionaries.

SCENIC RESOURCES

The Central Valley contains many areas of natural scenic beauty and rustic charm. Figure 5, Visual Sensitivity, identifies scenic resources within the Planning Area which, because of their scenic value or unusual physical features should either be conserved or protected. Many of these areas are also of historic and cultural significance. Scenic resources include but are not limited to: majestic mountain ranges, rolling hills, forested or wooded areas, meadows, steep slopes and valleys, unusual geologic formations, large or unique water bodies, vista points, scenic trails,


GREATER MONTEREY PENINSULA
Carmel Valley Village
PORTOLA'S TRAIL 1769-1770
TORO
JUAN BAUTISTA DE ANZA NATIONAL HISTORICAL TRAIL
GREATER SALINAS
STAGE COACH ROUTE
CHUALAR
CACHAGUA
COAST
GONZALES
SOLEDAD
Pinnacles National Monument
PACIFIC OCEAN
GREENFIELD
Monterey County



CENTRAL SALINAS VALLEY PLANNING AREA

PLANNING AREA BOUNDARY

FIGURE 4

CULTURAL RESOURCES

ARCHAEOLOGICAL SENSITIVITY ZONES

LOW

MODERATE

HIGH

HISTORICAL SITE

STATEWIDE SIGNIFICANCE

LOCAL SIGNIFICANCE

NOTE: NUMBERS REFER TO HISTORIC SITES (TABLE 2).

SOURCES: GARY BRESCHINI, CONSULTING ARCHAEOLOGIST; MONTEREY COUNTY PLANNING DEPARTMENT, 1983.

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FEET
DECEMBER 1981

Monterey County Planning Department

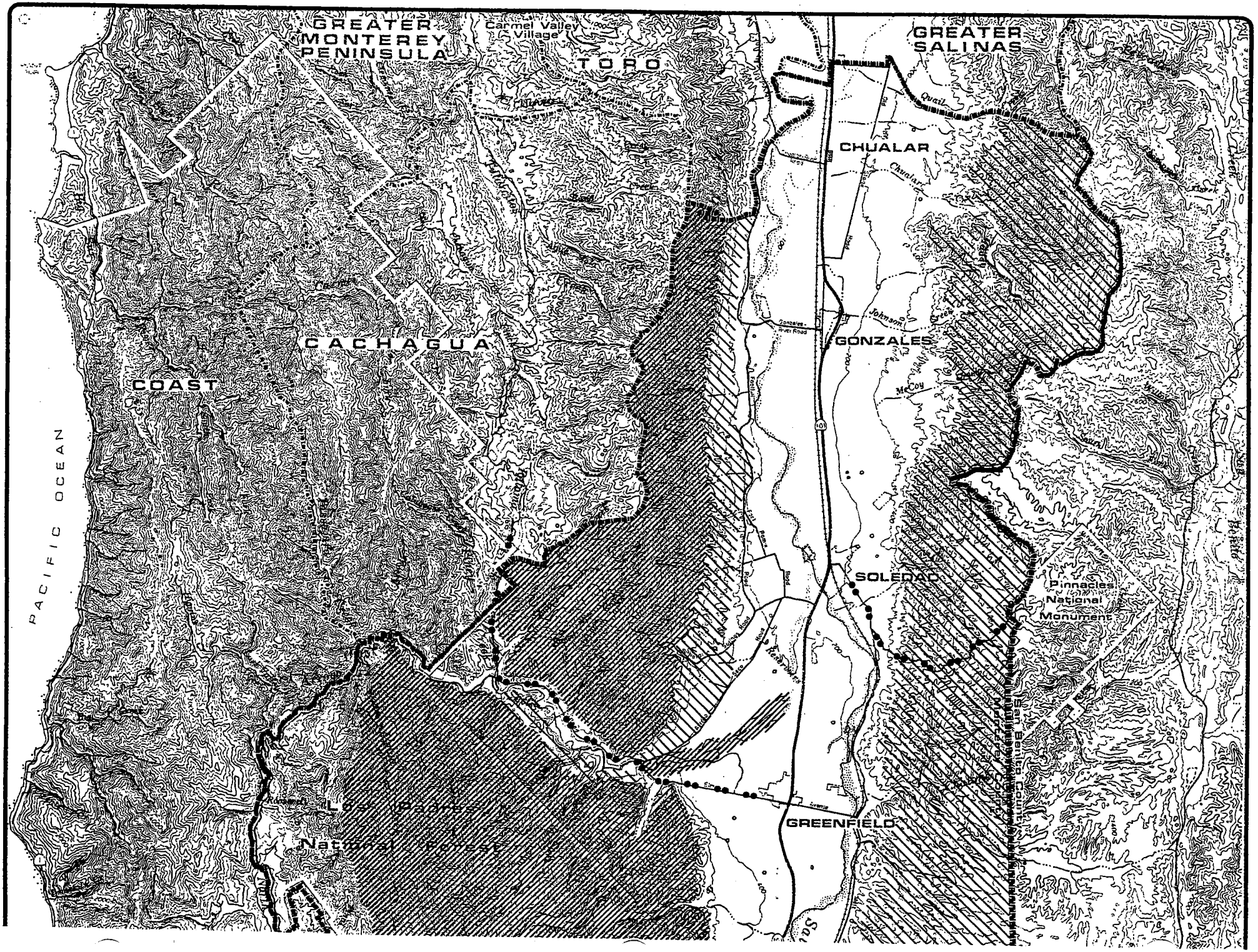
TABLE 2
HISTORIC SITES

Map Number	Site	Date	Location	Comment
	Historic Sites of Statewide Significance			
1	Soledad Mission	1791	Fort Romie Road	Partially reconstructed
2	Richardson Adobe	1843	Paraiso Road	Good condition; State Historical Landmark
	Historic Site of Local Significance			
3	Fort Romie	1890	River Road and Fort Romie Road	No structures remaining
4	Lowe's Cemetary	Mid-1800's	Jolon-King City Road	Across road from stage stop
5				
6	Paraiso Springs Resort	--	Paraiso Springs Road	Still in use
7	San Bernabe Rancho	1840's	Jolon-King City Road	Adobe gone; was stage stop
8	Rancho San Benito	1842	Northwest of San Lucas, on Salinas River	Adobe Adobe in ruins
9	Rancho San Benito Adobe Corral	1822	East of junction of San Luis-Lockwood and Oasis Roads	Built by Mission labor; Adobe in ruins
10	Site of Gamboa Adobe	--	South of King City & North of Cherry Canyon on Jolon Road	Adobe gone; prominant local pioneer family
11	Francisco Garcia Adobe	1842	San Bernabe Vineyard; (Originally 2 story built by F. Garcia)	Adobe in ruins
12	Mission Corral	1822	North of Oasisi Road, west of Salinas River; Built by Father Padro Cabot & Mission Neoybytes from Mission San Antonio	Adobe in ruins
	Structures of Architectural Significance			
13	"The Indians" adobe	Mid-1800's	Milpitas Road	Settled by Mission Indians after secularization; adobe incorporated into present house
14	Adobe Inn/Dunn Adobe	1864	Jolon-King City Road	Stage stop; fair condition
15	Treecony Ranch and adobe barn	Mid-1800's	San Lucas	Still in use
16	Peel House	1900+	Chualar	Good Condition
17	Pruitt House	1890	Chualar	Good Condition
18	Danish Community Church	1900+	Chualar	Moved, now a residence
19	Enevoldsen House	1900+	Chualar	Good Condition
20	Oneil House	1902	Chualar	Good Condition
21	Cowley Place	1875	San Lucas	Good Condition
22	(San Lucas) Church St. Luke's	1903	San Lucas	Good Condition
23	Arner Place	1890+	San Lucas	Good Condition
24	Beasley Place	1885	San Lucas	Good Condition
25	Bunte Store	1886	San Lucas	Second story removed; still in use; orginally Goldwaters
26	Boyd House	1890	San Lucas	Originally a restaurant; converted to residence 1900+
27	Antonio Boronda Adobe	Pre-1870	Relis Canyon	Ruins; walls standing
28	Jolon Road Grainary	1890	Jolon Road	Good Condition
29	San Lucas Schools	1930's	San Lucas WPA Project; Architect Robert Stanton	Still in use
30	Indian tar seep and archaeological site		Vaqueros Canyon	
31	Indian rock shelters and archaeological site		Horse Canyon	
32	Indian painted cave and		Oat Hills	
33	Paraiso Springs Archaeological Site		Paraiso Springs	
34	Archaeological Site		Milpitas Road	
35	Archaeological Site		Relis Canyon	
36	Archaeological Site		Greenfield-Arroyo Seco Road	
	Natural Land Features of Local Significance			
37	"The Indians" Rock		South of Junipero Serra Park	Massive rock features
38	"The Pinnacles"		Highway 146, at San Benito County Line	National Monument; rock formations; outlaw hideout
39	"Robber's Roost"		Pine Canyon	Rock formation; hideout
40	Fossil shells		Highway 198 at Freeman Flat Road	Exposed marine fossil-bearing strata

Source: Monterey County Planning Department, 1983.

roads, and highways. Visually sensitive areas are those scenic resources visible from existing, proposed, or potential scenic routes. Criteria for visual sensitivity include duration of view, degree of variety involved, and uniqueness of view. Sensitive areas contain scenic resources which have local or area significance.

Visually sensitive areas of the Central Salinas Valley include the foothills of the Gabilan and Sierra de Salinas Mountains, Pine Canyon, Chualar Canyon, Arroyo Seco watershed, and the Salinas Valley floor. Areas identified as highly sensitive are those possessing scenic resources which are most unique and which have regional or countywide significance. The highly sensitive areas in Figure 5 are so designated because the prominence of the ridgelines and frontal slopes with their unique vegetation are important in giving the Planning Area its rural character. Other highly sensitive areas are found along the Arroyo Seco River.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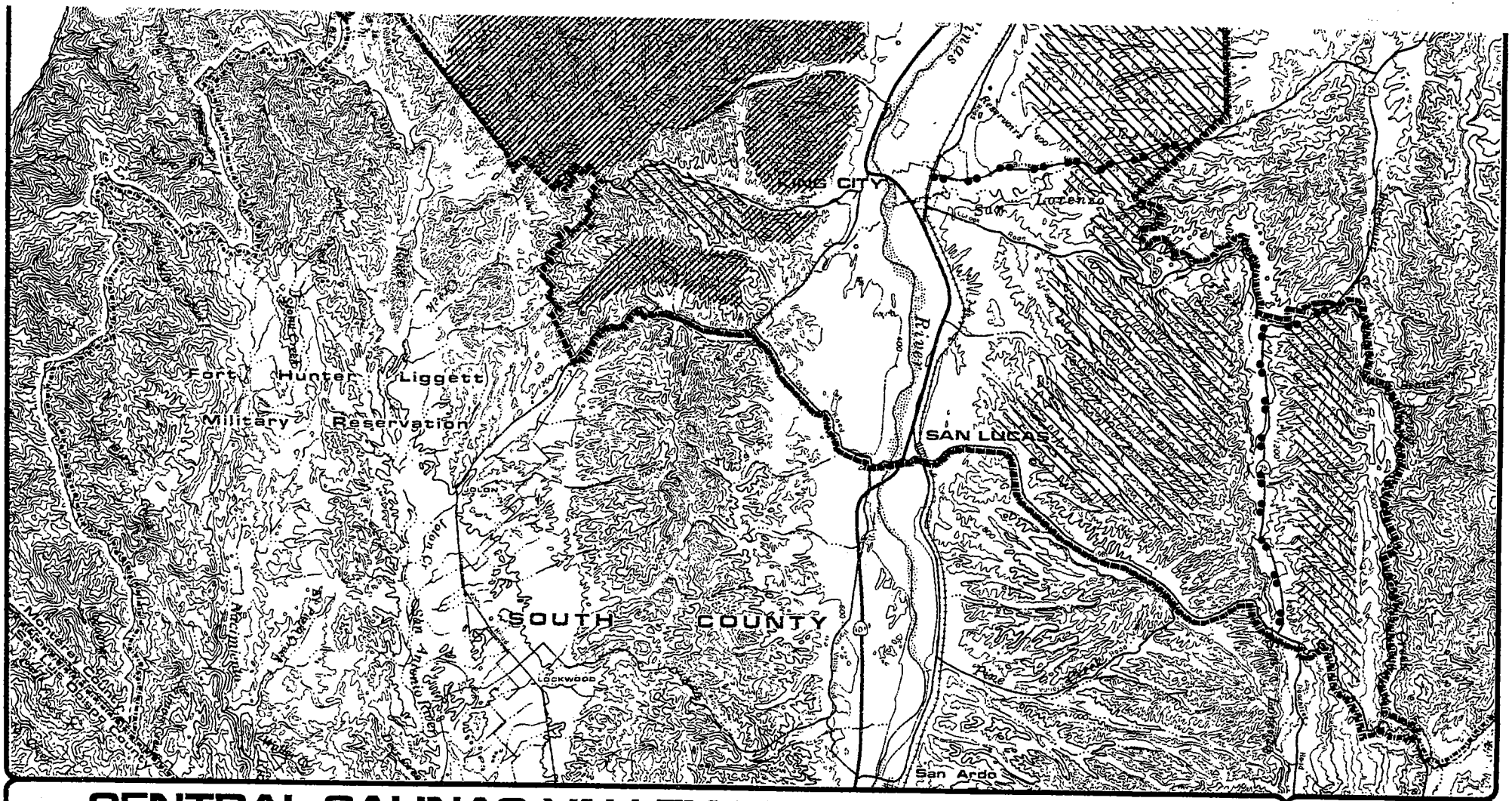


CENTRAL SALINAS VALLEY PLANNING AREA

PLANNING AREA BOUNDARY

FIGURE 5

SCENIC HIGHWAYS & VISUAL SENSITIVITY

PROPOSED SCENIC HIGHWAY/SCENIC ROUTE

HIGHLY SENSITIVE AREAS

SENSITIVE AREAS

0 6000 12000 FEET

DECEMBER 1981

Monterey County Planning Department

SOURCES: MONTEREY COUNTY LAND USE PLAN, 1982; MONTEREY COUNTY PLANNING DEPARTMENT, 1983.

CHAPTER II: 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 the possible negative effects of development in the 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.

SEISMIC AND GEOLOGIC HAZARDS

The Central Salinas Valley is bordered on the east side by the San Andreas Fault, which forms the boundary between two of the world's largest tectonic plates. Because of the likelihood of an earthquake along its length, the San Andreas has been classified as an "active" fault as per the Alquist-Priolo Special Studies Zones Act of 1972. The state classification mandates that seismic surveys be conducted for any project located within 1/8 mile of the observed fault trace. Many faults not classified as "active" by the Alquist-Priolo Act are still considered by geologist to be active and capable of inflicting severe loss of life and property. Several potentially active faults occur in the Planning Area (see Table 3). The San Fernando earthquake of 1971 in Southern California is an example of an "inactive fault" causing tremendous damage and destruction. Many of the documented faults in the Planning Area are considered to be part of the San Andreas Fault complex. Figure 6 illustrates the extent of this fault complex and shows that the Reliz Fault System bisects the Planning Area, running roughly parallel to the San Andreas Fault Zone.

Table 3

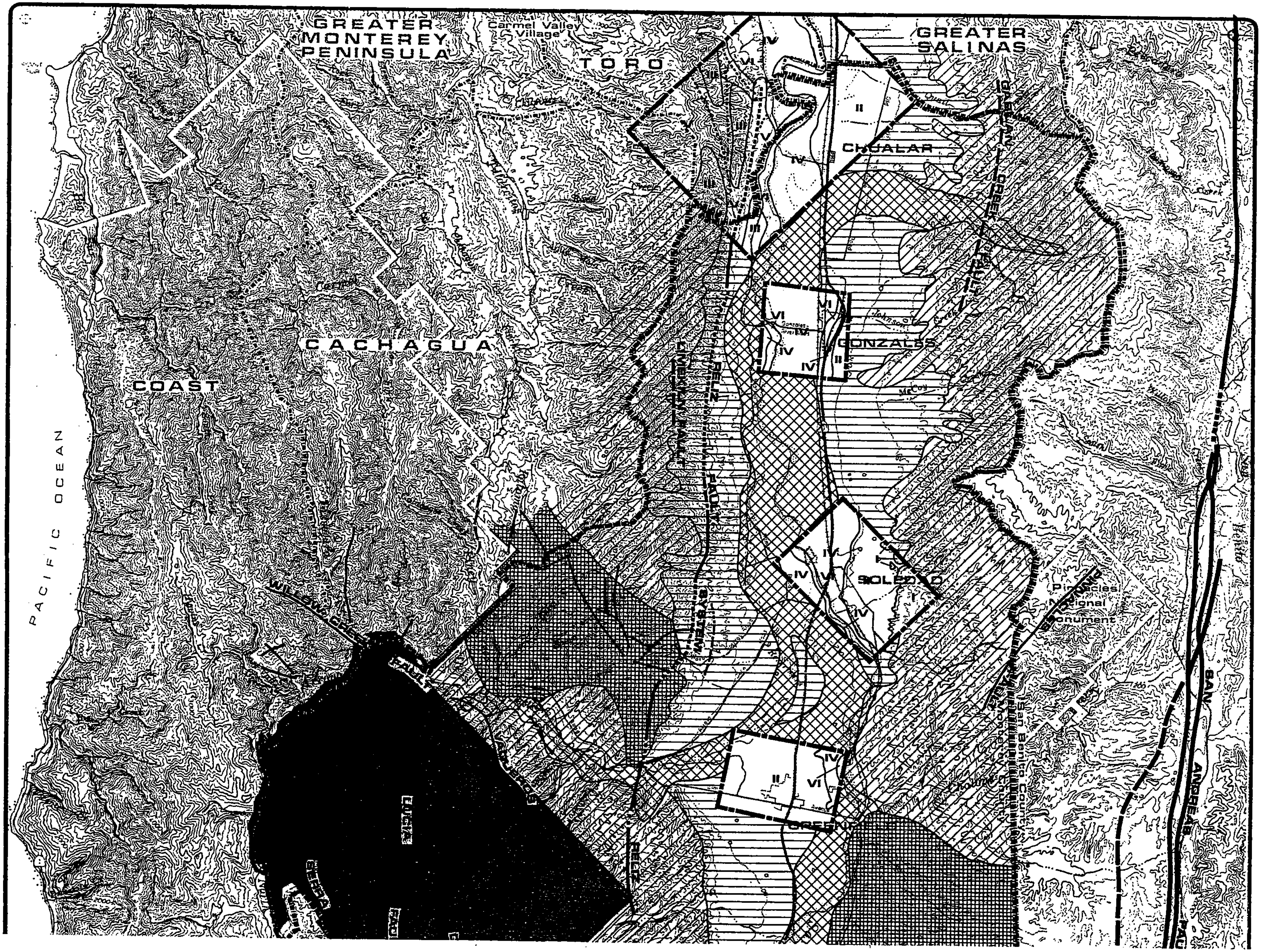
EARTHQUAKE FAULTS IN THE CENTRAL SALINAS VALLEY

Fault	Active	Potentially Active
San Andreas	X	
Gabilan Creek		X
Reliz Fault System		X
Limekiln		X
Los Lobos		X

Source: Burkland & Associates Monterey County Seismic Safety Element, 1975.

The Limekiln Fault west of Chualar appears to be a splinter of the Reliz Fault System. The Gabilan Creek Fault located in the foothills east of Chualar, as well as the Los Lobos Fault at the southern boundary of the Planning Area, also parallel the San Andreas Fault. Of these, the Reliz Fault System is believed most capable of inflicting significant damage.

The Central Salinas Valley has been the epicenter of four major earthquakes in the recent past (Table 4) yet the San Andreas Fault remains the most significant seismic hazard. A major earthquake on the San Andreas Fault could cause severe groundshaking, partial or complete destruction of structures, and human casualties. This is based on the 1906, San Francisco Earthquake, rated at 8.3 Richter with an epicenter more than 100 miles away.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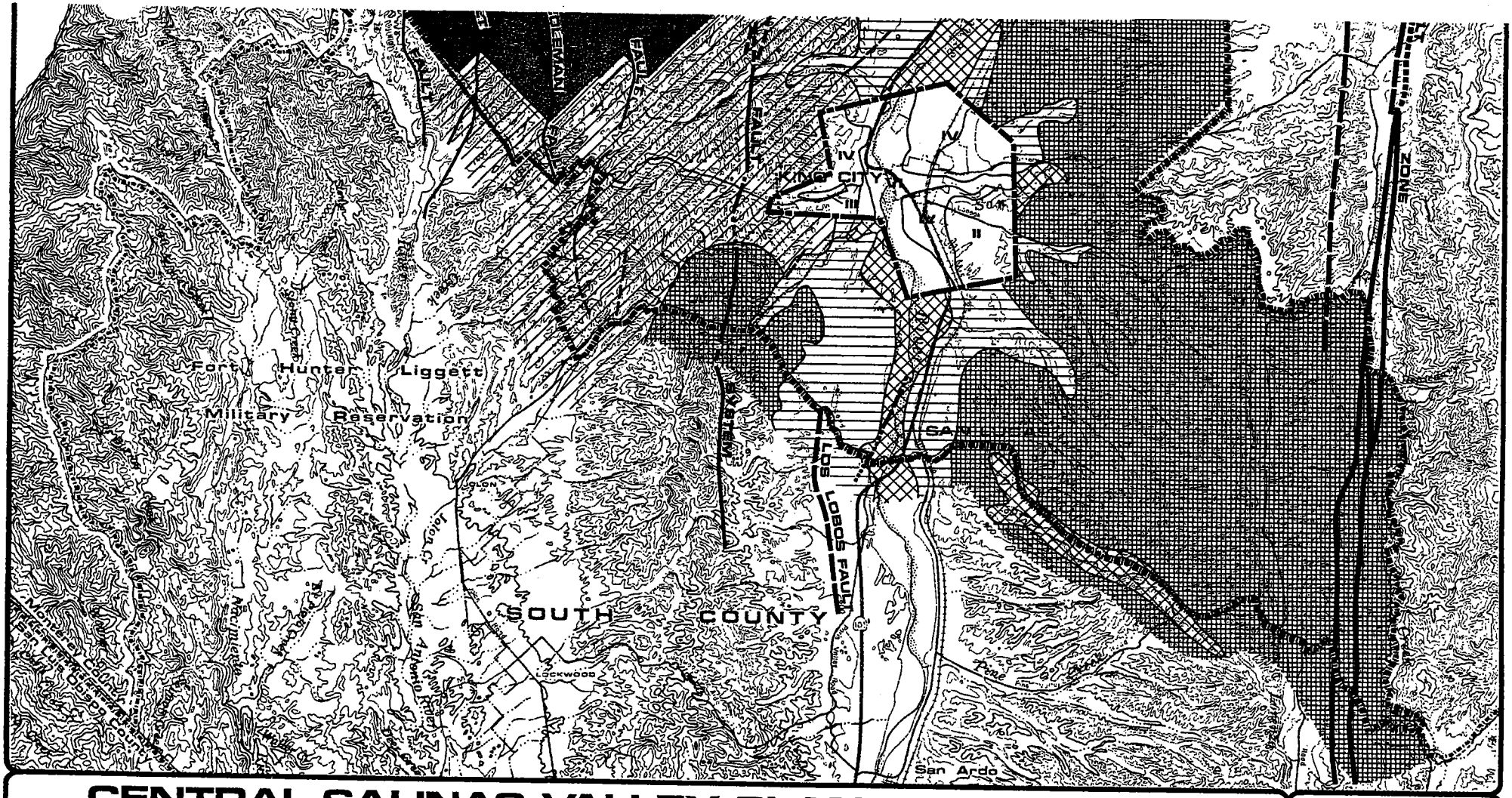
SOLEDAD
PACIFIC OCEAN
Pinnacles National Monument
SAN ANDREAS



CENTRAL SALINAS VALLEY PLANNING AREA

PLANNING AREA BOUNDARY

FIGURE 8

SEISMIC HAZARDS

AREA STUDIED BY BURKLAND & ASSOCIATES

NOT PART OF STUDY

VERY LOW — I

LOW — II

RELATIVELY STABLE AREAS

TERRACE DEPOSITS

MODERATE — III

MODERATELY HIGH — IV

HIGH — V

RECENT ALLUVIUM

RELATIVELY UNSTABLE UPLANDS

VERY HIGH — VI

EARTHQUAKE FAULTS

ACTIVE

POTENTIALLY ACTIVE

INACTIVE

(DASHED WHERE APPROXIMATELY LOCATED & DOTTED WHERE CONCEALED)

SOURCE: MONTEREY COUNTY SEISMIC SAFETY ELEMENT, 1975 (BURKLAND & ASSOCIATES); MONTEREY COUNTY PLANNING DEPARTMENT, 1983.

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DECEMBER 1981

Monterey County Planning Department

It is generally believed that the San Andreas is capable of producing an earthquake up to 8.5 Richter, with an epicenter considerably less distant than San Francisco. Given the 50-125 year recurrence interval for a major quake along this fault, seismic hazards on the floor of the valley are considerable.

Table 4

RECENT SEISMIC HISTORY OF CENTRAL SALINAS VALLEY

Date	Locality	Area Felt (sq. miles)	Estimated Intensity Modified Mercalli
July 23, 1956	N.W. of King City	4,000	V
Sept. 30, 1958	S.E. of Soledad		IV
Nov. 17, 1969	Pine Canyon	4,000	V
Nov. 18, 1969	Pine Canyon	3,500	V

Notes: Mercalli Scale Definitions:

IV - Felt by many who are indoors, felt by a few outdoors. At night, some awakened. Dishes, windows, and doors rattle.

V - Felt by nearly everyone, many awakened. Some dishes and windows broken. Unstable objects overturned.

Source: U.S. Department of Commerce, Earthquake History of the United States, 1973.

A major earthquake in the Central Salinas Valley could also trigger liquefaction and landslides of susceptible soils. Liquefaction is the loss of soil strength due to seismic forces acting on water-saturated granular soil. It is a common result of earthquakes in areas underlain by saturated, unconsolidated deposits such as those found along floodplains and river terraces. Within the Planning Area, liquefaction and ground failure potential are severe in the immediate area of the Salinas and Arroyo Seco Rivers. During the 1906 earthquake, liquefaction occurred on both sides of the Salinas River from the Monterey Bay to a point between Gonzales and Soledad. The Central Salinas Valley is relatively free of major landslides. Most known slides occur along the trace of the San Andreas Fault and western side of the valley. Landslide potential is greatest along the Sierra de Salinas Range and the southern portion of the Gabilan Range, north and east of King City.

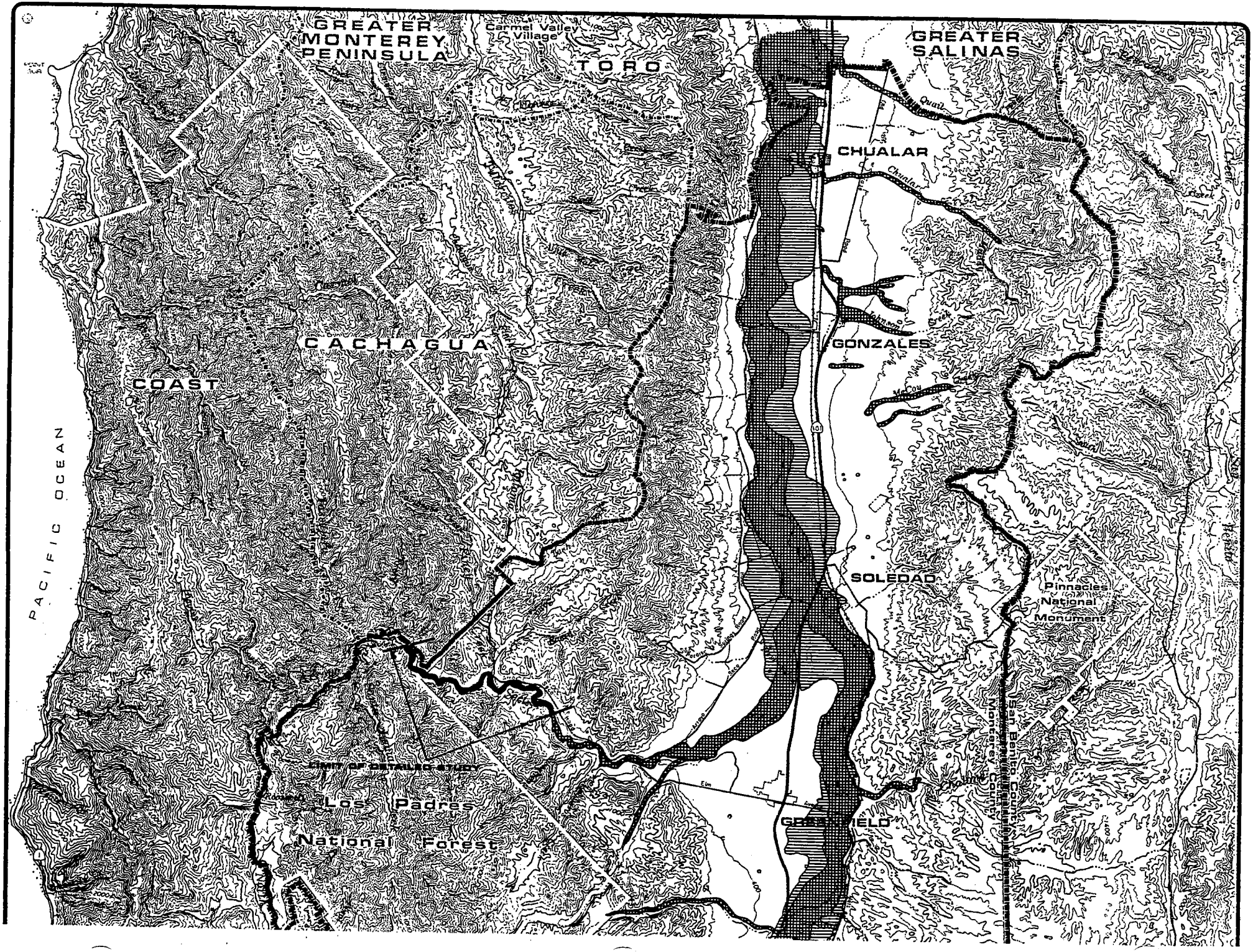
A seismic event such as an earthquake could also trigger the failure of Nacimiento or San Antonio dams causing a flood of major proportions. Most of the area inundated would be along Highway 101.

FLOOD HAZARDS

The major cause of flooding in the Planning Area is surface runoff caused when storms of high intensity and long duration exceed the soil's capacity to absorb water. Since 90% of the rainfall occurs between November and April, flooding is a seasonal hazard which is greatest during an intense or prolonged storm. The Central Salinas Valley has a history of repeated flooding during the years 1911, 1914, 1932, 1941, 1942, 1950, 1966, 1978, 1983, and 1986. The flood-prone valley floor developed in spite of the hazard, aided by the construction of Nacimiento and San Antonio dams in 1957 and 1965, respectively, and the Bryant Canyon Bypass Ditch in 1970, which have reduced the flood hazard. Large areas of the valley floor and the canyon bottoms remain designated as flood prone by the federal government which qualifies designated property for flood insurance under the Federal Flood Insurance Protection Act. These flood prone areas are illustrated in Figure 7 as the 100 year floodplain. All new construction in this flood zone must have flood insurance currently available at federally subsidized rates. In addition, County Ordinance 2966 requires stringent design requirements for new structures in the floodzone, including the requirement that a structure's first occupied floor be above the 100 year flood level. As the map indicates, large areas of the valley, including agricultural and urban areas, could be affected by a flood.

Damage to agricultural land could also result from the failure of private-agricultural earthen levees along the Salinas River. These levees are constantly subjected to the weathering forces of nature as well as seismic activity. Levee failure could cause a loss of farmland, but is not considered a threat to developed areas. The sewage treatment plant in Soledad could be flooded by levee failure resulting in possible health hazards.

Another source of potential flooding is failure of San Antonio and Nacimiento dams which could inundate much of the valley floor. Figure 7 also shows the probable extent of a major dam inundation. The most probable cause of dam inundation is seismic activity. It should, however, be understood that the flood map shows water depths of 6 inches or more, and that structural damage or casualties will not necessarily occur within all areas inundated by dam failure. It is assumed that the City of Greenfield and the adjacent vicinity would be significantly affected in the event of a total failure of the proposed project.


GREATER MONTEREY PENINSULA
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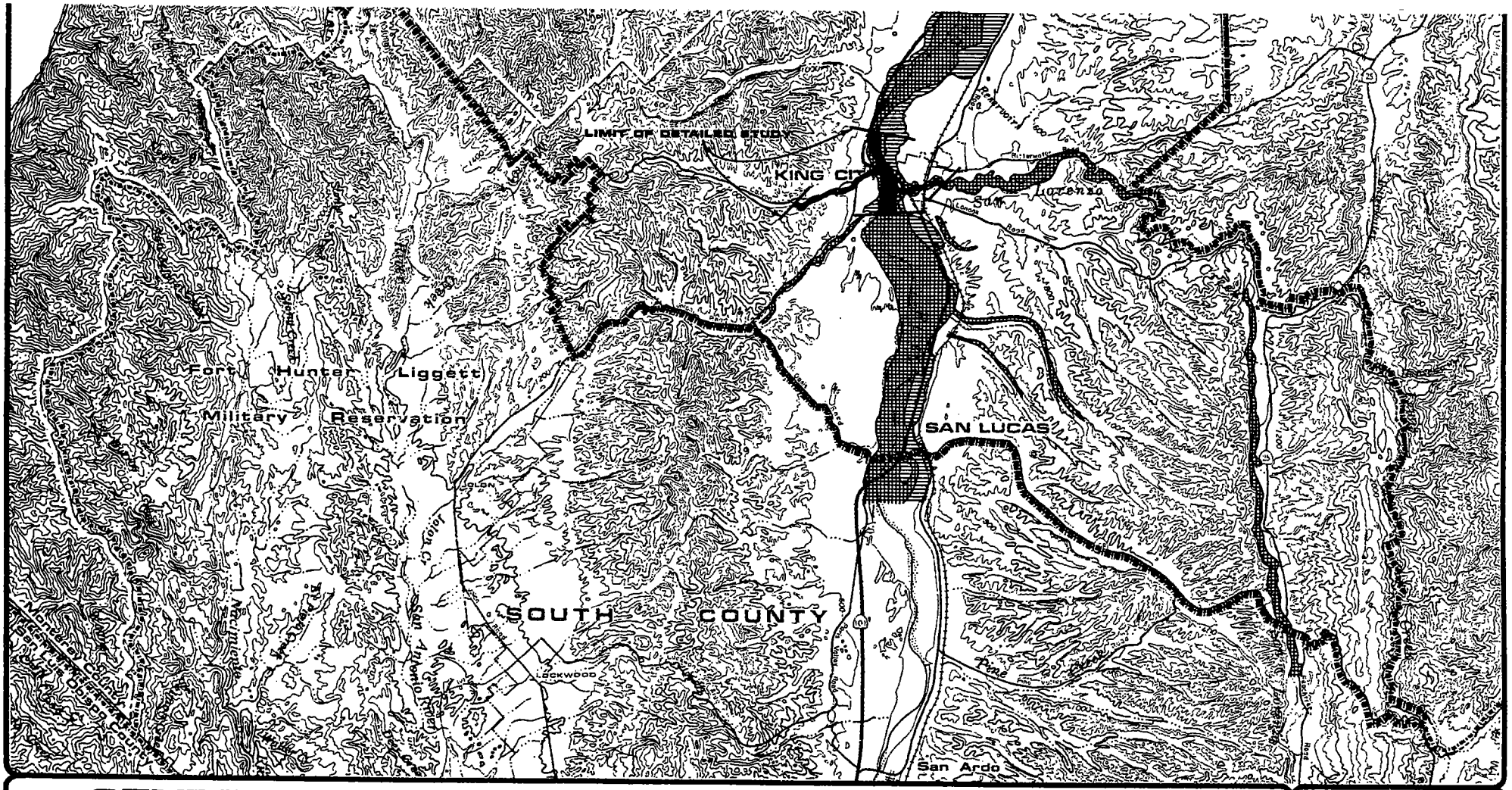
Pinnacles National Monument
LIMIT OF DETAILED STUDY
Los Padres National Forest
GREENFIELD
San Benito County
Monterey County



CENTRAL SALINAS VALLEY PLANNING AREA

PLANNING AREA BOUNDARY

FIGURE 7

FLOOD PRONE AREAS

AREA OF DAM INUNDATION

100-YEAR FLOODPLAIN

FLOODWAY

0 6000 12000
FEET
DECEMBER 1981

NOTES:
1. THE 100-YEAR FLOODPLAIN IS COMPRISED OF THE 100-YEAR FLOODWAY AND FLOODWAY FRINGE AREAS.
2. FLOODWAY FRINGE AND FLOODWAY BOUNDARIES ARE THE SAME UNLESS SHOWN OTHERWISE.
3. THE NOLTE FLOOD INSURANCE STUDY, WHILE GENERALLY ACCEPTED AS ACCURATE, HAS NOT YET BEEN ADOPTED FOR FEDERAL FLOOD INSURANCE PURPOSES AND MUST THEREFORE BE VIEWED AS PRELIMINARY AND UNOFFICIAL.
4. FLOODPLAINS SHOWN OUTSIDE DETAILED STUDY AREAS SHOW LESS DETAILED INFORMATION , BUT HAVE BEEN OFFICIALLY ACCEPTED.
5. CONSULT FLOOD CONTROL FOR MORE DETAIL REGARDING FLOODPLAIN INUNDATION.

SOURCES: FLOOD INSURANCE STUDY, MONTEREY COUNTY, GEORGE S. NOLTE & ASSOCIATES, SEPT. 1980; FEDERAL EMERGENCY MANAGEMENT AGENCY; MONTEREY COUNTY PLANNING DEPARTMENT, AUG. 1982.

Monterey County Planning Department

FIRE HAZARDS

Wildland fires are a major hazard in many areas of the Central Salinas Valley. The principal elements of wildland fires are topography, climate, and fuel loading. The elements are combined in the foothill and canyon areas and constitute a very high fire hazard. These foothills and canyons are covered with easily ignitable grassland and flammable chaparral or woodland plant communities. Under the hot, dry, windy conditions of summer and fall, this vegetation becomes highly combustible. Figure 8 shows the relative wildland fire hazard for the Planning Area. Expanding residential development into these areas can literally add fuel to the fire. Development into areas such as Pine Canyon, Chualar Canyon, and Arroyo Seco represents increased fire hazard unless mitigated by adequate fire safety provisions. The valley floor poses a negligible wildland fire hazard because of the altered state of the landscape, now characterized by irrigated agriculture and urban areas.

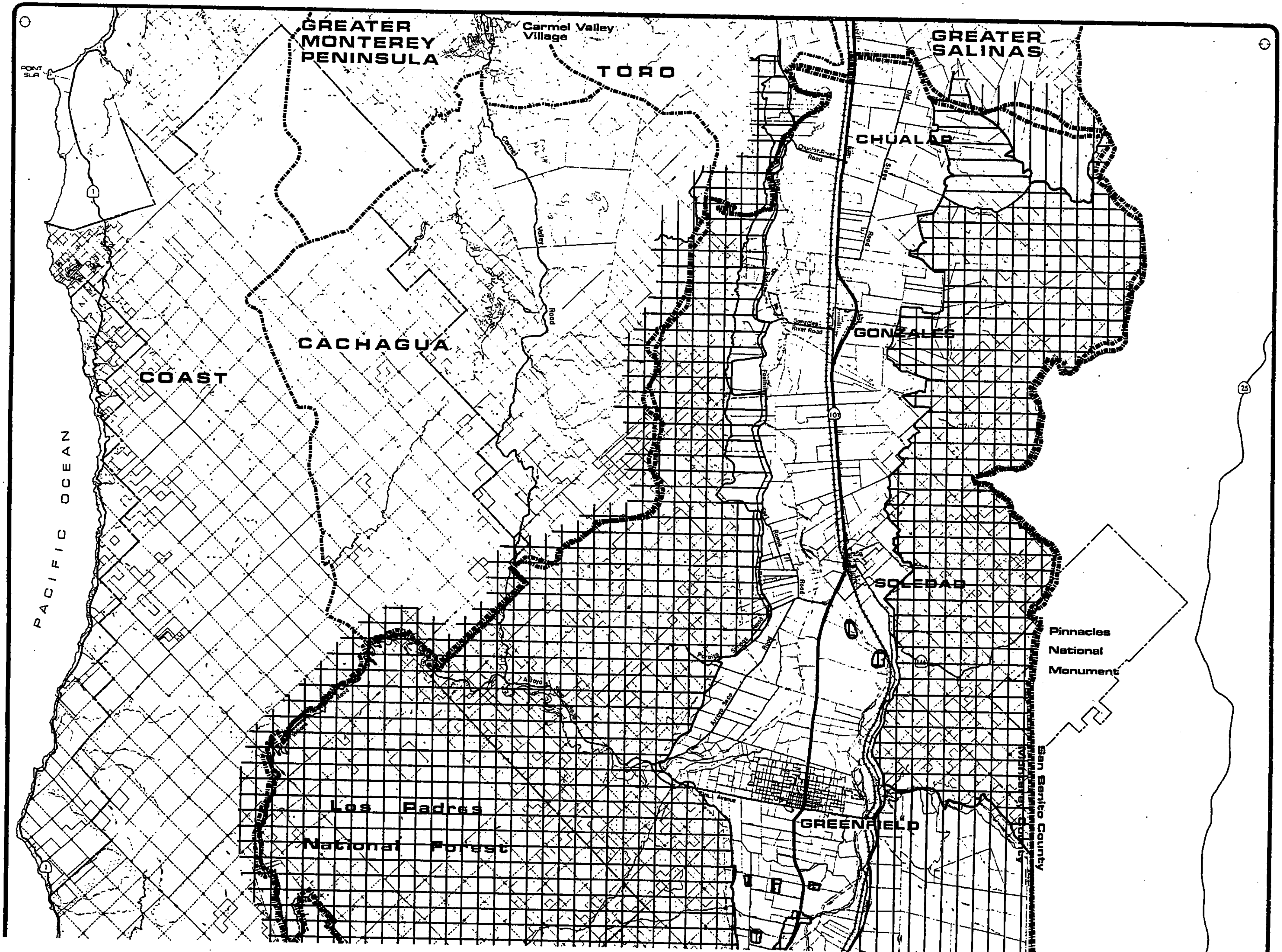
In addition to wildland and structural fires, there are several sites in the Central Salinas Valley subject to fire hazards from oil and natural gas fields and from flammable chemicals. Figure 8 illustrates the locations of very high fire hazard associated with combustible materials sites and chemical storage facilities. These areas appear as islands of very high hazard surrounded by lands with less fire hazard.

Chemical fires present a complex risk. They may precipitate an explosion, send toxic fumes skyward, or result in chemicals being washed into groundwater systems. Because of the extreme risk which chemicals present, their presence should be given careful consideration in nearby land use decisions. Hazardous substances are discussed in the following section.

Municipal fire departments provide service to the incorporated cities. Four fire protection districts and one County Service Area provide protection to most of the unincorporated Planning Area. The California Department of Forestry also provides some wildland fire protection, however, as Figure 8 illustrates, large areas of unincorporated County still lack structural fire protection. Even where fire protection services are provided, the series of small district fire departments are financially pressed to maintain effective services. Alternative methods of providing fire protection which are more efficient and cost effective have been discussed, but no definite solutions have been adopted.

MISCELLANEOUS HAZARDS

Miscellaneous hazards include pesticides, fertilizers, petroleum, and radioactive, flammable, toxic, or explosive materials. As a national leader in agricultural production, employing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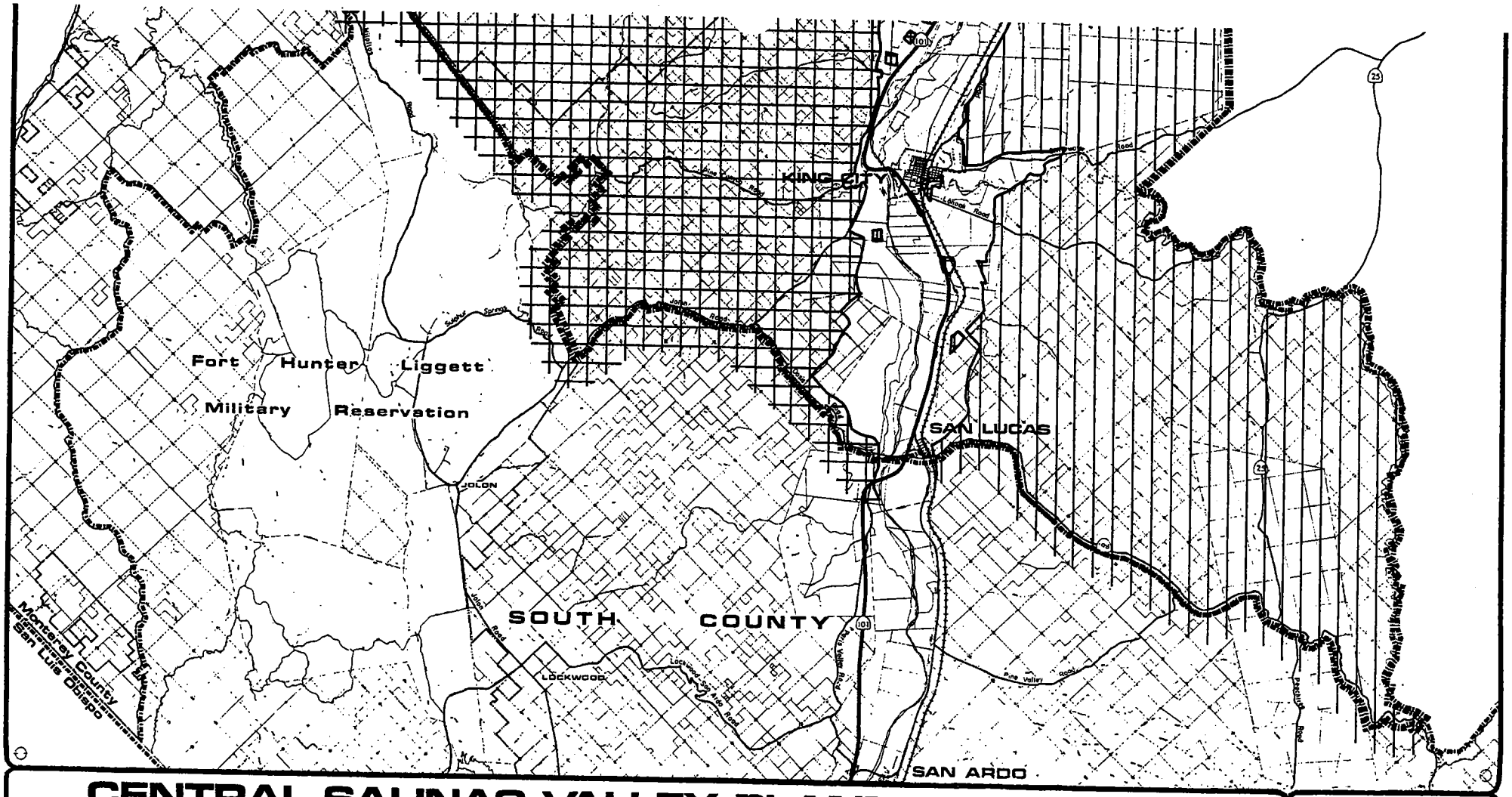


CENTRAL SALINAS VALLEY PLANNING AREA

PLANNING AREA BOUNDARY

FIGURE 8

FIRE HAZARDS

- URBAN/ AGRICULTURAL
- MODERATE
- HIGH
- VERY HIGH

SOURCE: CALIFORNIA DEPARTMENT OF FORESTRY, 1986.

0 5000 10000 FEET

DECEMBER 1981

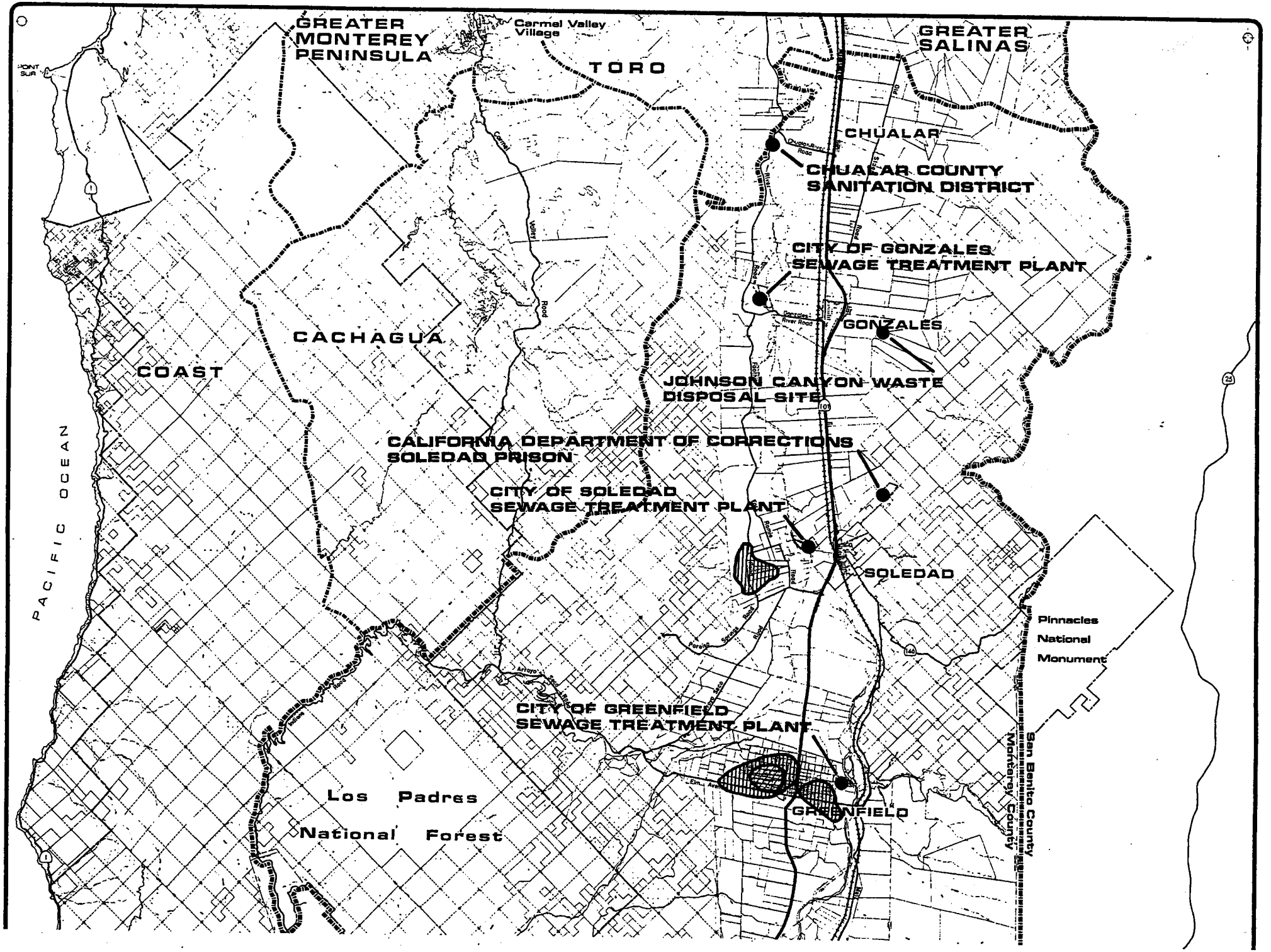
Monterey County Planning Department

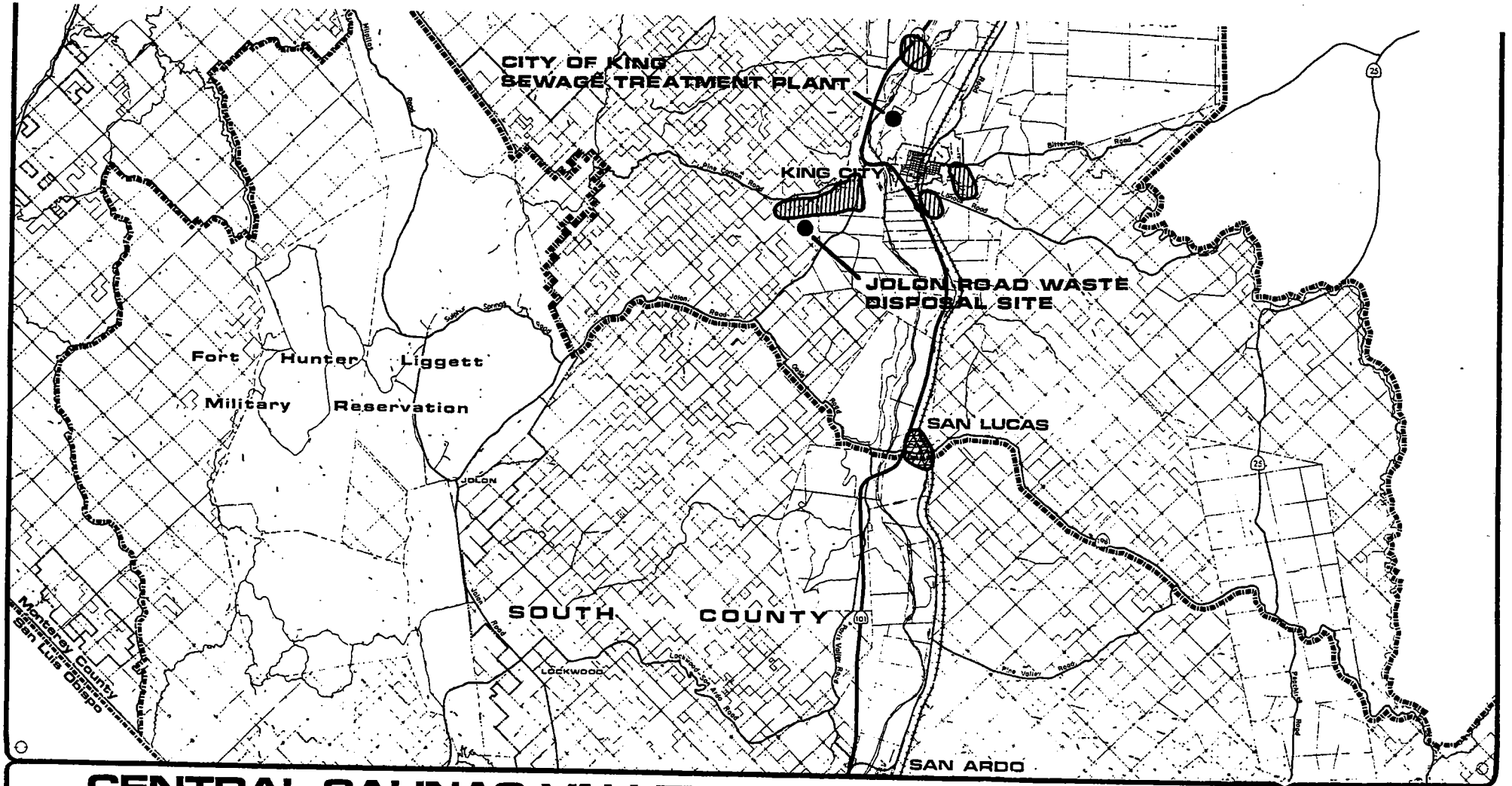
over 48% of the area's working labor force and utilizing 74% of the land, the use of chemicals such as fertilizers, pesticides, and herbicides in the Planning Area remains essential. However, the production, storage, and use of hazardous materials could threaten the health and safety of adjacent residents if improperly managed. These health and safety hazards may appear as leaks or spills contaminating the air or water, creating fires, or causing explosions. The most immediate hazard resulting as a byproduct of agricultural production is the contamination of surface and ground water, especially in the southern portion of the Planning Area. Wind transport and advection allow airborne chemicals to enter many ecological subsystems where through biological concentration they may reach toxic levels.

Oil and natural gas fields near King City and the City of Greenfield are a source of a variety of hazards. In addition to the fire hazard mentioned earlier, drilling and extraction facilities are a source of air pollution. The potential for a spill during extraction or transport also accompanies the presence of these facilities. The presence and construction of the pads and roads for the wells can be a cause of erosion and degradation of visual amenities, as well as loss of habitat for larger mammals. Improperly sealed abandoned wells can be a hazard in areas where groundwater resources occur. Petroleum development and production activities are inappropriate in proximity to residential areas.

Solid-waste landfill sites can be a source of nuisance and hazard, particularly abandoned sites which were used before strict health and safety regulations were enacted. Toxic deposits, groundwater contamination by leacheates, and buildup of explosive gases are hazards associated with landfills. Figure 9 shows the location of these sites in the Planning Area.

With the exception of the asbestos plant near King City, there are no large scale producers of hazardous materials in the Central Salinas Valley. There are, however, 284 businesses in the Planning Area which do store hazardous materials that are registered pursuant to state law. Assembly Bill 2185, passed in 1985, will implement more stringent definitions on what materials will be required to be registered. Pesticide dealers and applicators store significant volumes of chemicals in the spring, but the majority of dealers are located within corporate city limits. Most hazardous materials are trucked into the area. Highway 101 and the Southern Pacific Railroad, which both traverse the center of the Salinas Valley, are major north-south transportation routes on which hazardous chemicals, explosives, or radioactive materials are transported. It is the most direct route from the defense, aerospace, and chemical industries of central and southern California to the San Francisco Bay Area. These hazardous substances would present a threat only in the event of an accident near valley population centers. Accidents involving industrial chemicals such as PBB and PCB and controlled herbicides such as 2,4-D and 2,4,5-T could infiltrate the environment with long-term potential for genetic damage and increased incidence of cancer.


GREATER MONTEREY PENINSULA
Carmel Valley Village
TORO
GREATER SALINAS
CHUALAR
CHUALAR COUNTY SANITATION DISTRICT
CITY OF GONZALES SEWAGE TREATMENT PLANT
GONZALES
CACHAGUA
COAST
JOHNSON CANYON WASTE DISPOSAL SITE
CALIFORNIA DEPARTMENT OF CORRECTIONS SOLEDAD PRISON
CITY OF SOLEDAD SEWAGE TREATMENT PLANT
SOLEDAD
PACIFIC OCEAN
Pinnacles National Monument
CITY OF GREENFIELD SEWAGE TREATMENT PLANT
GREENFIELD
Los Padres National Forest
San Benito County
Monterey County



CENTRAL SALINAS VALLEY PLANNING AREA

PLANNING AREA BOUNDARY

FIGURE 9

MISCELLANEOUS HAZARDS

AREAS OF CONCENTRATED SEPTIC TANK USAGE IN SALINAS VALLEY

MODERATE CONCENTRATION

HEAVY CONCENTRATION

SOURCE: MONTEREY COUNTY PLANNING DEPARTMENT, 1986.

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FEET
DECEMBER 1981

Monterey County Planning Department

While most of these hazardous substances are regulated by state agencies having pre-emptory jurisdiction, it is still possible for the County to enact more stringent permit conditions or monitoring requirements on uses involving hazardous substances. Monterey County Health Department has instituted a Hazardous Materials and Underground Storage Tank Registration Program. The data generated through this program will be computerized and made available to County Communications to use in emergency response situations. Furthermore, development proposals can be referred to the Environmental Health Department for review with regard to their proximity to hazardous substances. As the population of the Central Salinas Valley increases, the County may wish to take appropriate action to ensure the health, safety, and welfare of its residents.

EMERGENCY PREPAREDNESS

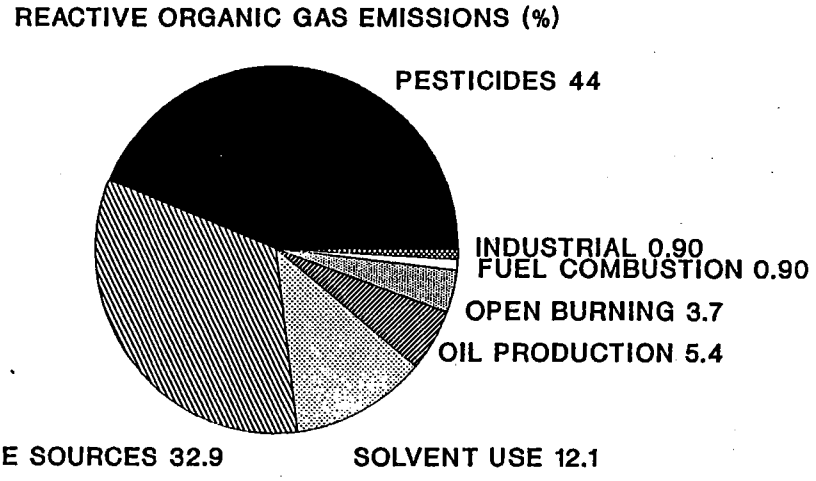
Safety planning is concerned with the prevention of hazards and the ability to deal with emergencies should they arise. While prevention is the most cost-effective and least stressful way to save lives and protect property, the County must also be prepared if disaster should strike. The County must anticipate possible needs and be able to respond to all emergencies to the fullest extent of its resources.

The County Health Department is presently on call 24 hours every day through the 911 exchange to respond to emergency situations.

The Monterey County General Plan, on pages 46 and 47, explains the types of affirmative actions needed to respond to widespread emergencies. Further information on these actions can be obtained from the Monterey County Emergency Plan. Through Policy 19.1.4, the Monterey County General Plan provides for some amendments to the Emergency Plan which would allow greater detail and, therefore, greater preparedness in responding to emergencies. Many of the policy mandates can be accomplished through the eight area plans. The mandates include identification of evacuation routes, provisions for emergency shelter, transportation, clothing, food, and medical aid and identifying the roles and relationships of all governmental, quasi-governmental, and private service agencies within the community. California Assembly Bill 2185, passed in 1985, will supplement existing inventories of hazardous materials and require entities storing them to prepare Release Response Plans. The information base resulting from this legislation could be a valuable resource for strengthening the County's emergency response plans.

AIR QUALITY

Monterey County is part of the North Central Coast Air Basin, which also encompasses Santa Cruz and San Benito counties. Air Quality in the Basin is generally favorable, yet several sources of pollution are degrading the Basin's air. The Air Basin is currently within attainment levels of all pollution types identified in the National Ambient Air Quality Standards with the exception of ozone.



Reactive organic gas emissions (ROGs) are a major contributor to ozone. According to the 1982 Air Quality Plan for the Monterey Bay Region prepared by AMBAG, the principal contributors to ozone in Monterey County are pesticides, motor vehicles, organic solvent use, and petroleum production. According to the Air Quality Plan, pesticide application accounts for 44% of the total ROGs in Monterey County. Seasonal adjustments to this estimate have not been made, but would probably show that the daily tonnage of pesticides released into the atmosphere during the growing season is significantly greater than the daily average over the entire year. Health hazards associated with the application of agricultural chemicals are an important factor when considering the compatibility of agricultural and residential land uses. Reconciling the needs of the agricultural industry with the responsibility to ensure the health and safety of the valley's growing population will be a complex problem for future County decision makers.

WATER QUALITY

Water quality is a significant factor in water supply because it determines what uses available water is suited for. The three primary consumers of water in the Central Salinas Valley are agriculture, residential, and commercial uses. Depending on the type and degree of contamination, certain uses may not be viable when water supplies become degraded. Water unfit for drinking may often be acceptable for irrigation, but because domestic supplies in the

Planning Area are drawn from the same groundwater basins as irrigation water, the quality of groundwater must be maintained at drinking water standards. This importance is reaffirmed by the fact that water resources are limited. Once a water supply is contaminated it cannot be easily replaced. Maintenance of groundwater quality is also necessary because of the hydrologic continuity of the Salinas Valley sub-basins. Contamination of one sub-basin may lead to contamination of others.

The County Health Department, which is responsible for water systems with 2 to 200 connections, has been routinely monitoring all water systems in the Central Salinas Valley for primary and secondary drinking water standards, as well as bacteriological standards. All water systems of 200 or more connections are permitted and monitored by the State Department of Health Services.

Water quality in the Planning Area's major rivers varies. The Salinas River is extremely degraded due to low flows, agricultural runoff, and leachates from wastewater treatment facilities located adjacent to the River. A recent study revealed that fish found in the Salinas River contain extremely high levels of pesticides.[5] Water quality in the Arroyo Seco River is generally good, however high sulfur concentrations occur in certain areas.

Groundwater quality in most of the Planning Area is still generally good. However, nitrates, natural mineralization, and trace elements are becoming significant contaminants in some areas. Nitrate contamination is probably the most significant contaminant. The California Department of Health has set a maximum allowable limit for drinking water of 45mg/L of nitrate (NO_3). Of 252 wells tested in the Salinas Basin in 1981, 22% contained nitrate levels greater than 45mg/L. Furthermore, nitrate levels have been increasing. Nitrate contamination has already forced the closing of a municipal well in Gonzales and is affecting Greenfield's water supply.[6] Table 5 shows the levels of nitrate in Salinas Valley Sub-Basin wells and the percent increase of nitrate

TABLE 5

COMPARISONS OF 1978 TO 1985 NITRATE CONCENTRATIONS FOR GROUNDWATER SUB-BASINS WITHIN THE SALINAS VALLEY, WITH PROJECTED NITRATE CONCENTRATIONS FOR YEAR 2000

AREA	NO. OF COMPARISONS	AVG. NITRATE CONC. mg/L 1978*	AVG. NITRATE CONC. mg/L 1985	ANNUAL % CHANGE	PROJECTED AVERAGE NITRATE CONC. mg/L 2000
P-180	45	14.8	20.2	4.4	39.3
EAST SIDE	39	37.9	57.4	5.9	139.7
FOREBAY	33	35.7	41.7	2.2	58.2
UPPER VALLEY	18	35.5	49.8	4.8	102.8
TOTAL	135	29.3	40.1	4.5	78.5

* To increase the number of comparisons, 1982 data was used where 1983 data was not available.
Source: Monterey County Flood Control and Water Conservation District.

5. ABA Consultants, Elkhorn Slough Wetlands Management Plan Preliminary Draft Report, Preliminary Draft (May 1986), p. 5.

6. Association of Monterey Bay Area Governments, Housing Needs Report (1981), p.68.

concentrations for the years 1978 to 1983. It can be seen that nitrate concentrations in the East Side and Upper Valley sub-basins already exceed the safe limit of 45mg/L established by the State Department of Health. Table 5 also projects that by the year 2000, mean nitrate concentrations will exceed the drinking water standard by 1.4 to 2.6 times in all the valley's sub-basins. Probable sources of the rising nitrate levels include: locally concentrated septic systems; heavy fertilizer applications on very permeable soils; and poor management of agricultural fertilizers and wastes. Table 6 lists other groundwater quality problems in the Planning Area.

Poor surface water quality in San Lorenzo Creek and the other streams which drain the east side of the Diablo Mountain Range, and irrigation water which has leached through soils containing a high concentration of salts are major contributors to the groundwater mineral content in the East Side and Upper Valley sub-basins. Many wells in the Arroyo Seco area also showed high levels of sulfate concentrations.[7] Cadmium and boron are among the trace elements occurring in the Upper Valley sub-basin.

TABLE 6

GROUND WATER QUALITY PROBLEMS BY SUB-AREA

Sub-basin and Sub-area	Saltwater Intrusion	Nitrates	Salts Buildup	Landfill Leachate	Naturally Occurring Salts	Trace Elements
SALINAS VALLEY						
Pressure 180	XXX	XXX	XX	?	---	X
Pressure 400	XXX	X	X	---	?	XX
East Side	X	XX	?	---	XXX	X
Forebay	---	XXX	XX	---	XXX	XX
Arroyo Seco Cone	---	XX	---	---	X	X
Upper Valley	---	XXX	XX	XX	XXX	XXX

The estimated severity of each problem within an individual sub-area is indicated as:

- ? May be Present; not determined due to lack of data.
- X Present in isolated wells, or considered to be an imminent potential problem.
- XX Present in a limited mumber of wells, or seriously constrains the usage of water by several individual landowners.
- XXX Present in a significant number of wells, or is a significant threat to public health or economic development in the subarea, based upon present standards.

Source: H. Esmaili and Associates, "Non-point Sources of Groundwater Pollution in Santa Cruz and Monterey Counties, California"; 1978.

7. Mike McGee, Personal Communication, August 4, 1986.

Saltwater intrusion into the Pressure sub-basin is an increasingly serious problem. Although those portions of the Planning Area drawing from the Pressure aquifers are not yet affected, continued intrusion could result in losses in crops, jobs, and land value, as well as reduced groundwater storage capacity and loss of the sub-basin's ability to distribute and supply water.

Given the limited amount of water resources in the County and the Planning Area, maintaining water quality is a vital concern. Several agencies are currently active in developing plans to address this concern. Two examples are the Protection Plan for Nitrates in the Salinas Ground Water Basin prepared by the Monterey County Flood Control and Water Conservation District and the Water Conservation Plan for Monterey County are two examples.

NOISE HAZARDS

The main objective in identifying noise hazards is to achieve noise compatible land uses which maintain living and working conditions free from annoying and harmful sounds. The harmful effects of noise range from annoyance, irritability, and stress to heart disease, digestive disorders, and hearing impairments. A person's reaction to noise is not determined by the noise alone but also by the environment in which the noise occurs. People who live near industrial areas accept more noise than those who live in non-industrial areas, however it is likely they would demand less noise had they a different basis for judgment. When evaluating noise impacts in Central Salinas Valley, it is important to consider the rural character of many unincorporated residential areas. One of the primary amenities attracting people to live in a rural setting is the peace and quiet. Acceptable noise levels in these areas may be different than in the more urban areas of the valley. While 60 dBA is generally considered to be the level at which noise becomes a problem, the actual noise level which people find acceptable is considerably less. Table 7 shows the different noise levels which people prefer in particular living environments.

Noise sensitive areas in the Central Salinas Valley include all schools and hospitals, as well as Pinnacles National Monument, Los Padres National Forest, and San Lorenzo Park.

The principal sources of noise exceeding 60 dBA in the Planning Area are highway traffic along the 101 corridor, Southern Pacific Railroad operations, and flight operations at Mesa Del Rey Airport in King City. In general, these sources pose no "hazard" because noise levels outside their respective rights- of-way do not exceed 60 dBA. Other sources of noise include industrial plants, food processing and packing plants, the landfill sites on Johnson Canyon and Jolon Roads, oil wildcatting activities, and agricultural equipment. Occasional military exercises at Fort Hunter Ligget also have significant noise impacts over a wide area. Table 8 lists available loudness contours in the Planning Area.

Table 7
NOISE LEVELS PEOPLE WANT

Location	Sound Level in dBA Day	Night
Rural Residential	35	25
Suburban Residential	40	30
Urban Residential	45	35
Commercial	55	45
Industrial	60	50

Source: State of California Department of Health, A Report to the 1971 Legislature on the Subject of Noise Pursuant to Assembly Concurrent Resolution 165, (Sacramento, 1971) p. 33.

The Board of Supervisors has directed the County Department of Environmental Health to obtain the necessary staffing and instrumentation to initiate and implement a comprehensive countywide noise ordinance.

Table 8
LOUDNESS CONTOURS IN THE CENTRAL SALINAS VALLEY

Location	Loudness (dBA)
Cal Compac Foods/Bitterwater Road in King City - at 100 ft.	55 -65
Metz Road at Paul Masson Winery	40 - 68
State Route 146 at Metz Road - at 50 ft.	57.5
State Route 198 at San Lucas East - at 50 ft.	58
U.S. Highway 101	
North Gonzales Intersection at 50 ft.	74.1
King City/Broadway Intersection at 50 ft.	73.3
Junction Route 198 East at 50 ft.	71.1

Sources: Monterey County Health Department, Division of Environmental Health, 1974; Monterey County Planning Department, July and August, 1974; CALTRANS, 1980; Earth Metrics, Inc. 1980.

CHAPTER III: HUMAN RESOURCES

The human resources component encompasses the demographic and socioeconomic analysis of the Central Salinas Valley Planning Area. The size, characteristics, distribution, 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, recreational facilities, and transportation systems.

DEMOGRAPHIC ANALYSIS

Population Trends

The population of the Central Salinas Valley has grown moderately since 1970. Table 9 indicates that the population in 1980 was 31,092 which is an increase of about 34% in ten years. This percentage increase ranked fifth among Monterey County's eight planning areas.

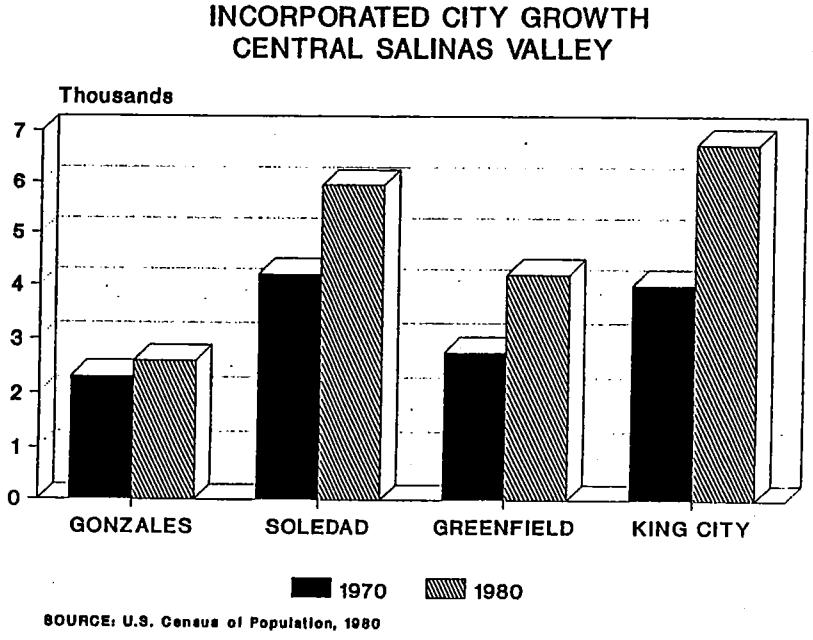
TABLE 9

Population Change 1970 - 1980

Location	1970 Population	1980 Population	% Change 1970-1980
Central Salinas Valley Planning Area	23,225	31,092	33.8%
Monterey County	247,450	290,444	17.4%

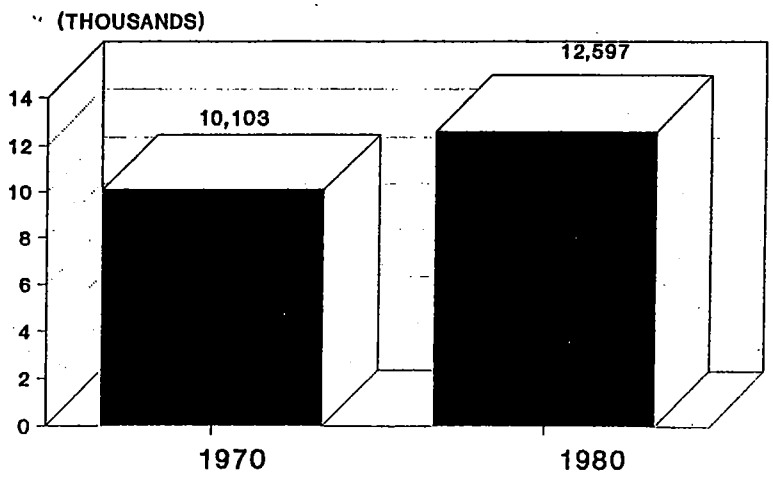
Sources: 1970 and 1980 U.S. Census of Population.

Incorporated Cities



Between 1950 and 1980, the population growth of the Planning Area's four incorporated cities was significant. Gonzales had a 59% increase in growth. Greenfield had the highest percentage increase in growth with 219%. Both Greenfield and Gonzales were incorporated in 1947. During the same 30 year period King City, which was incorporated in 1911, grew 134% while Soledad, which was incorporated in 1921, grew by 143%. Greenfield, Soledad, and King City were the fastest growing cities in the County between 1950 and 1980.

Unincorporated Area



The population in the unincorporated portion of the Planning Area was 10,103 in 1970 but increased by 22% to 12,597 in 1980, primarily due to growth surrounding the incorporated cities. Additional growth occurred in the communities of Chualar and San Lucas. Chualar, located eight miles south of Salinas, grew from 538 persons in 1970 to 638 persons in 1980 for a 19% population increase. San Lucas, located eight miles south of King City, increased from 160 persons in 1970 to 221 persons in 1980 for a 38% increase.

Population density in the Central Salinas Valley was about 27 people per square mile in 1970 and 36 people per square mile by 1980, including both the incorporated and unincorporated areas. The actual density for the unincorporated area only was 14 people per square mile. The actual density for most of the unincorporated area is even less because much of the unincorporated population lives in suburban communities. Table 10 shows the distribution of persons

TABLE 10
1980 Population Density of Incorporated Cities and Unincorporated Area

Jurisdiction	1980 Population	Area (Square Miles)	Density (Persons/ Square Mile)
Unincorporated Area*	12,597	852.3	14.8
Gonzales	2,891	0.6	4,818.3
Greenfield	4,181	0.8	5,226.0
King City	5,495	1.9	2,892.1
Soledad	5,928	1.0	5,928.0
Total Planning Area	31,092	856.6	36.0

* Includes the Soledad Correctional Facility acreage and population.

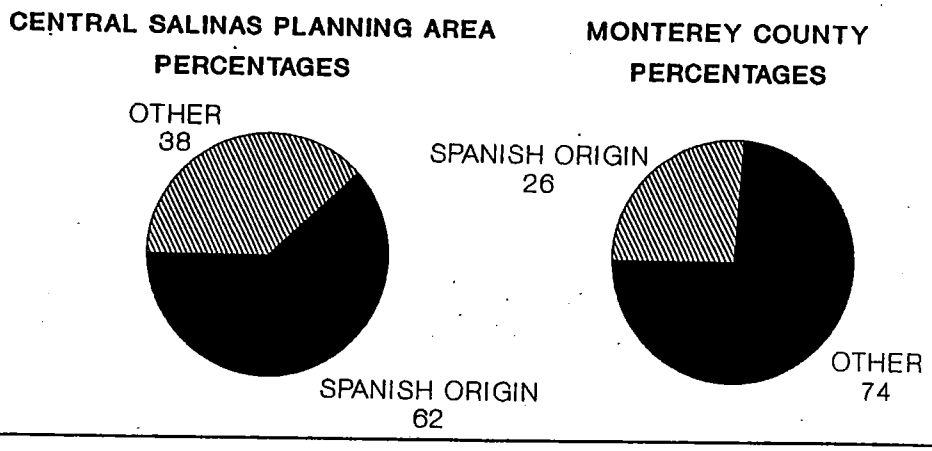
Sources: 1980 U.S. Census of Population; Monterey County Planning Department, Existing Land Use Analysis (May, 1980).

per square mile in the Central Salinas Valley in both the incorporated and unincorporated areas. Table 10 reflects the fact that 74% of the Planning area is devoted to agriculture. Among Monterey County's eight planning areas the Central Salinas Valley ranks second in size with 857 square miles and fifth in population density.

POPULATION CHARACTERISTICS

Racial and Ethnic Composition

The Planning Area's racial composition differs significantly from that of the County as a whole. Area residents classified as "white" accounted for about 56% of the population compared to 70% countywide, while the remaining four racial groups; Asian and Pacific Islander, Black, American Indian, Eskimo, Aluet and "other"; comprised the remaining 44% compared to 31% countywide. Over 62% of Planning Area residents were of Spanish origin compared to the countywide figure of 26%. Interestingly, almost 96% of the persons of Spanish origin indicated they were of "Mexican descent", compared to about 26% for the entire county.



Age Structure

The median age in the Central Salinas Valley varies slightly from census tract to census tract, but is generally similar to that of the entire County. The Planning Area's median age of 23.3 was slightly lower than the countywide figure of 27.6. Proportionately, almost 34% of the Planning Area's population was under 17 years of age compared to 28% for the County. Overall, the Central Salinas Valley has a higher proportion of children and young adults between 0-34 years and a lower proportion of adults 35 years and over than the County. The Planning Area had the same proportion of residents age 55 and older as the County at 17.6%.

TABLE 11

CURRENT AMBAG FORECASTS (YEAR 2000)

Area	1980 Population Base	Year 2000 Forecast	20 Year Change	Percent Increase
Census Tract 108	6,527	9,670	+3,143	+48.1%
Unincorporated	3,636	4,650	+1,014	+27.9%
Gonzales City	2,891	5,020	+2,129	+73.6%
Census Tract 109*	2,932	3,450	+518	+17.7%
Unincorporated	2,932	3,450	+518	+17.7%
Census Tract 111**	7,541	10,660	+3,119	+41.4%
Unincorporated	1,663	2,600	+937	+56.3%
Soledad City	5,928	8,060	+2,132	+36.0%
Census Tract 112	5,854	8,825	+2,971	+50.8%
Unincorporated	1,673	2,280	+607	+36.3%
Greenfield City	4,181	6,545	+2,364	+56.5%
Census Tract 113	8,188	14,370	+6,182	+75.5%
Unincorporated	2,693	4,550	+1,857	+69.0%
King City	5,495	9,820	+4,325	+78.7%
Total Planning Area	31,092	46,975	+15,883	+51.1%
Total Unincorporated within Planning Area	12,597	17,530	+4,933	+39.2%
Total Cities within Planning Area	18,495	29,445	+10,950	+59.2%

Notes: * Includes Soledad Correctional Facility Population.
** Tract split with Cachagua Planning Area.

Growth in the unincorporated areas does not reflect those areas adjacent to the cities that are expected to be annex and developed.

Sources: 1980 U. S. Census of Population;
Association of Monterey Bay Governments.

POPULATION FORECASTS

Population forecasts prepared in 1984 by the Association of Monterey Bay Area Governments (AMBAG) predict that almost 47,000 people will live in the Planning Area by the year 2000. This would require a 2% average annual growth rate which would be slightly lower than the 2.9 rate for the ten years between 1970 and 1980. The growth rate for the entire 20 years would be 51%. It is important to note that the anticipated population increase for the incorporated cities and the unincorporated County between 1980 and 2000 is considerably different than for the Planning Area as a whole, 59.2% and 39.2% respectively. This is primarily due to Monterey County's Growth Management Policy which places the priority for growth on infilling within existing urban areas or lands adjacent to urban areas where the necessary services and facilities are available, except where this impacts prime agricultural lands. Table 11 shows projected growth by census area.

SOCIOECONOMIC DATA

Households

The U.S. Census defines a "household" as consisting of all the persons who occupy a housing unit, related or not. Household data, when combined with demographic data and population forecasts are important indicators of future housing demand with respect to number, size, and type of units. Table 12 indicates the close relationship between median age and household size. Large average household size is indicative of a population characterized by younger persons with children living at home.

Table 12

Number and Size of Households in Central Salinas Valley

City or Area	Persons in Households	Number of Households	Average Size (Persons per Household)
Gonzales	2,862	852	3.36
Greenfield	4,171	1,115	3.74
King City	5,325	1,784	2.98
Soledad	5,904	1,424	4.15
Chualar and Vicinity (Enumeration District 338)	2,177	486	4.48
San Lucas and Vicinity (Enumeration District 344)	977	307	3.25
Total County	272,425	95,734	2.85

Source: 1980 U.S. Census of Population

The average household size in the Planning Area was larger than the County average, especially in Chualar where the average household size was 4.48 persons. Large households are also common in areas where either housing is scarce or incomes are relatively low.

Educational Level

Among the County's eight planning areas, the Central Salinas Valley had one of the lowest levels of educational attainment. For the area as a whole, 42% of those persons 18 years of age and older in 1980 were high school graduates and only 6% were college graduates versus 71% and 16% respectively for the County; as a whole. The King City area had the highest level of education within the Planning Area with 55% high school graduates and 11% college

TABLE 13

Level of Education

Area	Percent High School Graduates	Percent College Graduates
Census Tract 108	34%	5%
Unincorporated	29%	4%
Gonzales	40%	6%
Census Tract 109*	55%	5%
Census Tract 111**	33%	3%
Unincorporated	43%	5%
Soledad City	30%	3%
Census Tract 112	35%	3%
Unincorporated	37%	3%
Greenfield City	34%	3%
Census Tract 113	55%	11%
Unincorporated	58%	12%
King City	54%	11%
Total Planning Area	42%	6%
Total Unincorporated	46%	3%
Total Cities	40%	6%

Notes: *Includes Soledad Correctional Facility.
**Tract split with Cachagua Planning Area.

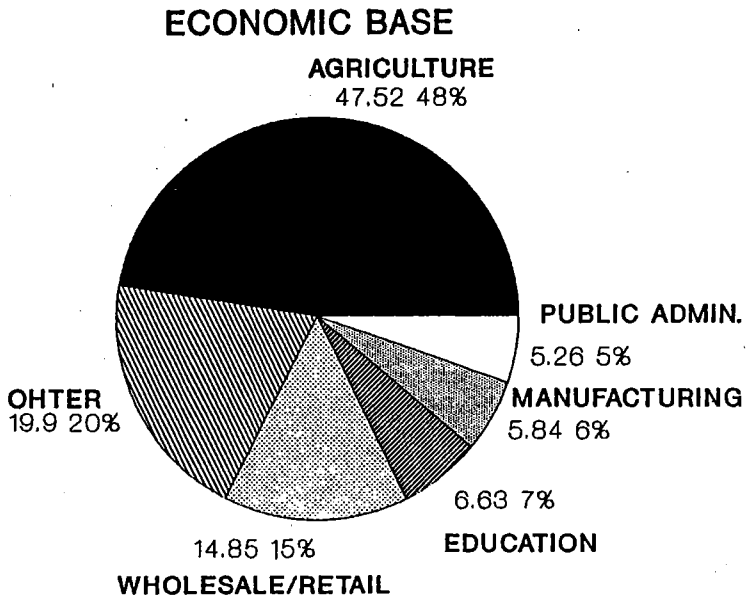
Source: 1980 Census of Population; Association of Monterey Bay Area Governments Census Data Center.

graduates. In contrast, the Soledad area has only 33% high school graduates and 3% college graduates. (Planning Area Census Tracts are illustrated in Appendix B).

Household Income

According to the 1980 Census, the median household income in the Central Salinas Valley was $15,648, which is 88.6% of the County's figure of $17,661. Table 14 shows the median incomes for the incorporated and unincorporated areas of the census tracts that comprise the Planning Area. The unincorporated areas of census tracts 109 and 113 were the only portions of the Planning Area with median incomes which exceeded the County median. Of the Planning Area's households, 47% were in the lower income range of 0 - $14,999, compared to the countywide total of 41%. In contrast, only 9% of Central Salinas Valley's households were in the higher income range of $35,000 or more, compared to the countywide total of 14%. A significant proportion of the Planning Area's population lives in poverty. Table 14 also shows the percentage of residents below poverty level for each census tract. It is not surprising that the areas with the highest incidence of poverty coincide with the areas having the lowest percentage of the County median income.

Economic Base



The two major components of the Central Salinas Valley economy are agriculture and manufactur- ing of non-durable goods. Agriculture represents the most vital component of Monterey County's total economic base, providing jobs related both directly and indirectly with agriculture. According to the 1980 Census, about 48% of the Planning Area's employed labor force are employed by the agricultural industry and 6% by manufacturing. In the Central Salinas Valley, the percentage of agriculture dependent employment exceeds 60%, when agriculture related manufacturing and transportation are considered. The remainder of the Planning Area's employed labor force are employed in the following industries: armed forces, construction, transportation, wholesale and retail trade, finance, insurance, real estate, personal entertainment, professional services, and public administration. In the Planning Area, these remaining industries comprise 44.5% of the employed labor force, compared to 75.4% countywide.

According to the 1984 Agricultural Commissioner's Crop Report, the gross value of Monterey County's 1984 crop exceeded one billion dollars. Monterey County continues to be the number one vegetable producing county in the nation. Crop and livestock production in the Central Salinas Valley accounts for about 44% of the County's gross annual agricultural crops value. Lettuce and broccoli were the two top cash crops in 1984 grossing $285 million and $126 million, respectively. The Planning Area accounts for more than 50% of the County total for these two crops. In addition, more than 90% of the following million dollar crops are grown in the Central Salinas Valley: grapes, cattle, tomatoes, peppers & chili, asparagus, carrots, and garlic.

Manufacturing industries employ about 5.9% of the Planning Area's available labor force, which is consistent with the countywide proportion of 6.1%. Food processing is the primary type of manufacturing and is strongly affected by the seasonal fluctuations in agricultural production. Employment at food processing plants peaks in the spring and fall, remains moderately high during the summer, and declines sharply in the winter. Other forms of manufacturing occur in the incorporated and urbanized centers of the Planning Area.

Other major employers in the Planning Area include: wholesale/retail trades, employing about 15% of the Planning Area's labor force; educational services, employing about 6.7%; and public administration, employing 5.3% of the valley residents.

Economic Outlook

Despite recent efforts to diversify and broaden the economic base of southern Monterey County through expansion of manufacturing and service sectors, the local economy remains agriculturally based. The dependence on agriculture and the attendant seasonal fluctuations in demand for labor account for a periodic high unemployment rate in the area. Rising energy and labor costs during the 1970's decreased the area's comparative advantage in vegetable production. Because of rising transportation costs, the local growers face stiffened competition.

Spurred by rising labor costs and technological development, automation and mechanization are beginning to affect many facets of the agriculture industry. As this trend continues, fewer and fewer farm workers will be needed, even as the acreage under production is increased. The economy of southern Monterey County will probably continue to center around agriculture for many years to come. The natural attributes of the area are uniquely suited to that use. The consensus regarding economic growth in southern Monterey County is that the economy must diversify in order to provide improved employment opportunities for the area's growing population.[8]

8. Group Arcon, Analysis of Spreckels Site Redevelopment and Economic Base Study for South Monterey County (December 1984), p.6.

TABLE 14

1979 HOUSEHOLD INCOME LEVELS

Area	Total Households	Median Household Income	Percent of County's Median Income	% Below Poverty Level
Census Tract 108	1,630	$14,330	81.1%	19.0%
Unincorporated	778	13,380	75.8%	22.0%
Gonzales	852	15,198	86.1%	14.2%
Census Tract 109*	16	35,225	199.6%	--
Unincorporated	16	35,225	199.6%	--
Census Tract 111**	1,866	15,626	88.5%	15.0%
Unincorporated	442	15,660	88.7%	14.4%
Soledad City	1,424	15,616	88.4%	15.1%
Census Tract 112	1,560	14,315	81.1%	17.4%
Unincorporated	445	13,785	78.1%	22.6%
Greenfield City	1,115	14,526	82.2%	15.3%
Census Tract 113	2,574	17,186	97.3%	13.1%
Unincorporated	790	19,995	110.7%	11.2%
King City	1,784	16,135	91.4%	14.1%
Total Planning Area	7,646	15,648	88.6%	
Total Unincorporated within Planning Area	2,471	15,978	90.5%	
Total Cities within Planning Area	5,175	15,491	87.7%	
Total County	95,734	17,661	100.0%	

Notes: * Includes Soledad Correctional Facility Population.
** Tract split with Cachagua Planning Area.

Sources: 1980 U. S. Census of Population; Association of Monterey Bay Area Governments.

The types of industries best suited to Central Salinas Valley are those which could use a locally grown, quality raw product, employ local labor, and gain an advantage because of lower land costs. It has been suggested that two of the Planning Area's chief assets; abundant, premium agricultural products such as wine-grapes and proximity to recreation opportunities, combined with the booming tourist industry of the Monterey Peninsula, could provide the basis for a thriving wine industry, which in turn would stimulate tourism for the entire County.[9] The Planning Area's location astride U.S. Highway 101 between Los Angeles and the San Jose/San Francisco area enhance the possibility of attracting visitors from these metropolitan centers.

9. Group Arcon, Analysis of Spreckels Site Redevelopment and Economic Base Study for South Monterey County (December 1984), p.25.

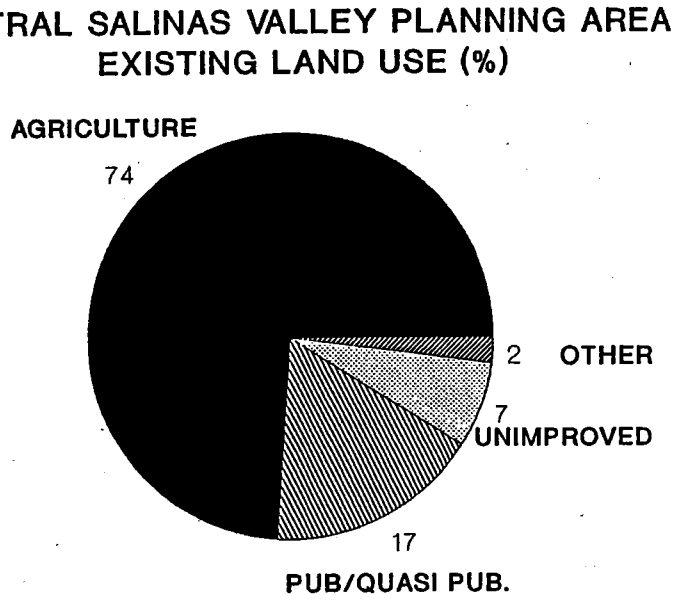
CHAPTER IV: AREA DEVELOPMENT

The Area Development component of this area plan includes discussion of existing land use, public land ownership, transportation, public services and facilities, housing, holding capacity, and future land use. These topics represent the major considerations in the spatial distribution of human activities and the facilities necessary to support them. Area development encompasses the constructed environment.

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. Public land ownership examines the extent of land owned by public agencies that is therefore unavailable for private development. The transportation section describes the transportation network for the movement of people and goods. The adequacy of services and infrastructure is analyzed in public services and facilities. The housing analysis describes characteristics and trends in the housing supply and housing conditions. The 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 land use plans contained in this Central Salinas Valley Area Plan designate the type, location, and intensity of all future land uses in the Planning Area.

EXISTING LAND USE

Land use in the Central Salinas Valley is characterized by small cities and communities regularly spaced along Highway 101; intensive row crop production of the valley floor; grape production on some of the upland terraces; and grazing, watershed, and recreational uses of the mountain ranges. The general character is rural. The Planning Area contains 548,242 acres, or about 857 square miles.



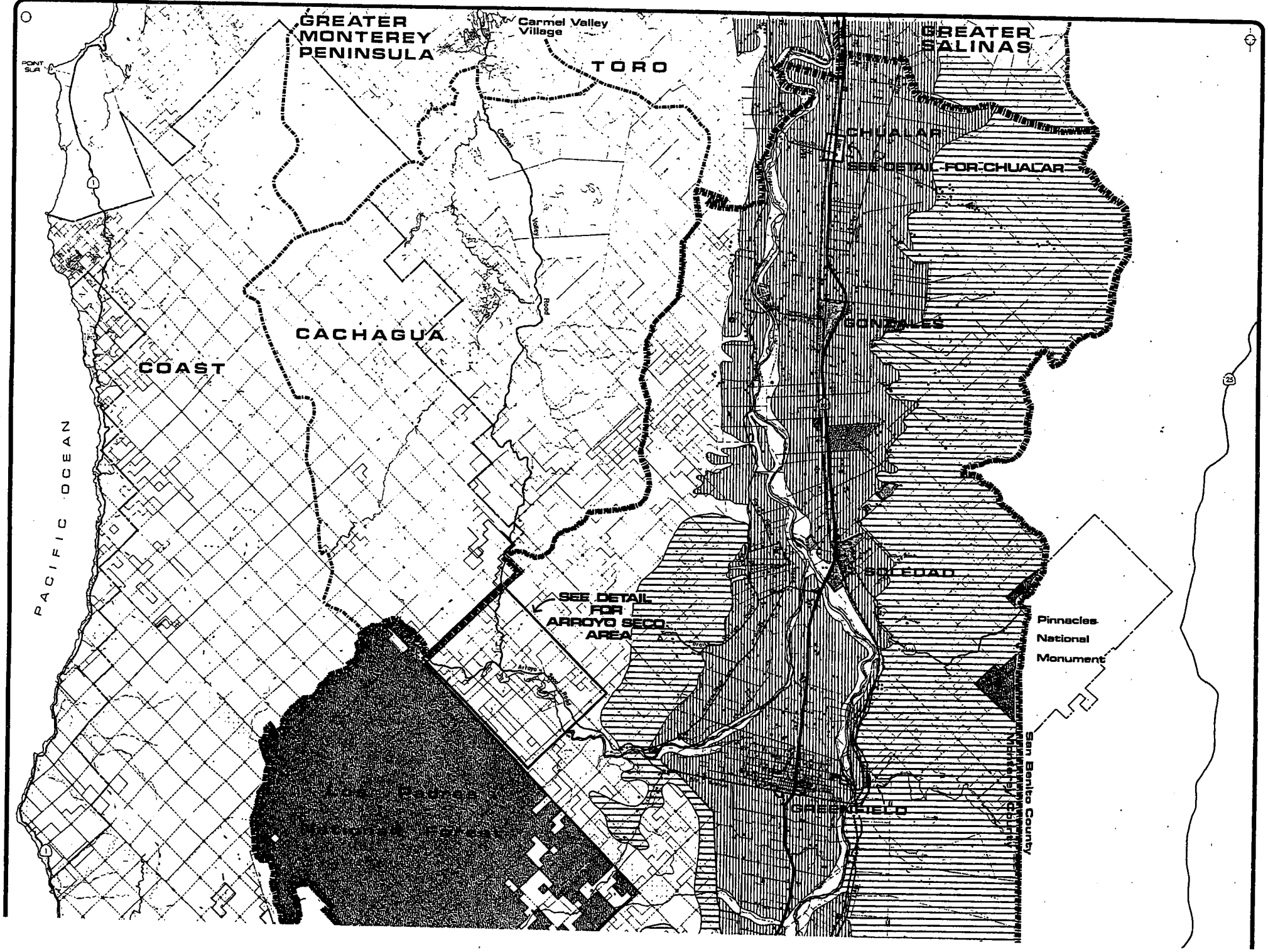
The incorporated cities of Gonzales, Soledad, Greenfield, and King occupy an area of about five square miles. The following paragraphs describe existing land uses in the unincorporated portion of the Planning Area in descending order of the amount of land devoted to each use, while Figures 10 and 11 illustrate these uses.

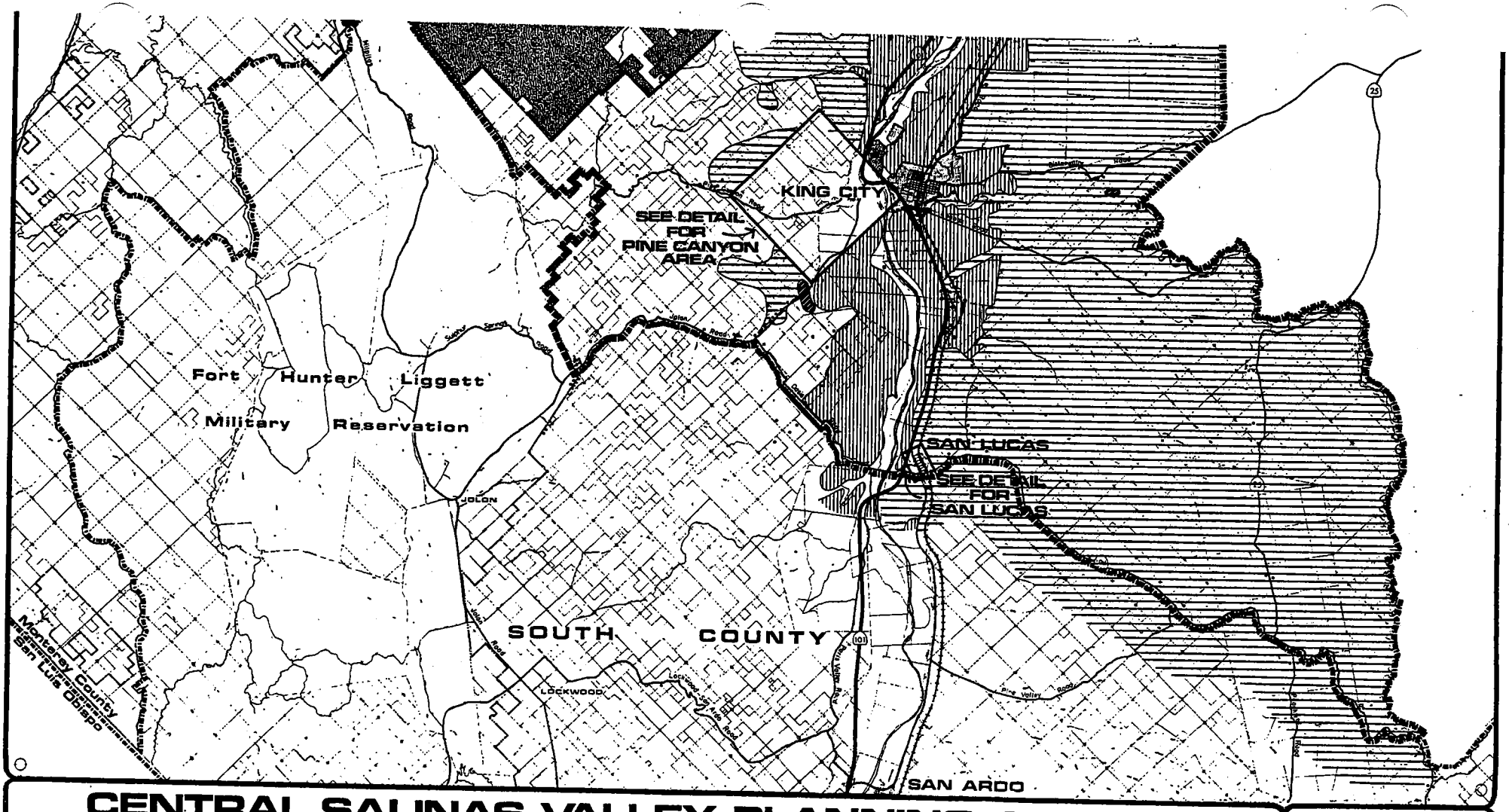
Agriculture/Grazing

Crop production and grazing uses occupy the largest amount of land in the Planning Area, accounting for about 74% of all the land or 405,000 acres. Row crops are grown throughout the length of the valley which is about 48 miles. Grapes are grown along much of the upland terrace lands and cattle are grazed in the lower mountain ranges above both sides of the valley floor. In 1987, about 189,465 acres were under Williamson Act contracts in the Planning Area.

Public/Quasi-Public Lands

Public and quasi-public uses total 94,283 acres or about 17% of the Planning Area. About 93,000 acres are held by the federal government in the Los Padres National Forest or in land under the Bureau of Land Management. Much smaller holdings by the state and County comprise the remainder of the public land within the Planning Area. North of Soledad along Highway 101, the State operates the Soledad Correctional Facility which encompasses approximately 900 acres. Farther south, the County owned San Lorenzo Park occupies about 200 acres near King City.


GREATER MONTEREY PENINSULA
Carmel Valley Village
TORO
GREATER SALINAS
CHUALAR
SEE DETAIL FOR CHUALAR
CACHAGUA
COAST
GONZALES
SOLEDAD
PACIFIC OCEAN
SEE DETAIL FOR ARROYO SECO AREA
Pinnacles National Monument
San Benito County
GREENFIELD
Carmel Valley Road



CENTRAL SALINAS VALLEY PLANNING AREA

PLANNING AREA BOUNDARY

FIGURE 10

EXISTING LAND USE

- SINGLE FAMILY RESIDENTIAL
- MULTIPLE FAMILY RESIDENTIAL
- COMMERCIAL
- INDUSTRIAL
- AGRICULTURAL
- GRAZING / RANGELAND
- UNIMPROVED LANDS / WATERSHED AREAS
- PUBLIC / QUASI PUBLIC
  - EMERGENCY SERVICES
  - RELIGIOUS FACILITY
  - PRIVATE SCHOOL
  - PUBLIC RECREATION
  - PRIVATE RECREATION
  - NATURAL RESERVE
  - OTHER FACILITIES
- INCORPORATED AREA

SOURCE: MONTEREY COUNTY PLANNING DEPARTMENT, 1983

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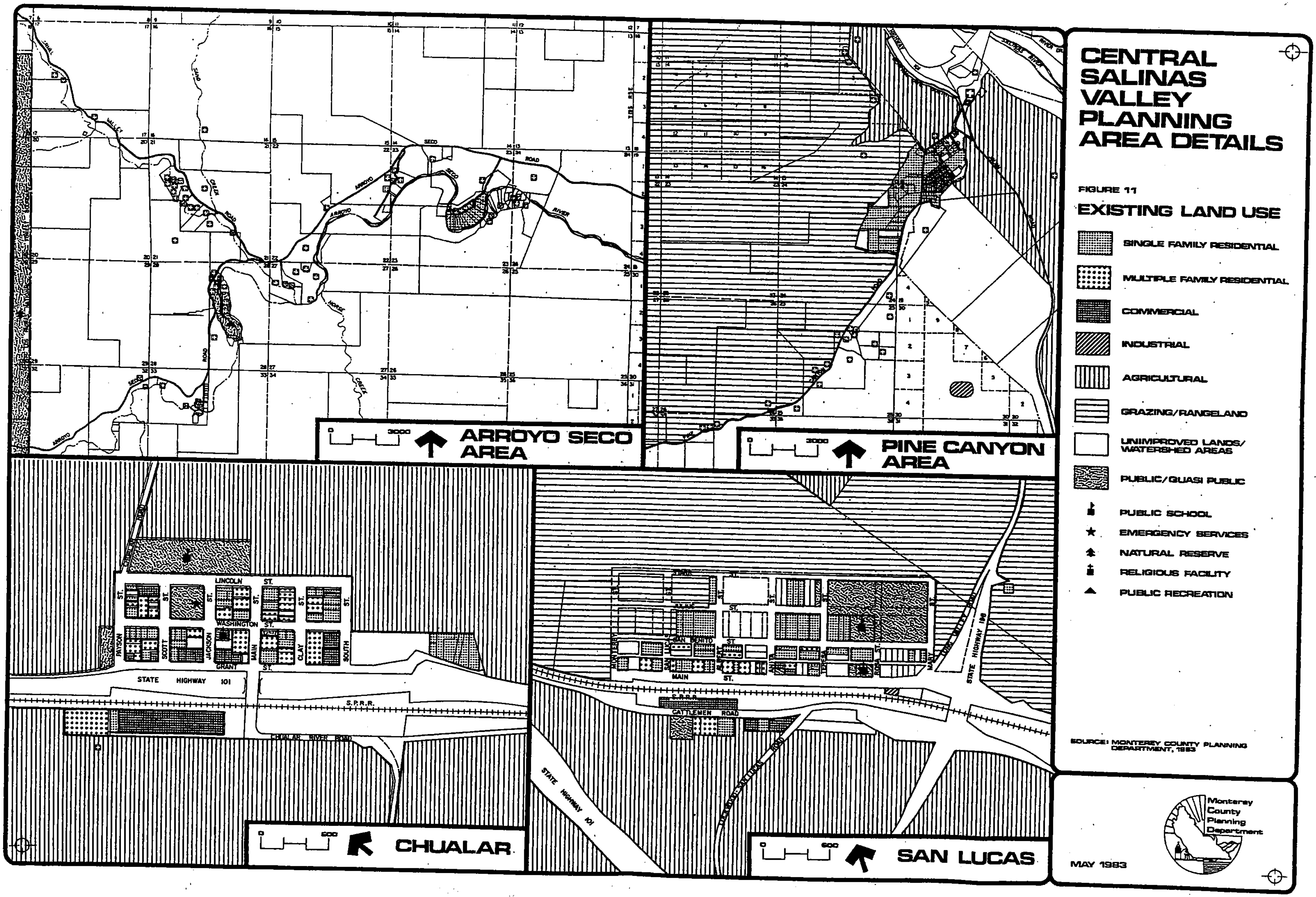
DECEMBER 1981

Monterey County Planning Department


CENTRAL SALINAS VALLEY PLANNING AREA DETAILS
FIGURE 11
EXISTING LAND USE
SINGLE FAMILY RESIDENTIAL
MULTIPLE FAMILY RESIDENTIAL
COMMERCIAL
INDUSTRIAL
AGRICULTURAL
GRAZING/RANGELAND
UNIMPROVED LANDS/ WATERSHED AREAS
PUBLIC/QUASI PUBLIC
PUBLIC SCHOOL
EMERGENCY SERVICES
NATURAL RESERVE
RELIGIOUS FACILITY
PUBLIC RECREATION
SOURCE: MONTEREY COUNTY PLANNING DEPARTMENT, 1983
Monterey County Planning Department
MAY 1983
ARROYO SECO AREA
PINE CANYON AREA
CHUALAR
SAN LUCAS
ARROYO SECO ROAD
RIVER
STATE HIGHWAY 101
S.P.R.R.
CHUALAR RIVER ROAD
LINCOLN ST.
WASHINGTON ST.
GRANT ST.
PAYSON ST.
SCOTT ST.
JACKSON ST.
MAIN ST.
CLAY ST.
SOUTH ST.
CATTLEMEN ROAD
MAIN ST.
SAN BENITO ST.
MONTEREY
STATE HIGHWAY 198

Unimproved Lands/Watershed Areas

Unimproved lands total 40,064 acres which is about 7% of the total Planning Area. These areas are generally located in the upper mountain reaches of the Sierra de Salinas and Santa Lucia Mountains that lie within the Planning Area and are presently too steep to develop. These unimproved areas serve important watershed and wildlife habitat functions.

Residential Uses

The majority of the residential development is contained within the four incorporated cities. Residential development in the unincorporated area totals only 1,340 acres or about 0.3%. About 1,233 acres are developed in single family residential use and nearly 107 acres are developed in multiple family residential use. Aside from development concentrated in Chualar, San Lucas, and portions of Pine Canyon, residential development outside of the cities is very rural in nature and is associated with agricultural land use. Pressure for residential development has increased in the Arroyo Seco area, the area surrounding Greenfield, and the previously mentioned Pine Canyon and Chualar Canyon areas.

Industrial Uses

Industrial land uses total 420 acres or about 0.08% of the Planning Area. These land uses include the Johnson Road County Landfill, the Jolon Road County Landfill, sewage treatment facilities for Soledad, Gonzales, Greenfield, and Chualar, an auto wrecking yard, a sand and gravel operation along San Lorenzo Creek, agricultural product processing plants, and several utility and communication sites.

Streets, Highways, and Railroads

Streets, highways, and railroads account for about 4,292 acres in Central Salinas Valley. U.S. Highway 101 is the primary arterial of the Planning Area, providing for vehicular travel throughout its length and linking all the cities and communities in the valley. Significant county roads include: River Road, which parallels 101 on the west side of the Salinas River, Old Stage Road, Pine Canyon Road, Chualar Canyon Road, Johnson Road, Gloria Road, Arroyo Seco Road, Jolon Road, and Metz Road. The roads generally provide access to agricultural areas which are adjacent to Highway 101. Southern Pacific Railroad operates a major route which traverses the length of the Planning Area along the valley floor paralleling Highway 101.

Commercial Uses

Commercial land uses are the least in acreage in the Planning Area, encompassing a total of 91 acres or less than 0.02 of the total land use. The majority of the commercial development in the Planning Area is located along Highway 101 near the incorporated cities and in the community of Chualar.

PUBLIC LAND OWNERSHIP

Over 17% of the Planning Area, or 94,283 acres is publicly owned and, therefore, is not subject to private development. The Federal Government is the largest public landowner in the Planning Area with major holdings consisting primarily of the Los Padres National Forest, Bureau of Land Management, and Pinnacles National Monument. Lands owned by the State total 900 acres or about 0.001% of the total area. This land is used for the State Correctional Facility at Soledad. The major County owned property is San Lorenzo Park near King City, occupying about 200 acres. Streets, highways, and railroads account for 4,292 acres of the Planning Area.

INCORPORATED CITIES

The four incorporated cities in the Central Salinas Valley occupy a combined area of about 3,162 acres, or about 0.5% of the Planning Area's total acreage. The four cities serve as population and economic activity centers for the Planning Area. All four cities share a number of other common characteristics:

- All four lie along U.S. Highway 101 and the Southern Pacific Railroad,
- All four have a general law form of city government,
- All four are within County supervisorial district #3,
- All four have economies dependent on agriculture and serve as support centers for nearby agricultural operations, and
- All four cities are essentially surrounded by prime farmlands.

King City is the most prosperous city in southern Monterey County. Though its economy is primarily based on agriculture, it is much more diversified than the other Planning Area cities. King City serves as the retail trade center for much of southern Monterey County, and has such amenities as a 46 bed hospital, a golf course, tennis courts, and a municipal swimming pool.

The Planning Area cities have experienced rapid growth over the last 30 years. More recently, between 1970 and 1980 the growth rates for the cities have ranged from 12.3% in Gonzales to 60.3% in Greenfield. Haphazard growth patterns and annexations can lead to the destruction of agricultural and open space resources, inefficient service patterns, and degradation of the areas natural resources and quality of life.

The challenge before Monterey County and the Central Salinas Valley cities is to develop a growth management system that will determine the necessity and location of future urban growth while protecting the County's resources, particularly remaining areas of prime agricultural lands.

To help resolve these kinds of issues a Local Agency Formation Commission (LAFCO) was established for each county in 1963. The creation of these commissions was intended to provide a regional review of proposals to expand urban service boundaries and make studies of the logical expansion of cities.

In reviewing proposals for expansion of incorporated cities, LAFCO should give major consideration to the following topics: the suitability of the land for urban development in terms of conserving natural resources and avoiding physical hazards, the balance of jobs and housing within the city and its relationship to the entire County, and the ability to provide services and facilities to accommodate expansion.

The County has identified areas meeting specific criteria regarding physical hazards and resource and watershed protection, and must now work with the cities and LAFCO to determine appropriate urban expansion limits.

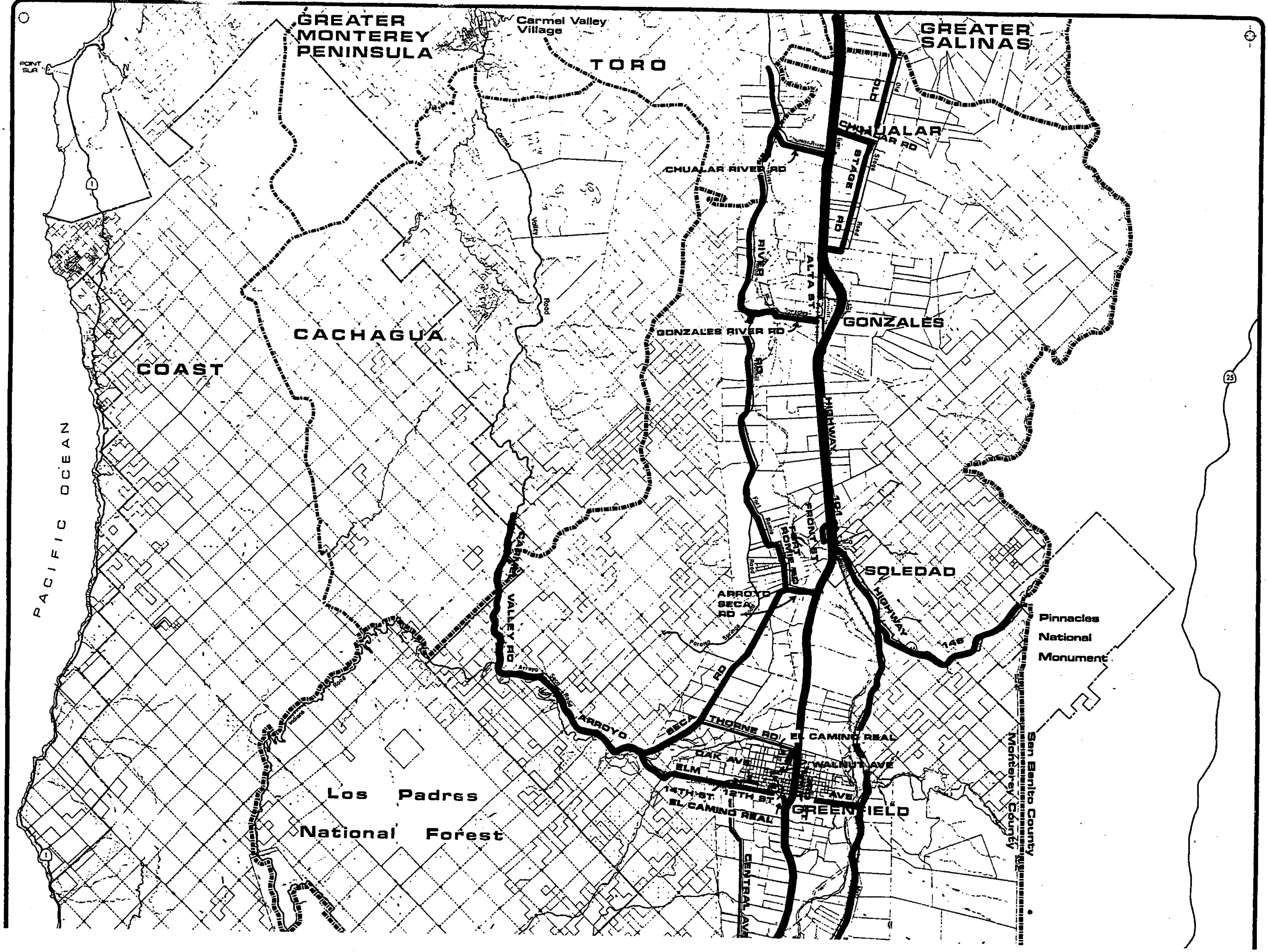
TRANSPORTATION

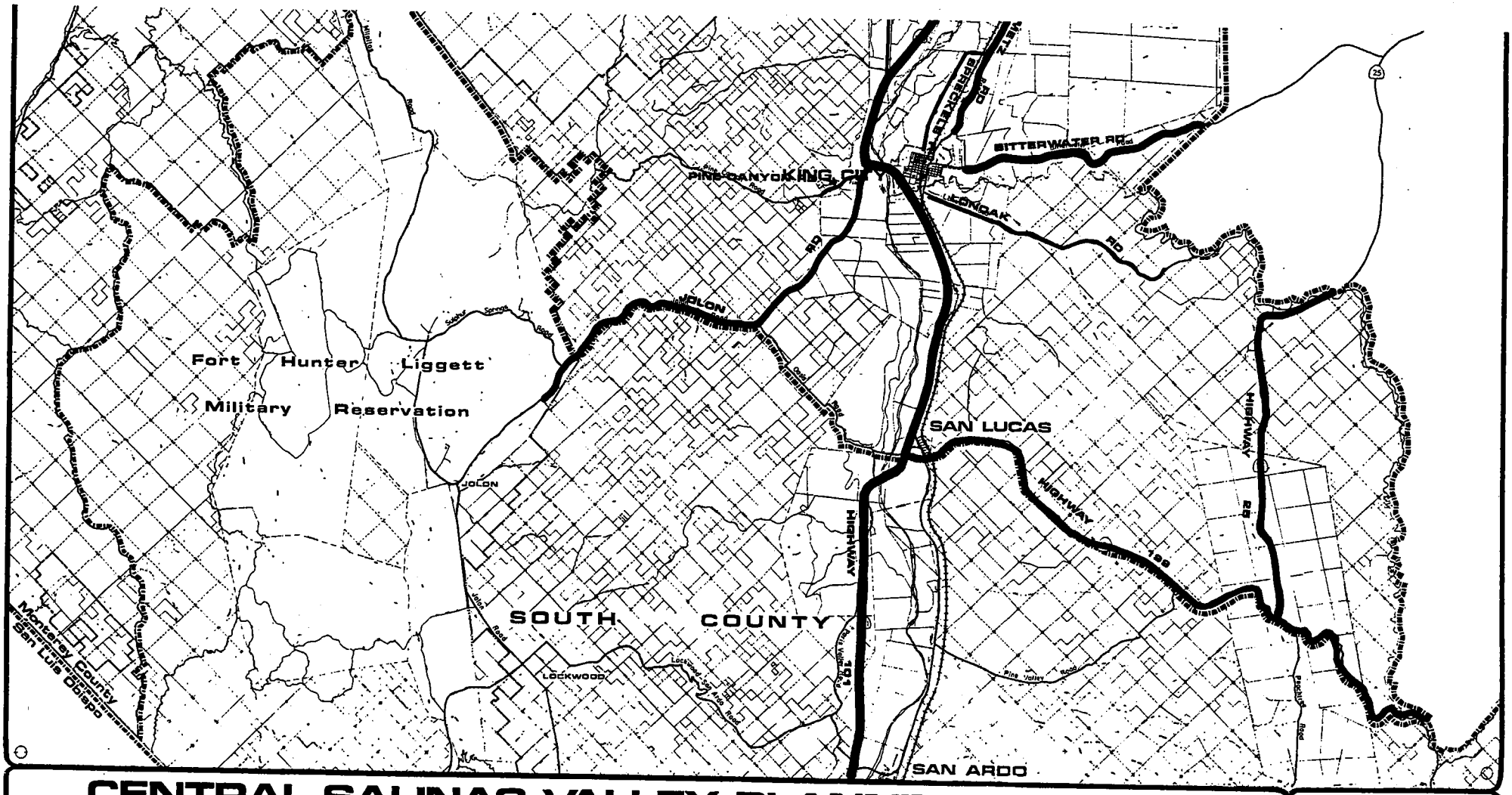
The Planning Area's transportation system is primarily a network of state highways, county roads, and city streets. Locations of state highways indicate their primary roles as intercity travel corridors while county roads connect more remote areas with the cities and other highways. Figure 12 shows the Planning Area's major roadways by function. Those roads not designated on the map are considered to be "nonclassified" and provide access to specific properties only.

Highways

U.S. Highway 101 is the primary north-south arterial within the County, entering the Central Salinas Valley Planning Area at Chualar. The four lane highway traverses the center of the Planning Area for 48 miles, connecting all of the urban centers, eventually exiting into San Luis Obispo County at Camp Roberts. Highway 101 is the County's most prominent trucking corridor and the principal transport route for goods and services into, out of, and through the Planning Area.

State Highway 25, a minor arterial, begins at a junction with Highway 198, 14 miles east of San Lucas, and heads northwest following San Lorenzo Creek for a distance of 12 miles to the San Benito County line. In San Benito County the highway provides the eastern access to the Pinnacles National Monument.


GREATER
MONTEREY
PENINSULA
Carmel Valley
Village
TORO
GREATER
SALINAS
POINT SUR
CHUALAR
CHUALAR RIVER RD
STAGE RD
OLD
RIVER
ALTA ST
GONZALES
GONZALES RIVER RD
CACHAGUA
COAST
PACIFIC OCEAN
HIGHWAY 101
FRONT ST
FORT ROMIE RD
SOLEDAD
ARROYO SECA RD
HIGHWAY 146
Pinnacles
National
Monument
CARMEL VALLEY RD
Carmel Valley Road
ARROYO SECA RD
THORNE RD
EL CAMINO REAL
OAK AVE
WALNUT AVE
ELM
14TH ST
12TH ST
EL CAMINO REAL
GREENFIELD
CENTRAL AVE
Los Padres National Forest
San Benito County
Monterey County
25
1



CENTRAL SALINAS VALLEY PLANNING AREA

PLANNING AREA BOUNDARY

FIGURE 12

MAJOR ROADWAYS BY FUNCTION

PRINCIPAL ARTERIAL

MINOR ARTERIAL

COLLECTOR

PRINCIPAL ARTERIAL:

HIGHWAY 101

MINOR ARTERIALS:

ALTA ST
ARROYO SECA RD
SITTERWATER RD
CARMEL VALLEY RD

MINOR ARTERIALS (CONT.):

CHUALAR RD
CHUALAR RIVER RD
EL CAMINO REAL
ELM AVE
FORT ROMIE RD
FRONT ST
GONZALES RIVER RD
HIGHWAY 25
HIGHWAY 146

MINOR ARTERIALS (CONT.):

HIGHWAY 198
JOLON RD
METZ RD
OLD STAGE RD
RIVER RD

COLLECTORS:

CENTRAL AVE
LONOAK RD (PARTIAL)

(CONT.):

OAK AVE
PINE CANYON RD (PARTIAL)
SPRECKELS RD
THORNE RD
WALNUT AVE
3RD ST
12TH ST
14TH ST

SOURCE: MONTEREY COUNTY MAINTAINED ROAD SYSTEM MAP- CALTRANS & MONTEREY COUNTY PUBLIC WORKS, 1982.

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DECEMBER 1981

Monterey County Planning Department

State Highway 146 is a minor arterial beginning at U.S. 101 in Soledad. It meanders eastward into the foothills of the Gabilan Mountains for a distance of 12 miles terminating at the western side of the Pinnacles National Monument.

State Highway 198, also a minor arterial, follows the Planning Area's southern boundary, heading in an easterly direction approximately 26 miles from U.S. 101 at San Lucas to the Fresno County line.

County Roads

Over half the Planning Area's paved road surfaces are either county roads or city streets. Most of them fit the nonclassified functional description, serving as minor rural or local access routes. Figure 12 illustrates that many of the county roads, particularly those serving traffic to and from more densely populated portions of the Planning Area, function as minor arterials and collectors, e.g., Arroyo Seco Road, Elm Avenue, Jolon Road, and Pine Canyon Road. Minor arterials and the smaller streets in the Planning Area's unincorporated communities have few major traffic problems due to the limited number of vehicles using the streets. Traffic management in these communities consists mainly of facilitating traffic flow through engineering measures, such as limiting on-street parking, proper signage, and setting speed limits. These measures are directed more to improve safety rather than increasing traffic carrying capacity. Maintenance of these roads is essential for residents as well as agricultural activities in rural areas. Financing and maintenance of county roads, however, is currently in a state of uncertainty, due primarily to a decrease in funding sources.

Use of Roads and Highways

The use of roads and highways can be measured in daily vehicle miles of travel (DVMT) and annual average daily traffic (AADT). In contrast to DVMT data, which shows only general trends in road use, the AADT data is compiled to determine the amount of use of specific roads or road segments. AADT's for Central Salinas Valley's major county roads and highways are represented in Table 15, using the latest available data. Highest traffic counts occur in and around urban areas and on major highways.

A majority of the roads listed in Table 15 have had increases in traffic volumes between 1978 and 1982. Highway 101 had decreased in traffic volumes between 1978 to 1981 from San Lucas north to Soledad, and increased traffic volumes from Soledad north to Chualar. In 1981, annual average daily traffic (AADT) on Highway 101 ranged from a low of 9,100 at the junction with Highway 198 to a high of 19,600 at the north Gonzales overpass.

The traffic volume AADT for Highway 25 in 1981 was 150. The AADT for Highway 146 ranges from 6,100 at Third Street in Soledad to 250 at Metz Road. AADT for Highway 198 ranged from 1,300 near the U.S. 101 junction to 500 at the Fresno County line. All the listed minor arterials had increased in traffic volumes from 1978 to 1982 with the exception of Chualar

TABLE 15

CENTRAL SALINAS VALLEY ANNUAL AVERAGE DAILY TRAFFIC

	Road Name	Limits From	Limits To	Annual Average Daily Traffic 1979	1981	1983	1984
	PRINCIPAL ARTERIAL						
1	State Highway 101	SH 198 (San Lucas)	North	N/A	9,100	10,700	12,300
2	State Highway 101	First Street	North	10,900	10,600	13,700	14,500
3	State Highway 101	Broadway	North	15,100	17,200	20,000	21,100
4	State Highway 101	Jolon Road	North	15,100	14,900	17,500	17,500
5	State Highway 101	S. Greenfield Overpass	North	12,300	12,500	14,500	15,000
6	State Highway 101	Oak Avenue (Greenfield)	North	12,400	13,100	15,500	16,000
7	State Highway 101	N. Greenfield Overpass	North	13,800	15,000	17,500	18,000
8	State Highway 101	Arroyo Seco Road	South	14,200	15,300	18,000	18,500
9	State Highway 101	Arroyo Seco Road	North	14,400	16,600	19,200	20,000
10	State Highway 101	Soledad Prison Overpass	North	15,800	17,200	20,700	21,500
11	State Highway 101	Gloria Road	North	14,000	17,000	18,100	18,900
12	State Highway 101	Johnson Canyon Road	North	14,000	16,300	18,000	18,700
13	State Highway 101	N. Gonzales Overpass	North	17,600	19,600	21,700	22,600
14	State Highway 101	Spence Road	North	16,100	17,600	19,000	23,300
	MINOR ARTERIALS						
15	Alta Street (North End)	SH 101	City Limits	N/A	6,300	N/A	7,000
16	Arroyo Seco Road	Indians Road	Carmel Valley Road	1,200	200	N/A	300
17	Arroyo Seco Road	Carmel Valley Road	Elm Avenue	600	650	N/A	850
18	Arroyo Seco Road	Elm Avenue	Thorne Road	350	350	N/A	450
19	Arroyo Seco Road	Thorne Road	Fort Romie Road	1,000	1,000	N/A	12,000
20	Arroyo Seco Road	Fort Romie Road	SH 101	1,550	22,000	N/A	2,300
21	Bitterwater Road	City Limits	County Line	650	1,000	N/A	1,000
22	Carmel Valley Road	Martin Road	Arroyo Seco Road	250	300	N/A	300
23	Chualar River Road	River Road	Foletta Road	1,150	1,150	N/A	1,150
24	Chualar Road	Lincoln Street	Old Stage Road	600	1,100	N/A	1,200
25	El Camino Real (South End)	SH 101	Elm Avenue	2,300	2,600	N/A	2,600
26	El Camino Real (City)	City Limits	Pine Avenue	2,600	2,700	N/A	3,100
27	El Camino Real (North End)	Pine Avenue	SH 101	2,300	2,500	N/A	2,800
28	Elm Avenue	Arroyo Seco Road	Central Avenue	500	500	600	500
29	Elm Avenue	Central Avenue	City Limits	1,000	1,400	N/A	1,400
30	Elm Avenue (City)	City Limits	3rd Street	850	1,200	N/A	1,500
31	Elm Avenue	3rd Street	Metz Road	650	1,000	N/A	1,200
32	Fort Romie Road	Foothills Road	Arroyo Seco Road	800	1,300	N/A	1,500
33	Front Street	N/A	N/A	N/A	N/A	N/A	N/A
34	Gonzales River Road	River Road	City Limits	N/A	2,300	N/A	2,500
35	State Highway 25	North of SH 198	---	120	150	180	N/A
36	State Highway 146	Third Street (Soledad)	West	5,500	6,100	6,000	N/A
37	State Highway 146	Third Street (Soledad)	East	2,500	2,700	2,600	N/A
38	State Highway 146	Metz Road	West	3,500	3,900	1,550	N/A
39	State Highway 146	Metz Road	East	250	250	200	N/A
40	State Highway 198	SH 101 (San Lucas)	---	1,200	1,300	1,600	N/A
41	State Highway 198	East of San Lucas	---	600	600	600	N/A
42	State Highway 198	Fresno County Line	---	500	500	600	N/A
43	Jolon Road	Sulphur Springs	San Lucas Road	1,800	1,800	N/A	1,800
44	Jolon Road	San Lucas Road	SH 101	2,500	2,500	N/A	2,500
45	Metz Road	City Limits	Spreckels Road	750	1,100	N/A	1,100
46	Metz Road	Spreckels Road	Elm Avenue	700	1,100	N/A	1,200
47	Metz Road	Elm Avenue	SH 146	550	600	N/A	1,000
48	Old Stage Road	SH 101	Chualar Road	N/A	1,600	N/A	1,700
49	Old Stage Road	Chualar Road	Esperanza Road	N/A	1,600	N/A	1,700
50	Old Stage Road	Esperanza Road	Alisal Road	N/A	2,800	N/A	N/A
51	River Road	Chualar River Road	Gonzales River Road	500	800	N/A	800
52	River Road	Gonzales River Road	Fairview Road	N/A	800	N/A	900
53	River Road	Fairview Road	Foothill Road	450	500	N/A	500
	COLLECTORS						
54	Central Avenue	Elm Avenue	SH 101	500	500	N/A	650
55	Fourteenth Street	Elm Avenue	Oak Avenue	300	300	N/A	550
56	Lonoak Road	1st Street	SH 25	400	700	N/A	900
57	Oak Avenue	14th Street	City Limits	250	250	N/A	450
58	Pine Canyon Road	Merritt Street	Jolon Road	2,100	2,300	N/A	2,900
59	Spreckels Road	City Limits	Metz Road	700	700	N/A	700
60	Thorne Road	Arroyo Seco Road	SH 101	500	500	N/A	650
61	Third Street	Elm Avenue	Cherry Avenue	200	150	N/A	200
62	Twelfth Street	Elm Avenue	Cherry Avenue	200	200	N/A	300
63	Twelfth Street	Cherry Avenue	Pine Avenue	150	100	N/A	100
64	Walnut Avenue	City Limits	3rd Street	550	700	N/A	1,200

NOTE: N/A--Annual Average Daily Traffic Data No Available.

SOURCE: Monterey County Public Works Department, Average Daily Traffic Volume Trends, 1984.

River Road, from River Road to Foletta Road, State Highway 146, from Metz Road east, State Highway 198, from east of San Lucas to the Fresno County line, and Jolon Road, from Sulpher Springs to Highway 101. About half of the listed collector roads had increased in traffic volumes between 1979 and 1982, and the remaining half reported no changes since 1979.

Performance of the County's roads and highways are ranked "A" to "F" according to Level of Service (LOS) calculations. LOS is based upon traffic type and volume, prevailing speeds, roadway conditions and control, alignment, grade, and freedom to maneuver. The six levels of service ranging from ideal, LOS A, to stop and go, LOS F) are defined in the General Plan Update Background Report, Transportation Analysis of Monterey County, July 1981. The Monterey County Regional Transportation Plan (MCRTP) established LOS C or better as the objective for all roads in the County. The only major roadways on the Central Salinas Valley whose present or future traffic loads indicate deficient levels of service include: Arroyo Seco Road, from Highway 101 to Bridge 311, Elm Avenue from Arroyo Seco Road to Bridge 320, and Pine Canyon Road, from Merritt Street to the end of Pine Canyon Road.

Road and Highway Improvements

Planned improvements for the Central Salinas Valley's roads and highways are detailed in the adopted 1984 Monterey County Regional Transportation Plan (MCRTP). The major proposed road and highway improvements for the Central Salinas Valley include the following:

Short Range Program

- The existing highway and county road system will be maintained.
- Accident locations will be monitored and safety improvements provided in accordance with engineering practices.
- Provide park and ride facilities.
- Seismic retrofit of six bridges on Route 101, from Nacimiento River to the Soledad overhead.
- Remove the power poles along Route 101, from 0.4 miles north of Chualar to 0.1 miles north of the Spence Underpass.
- Upgrade the pavement on Route 101, from .5 mile north of King City to 1.5 mile north of the Canal Street Undercrossing Bridge No. 44-180.
- Jolon Road I - Overlay and shoulder widening of Jolon Road near Jolon Grade.
- Jolon Road II - Overlay and shoulders for Jolon Road between Pine Canyon and milepost 31.0.
- Jolon Road III - Overlay and shoulders between the north end of Jolon Road II and Pine Canyon Road.
- Replace the Chualar River Bridge over the Salinas River, Bridge No.306.

Long Range Program

- Continue to maintain existing highway system.
- Continue to monitor accident locations and provide safety improvements as warranted.
- Reconstruct the Elm Avenue Bridge, Bridge No. 321.
- Overlay and add improved shoulders to Jolon Road from Interlake Road to Hunter Ligget boundary and between Mile Post 35 and Highway 101 north.

The planned improvements described above were determined in accordance with funding constraints. Many projects are necessary to alleviate congestion and safety problems if additional funds become available. In the Planning Area, these projects include widening of bridge on-ramps and the reconstruction and realignment of several important county roads including: Arroyo Seco Road, River Road, Metz Road, and Fort Romie Road. Also under consideration is the replacement of the following five bridges: No. 302 at Elm Avenue, No. 326 on Arroyo Seco Road, No. 326 at Reliz Canyon Road, No. 327 at Jolon Road, and No. 312 at Los Coches Road.

Scenic Highways

As indicated in Figure 5 and the previous discussion of visual resources, several of the roads and canyons in the Planning Area exhibit scenic qualities sufficient to warrant their designation as scenic routes or highways. The County's Scenic Highway System is composed of roads and highways that have been designated as either State scenic highways or County scenic routes. The Central Salinas Valley contains areas of inspiring natural landforms and bucolic rural settings which can be appreciated from many of its roads and highways. In recognition of the desirability to preserve these scenic corridors for future generations, the Scenic Highway Element of the County General Plan has proposed that many scenic routes in the Planning Area be constructed or improved to meet the criteria of the Scenic Highway Program. Proposed routes include: Arroyo Seco Road; Bitterwater Road; Carmel Valley Road; Chualar Road; Chualar River Road; Elm Avenue; Indians Road; Jolon Road; Old Stage Road; River Road; and State Highways 25, 146, and 198. None of the proposed scenic highways or roads have yet been officially designated.

Public Transit

The existing transit system in the Central Salinas Valley consists of local demand response service provided by Soledad, Greenfield, and King City, scheduled service by Greyhound Lines West, and a special transportation program for the elderly and handicapped. Greyhound Lines West is operating as an intercity service between Salinas and the Central Salinas Valley cities. Interregional service is provided between Monterey County and the San Francisco Bay and Los Angeles areas. The Rural Health Project, Inc. of King City, under contract to the County, provides door-to-door service to the mobility impaired and provides service for the able-bodied to the nearest fixed-route bus stop. Three vans, one equipped with a wheelchair lift, serve the rural areas between Chualar and San Lucas.

According to the MCRTP, the short range programs for public transit in the Central Salinas Valley involve the maintenance of existing service levels, the purchase of one van for Soledad Transit, a purchase replacement vehicle for Greenfield Transit, and purchase replacement vehicles with wheelchair access for King City Transit. Long-range plans for transit include the consideration of inter-city bus service to Central Salinas Valley cities, a local demand responsive service in Gonzales, and implementing bus service to newly developed areas.

Truck Transportation

Highway 101 is the County's most prominent trucking corridor. Counting stations at Highway 101's junctions with Highway 198, Jolon Road, Highway 146, Soledad Prison, and North Gonzales measure truck traffic through Central Salinas Valley. At Highway 198, Highway 101 carries a significant load, 18% of truck traffic; only the junction of Highways 1, 156, and 183 carries a higher proportion of truck traffic. One third of the traffic is small capacity, 2 and 3 axle trucks, while two-thirds is large capacity, 4 and 5 axle, indicating predominantly long distance commodity movement. The Jolon Road junction carries 13% in truck traffic while the junctions of Highway 146, Soledad Prison, and North Gonzales each carry 16% in truck traffic. Commodity movement along the Highway 101 corridor is predominantly long distance as indicated by the large proportion, over 50%, of large capacity vehicles.

Air Transportation

The Central Salinas Valley contains one public airport in King City and 13 private airports and agricultural landing fields located throughout the Planning Area. While both agricultural landing fields and private airports are located on private property, agricultural landing fields are used exclusively for agriculturally related activities, primarily crop dusting. Mesa Del Rey Airport, owned by the City of King, is located on the north boundary of the City within city limits. The airport is a general aviation facility with no scheduled commercial service.

Railroad Transportation

Rail passenger service to and from Monterey County is provided by AMTRAK and rail freight service is provided by the Southern Pacific Transportation Company (SPTC). The railroad system in the County consists of one main track and one branch track. The main track enters the region in the north at Watsonville extending south through the Salinas Valley to San Luis Obispo and, eventually, San Diego. Salinas is the only city in Monterey County with rail passenger service. The Coast Starlight train serves the Salinas station traveling southbound to Los Angeles and northbound to San Francisco, Oakland, and Seattle. SPTC rail freight stations are located at Castroville, Salinas, and Gonzales in the Central Salinas Valley. Spur tracks serve local industrial sites. The primary products shipped by rail are fresh and frozen vegetables, sugar beets, food products, sand and gravel, and rocks.

Non-Motorized Transportation

Non-motorized transportation includes biking, equestrian, and pedestrian modes. All of these modes can provide recreation as well as basic transportation. However, bicycling has the greatest potential as a viable alternative to the automobile. The relatively level terrain of the valley floor is conducive to bicycle routes and paths which could link the urban centers of the Planning Area. Bike routes are designated by signing only, and no physical improvements are provided. Bike paths are physically separated from adjacent streets and are reserved for exclusive bicycle use. Both bike routes and bike paths can be integrated into an effective network of alternative transportation.

Several historical trails and landmarks appropriate for recreational bicycle routes exist in the Planning Area, e.g. the Juan Bautista De Anza National Trail, the route of Portola during his exploration of the Pacific, and the California Mission Trail. Bypass routes are also necessary where portions of Highway 101 are prohibited to bicycles. In the Planning Area these areas are Highway 101 from King City to the southern boundary, the 101 Freeway near Greenfield, and Highway 101 between Soledad and Greenfield. Cyclists wishing to traverse the valley are forced find alternate routes. According to the "Bikeway System in Monterey County" report, prepared by the Monterey County Transportation Study in 1982, the only designated bike facilities existing in the unincorporated area of the Central Salinas Valley are:

- A bike route in Greenfield along Oak Avenue and First Street from El Camino Real to Elm Avenue which continues as a bike path along Elm Avenue to Oak Park.

- A bike pedestrian crossway that parallels on the South First Street Bridge in King City.

While the Planning Area does contain several roads which have relatively low traffic volumes and sufficient width for bike riding, a hazard does exist for cyclists because these routes are shared with motor vehicle traffic. Currently the only plans for bicycle facilities in the Planning Area exist as general short-range and long-range objectives in the MCRTP to safely accommodate pedestrian and bicycle traffic by:

- Providing bikeway and pedestrian paths which are separated from roadways or are defined from traveled ways;

- Encouraging use of standard signing along bikeways; and

- Encouraging educational programs to make drivers aware of bicyclists' rights on highways.

Current development of bicycle facilities is occurring primarily in the greater Monterey Peninsula cities and Salinas, with plans to close the gaps between the city networks. The Countywide General Plan requires that each area plan map contain an integrated system of bicycle routes for the County. A trails plan will be prepared as a supplemental element to this

Area Plan. This system of area plan bicycle routes will play an important role in filling the gaps between the cities and connecting all areas of the County.

Pipeline Transportation

Pipeline transportation is an inconspicuous yet significant form of commodity transportation. Water, natural gas, and crude oil are the primary substances transported by pipeline in Monterey County. Water and natural gas are the commodities currently transported by pipeline in the Central Salinas Valley. Water transport and purveyors are discussed below. Natural gas is supplied to the Planning Area by Pacific Gas and Electric Company in its own pipeline system using 6- and 8- inch pipelines which roughly parallel Highway 101 along the valley floor. Further south in the South County Planning Area, Mobile Oil owns and operates an oil pipeline between San Ardo and Estero Bay in San Luis Obispo. The pipeline has the capacity to pump 56,000 barrels per day from the San Ardo oil fields to the tanker port at Estero Bay. In 1979, the pipeline carried about 30,000 barrels per day. The presence of oil fields in Central Salinas Valley and the existence of unused capacity in the Mobile Oil pipeline may make possible future pipeline transport of crude oil produced in Central Salinas Valley.

PUBLIC SERVICES AND FACILITIES

Police Protection

The Monterey County Sheriff's Department is the primary provider of police services to the unincorporated areas of the Central Salinas Valley. The Sheriff's Office in Salinas is the department's primary dispatching station and houses the administrative and support staff. The County jail facility is also located in Salinas. Patrols in the southern portion of the Planning Area are dispatched from the Sheriff's Department substation located in King City. The unincorporated portion of the Planning Area is divided into two beats, each of which is patrolled by one deputy in a patrol car at all times. The California Highway Patrol has jurisdiction and law enforcement powers on all state highways and County roads. Patrol cars are dispatched from the Highway Patrol substation on Portola Drive, two miles east of Salinas, and on Broadway Circle in King City.

Park and Forest rangers serve as police officers within the boundaries of their jurisdictions. The U.S. Forest Service has responsibility for law enforcement in the Los Padres National Forest. Two ranger stations serve as command posts for the approximately 65 square miles of the Los Padres National Forest. A portion of the Pinnacles National Monument is also in the Planning Area and is patrolled by rangers of the National Park Service. Monterey County parks are patrolled by County park rangers authorized to enforce park ordinances, protect park property, and maintain peace within County parks.

Soledad, Gonzales, Greenfield, and King City each have their own police departments. While these departments operate only within their incorporated boundaries, mutual assistance agreements are in effect with the County Sheriffs.

Several special-interest law enforcement agencies also exist in the Planning Area. The State Department of Corrections, at the Soledad State Prison, maintains a staff of approximately 739 trained correctional officers, the Department of Fish and Game enforces laws concerning illegal hunting, and the Immigration and Nationalization Service has approximately five border agents operating from its Salinas office.

Fire Protection Services

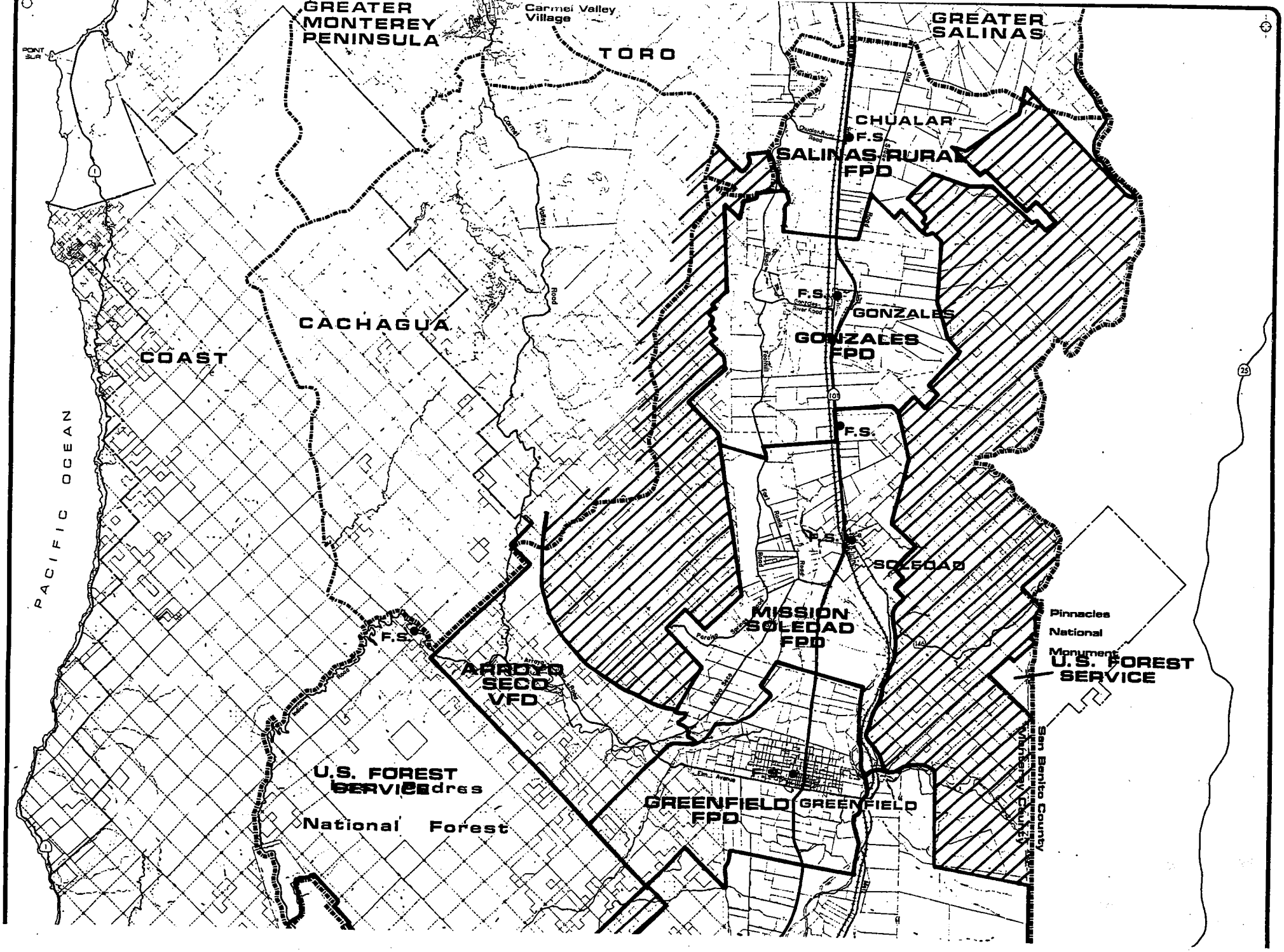
Fire protection services in the Central Salinas Valley are provided by four fire protection districts and one County service area: Gonzales, Greenfield, Mission Soledad, Salinas Rural, and County Service Area 61. These providers cover most of the valley floor between the Gabilan and Santa Lucia Mountains. Figure 13 illustrates the boundaries of these districts as well as the areas where no organized structural fire protection exists.

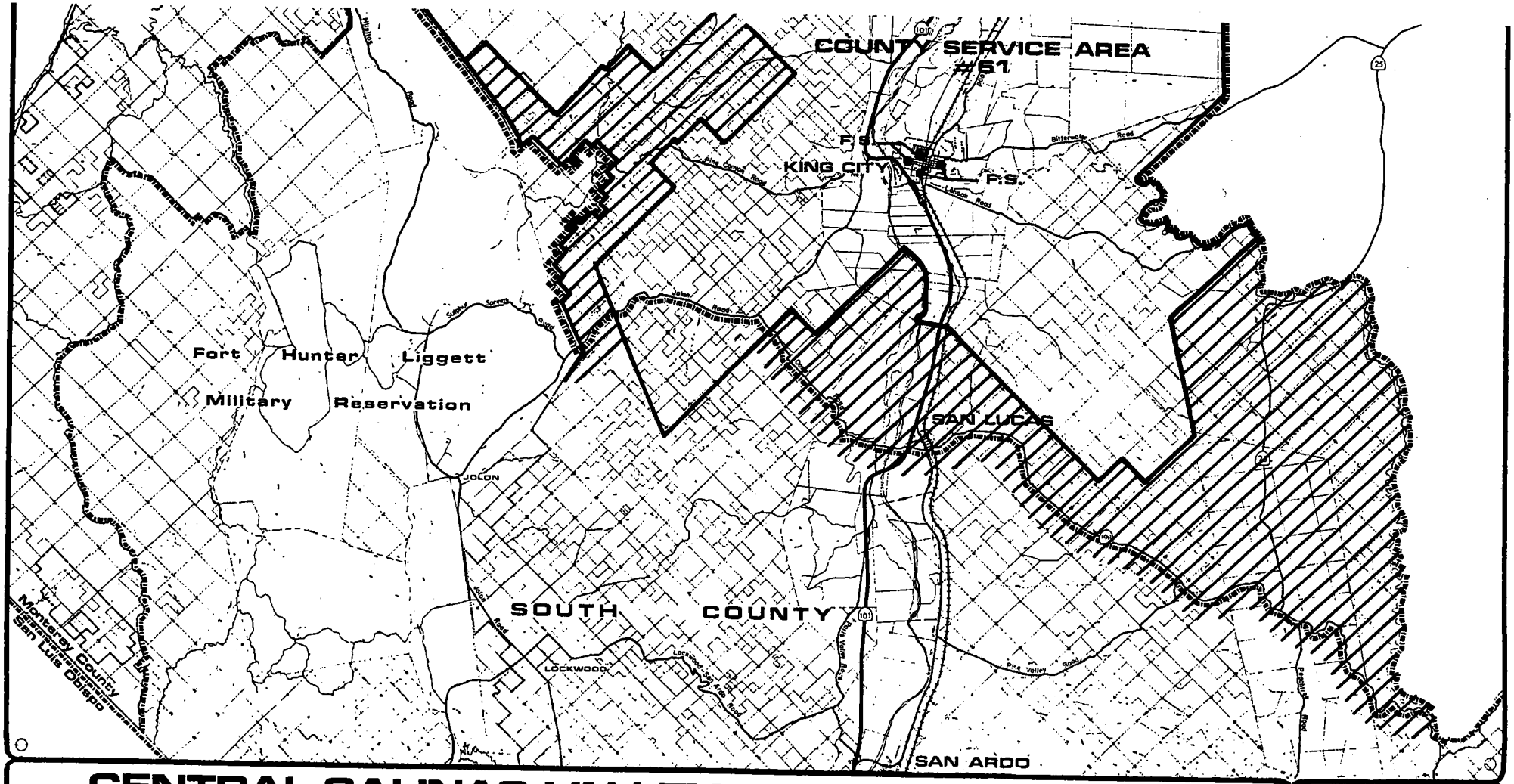
Wildland and grassland fire suppression throughout the Planning Area is the responsibility of the California Department of Forestry (CDF) which maintains stations in King City and adjacent to the Soledad State Prison. The CDF also provides manpower and volunteer training service to County Service Area 61 by contract. The United States Forest Service has responsibility for fire protection within the boundaries of the Los Padres National Forest. Where response time can be significantly improved, the Forest Service and CDF have traded responsibility for certain lands within each other's jurisdiction.

The California Department of Forestry does not normally respond to structural fires. Its primary responsibility is the suppression of wildland fire. Consequently, several areas within the Planning Area are without any adequate protection from structural fires. The most serious of these is the Arroyo Seco Canyon which contains dozens of structures, many of which are summer cabins. Other such areas are Henry Sands Canyon east of Gonzales, Stonewall Canyon and Shirttail Canyon east of Soledad, upper Reliz Canyon southwest of Greenfield, and Peachtree Valley southeast of King City. High fire risks are being reduced somewhat as existing structures are brought into conformance with the Uniform Building Code and Uniform Fire Code. The impact of fires on lives and property can be further reduced through the extension of structural fire protection services where none currently exist. Development in such areas must be predicated on the provision of adequate structural fire protection.

Educational Facilities

Eight unified-public school districts operating twelve schools provide elementary level education to residents of the Central Salinas Valley. In addition, the Coalinga Unified School District serves the extreme southeast corner of the Planning Area. The Central Salinas Valley is also


GREATER MONTEREY PENINSULA
Carmel Valley Village
TORO
GREATER SALINAS
CHUALAR
F.S.
SALINAS RURAL FPD
F.S.
GONZALES
GONZALES FPD
F.S.
CACHAGUA
COAST
PACIFIC OCEAN
F.S.
SOLEDAD
MISSION SOLEDAD FPD
Pinnacles National Monument
U.S. FOREST SERVICE
F.S.
ARROYO SECO VFD
U.S. FOREST SERVICE
National Forest
GREENFIELD FPD
GREENFIELD
San Benito County



CENTRAL SALINAS VALLEY PLANNING AREA

PLANNING AREA BOUNDARY

FIGURE 13

FIRE PROTECTION DISTRICTS

FPD FIRE PROTECTION DISTRICTS

VFD VOLUNTARY FIRE DEPARTMENT

AREAS WITHOUT ORGANIZED STRUCTURAL FIRE PROTECTION

F.S. FIRE STATION LOCATIONS

0 5000 10000
FEET
DECEMBER 1981

Monterey County Planning Department

SOURCES: CALIFORNIA DEPARTMENT OF FORESTRY; MONTEREY COUNTY PLANNING DEPARTMENT, 1982.

served by three high school districts. The Salinas Union High School District operates five high and junior high schools, four of which serve residents of the Planning Area. The Planning Area is also served by the Hartnell Community College District. The main campus of the college is on Homestead Avenue in Salinas. The agricultural campus is located at East Alisal Street and Bardin Road in Salinas. The district provides twice daily bus service between Salinas and King City as a free service to area residents attending Hartnell. Projections of future school enrollments by AMBAG indicate that unless additional facilities are constructed, school districts in the Central and South Salinas Valley will be 1,300 students above capacity by the year 1990. By the year 2000 Central/South Salinas Valley school districts are expected to be 3,500 students over capacity. To achieve 27 students per classroom, 130 new classrooms will be required in the Central Salinas Valley and South County Planning Areas.[10]

Health Services

Central Salinas Valley is served by four acute care hospitals. Only one of these, George L. Mee Memorial Hospital in King City, is in the Planning Area. Also serving the Planning Area are Salinas Valley Memorial, Alisal Community Hospital, and the County's Natividad Medical Center, all located in Salinas. These hospitals have capacities of 33, 211, 42, and 246 beds, respectively. Mee Memorial also provides the only licensed nursing care facility in the Planning Area with nine beds.

The County Health Department offers several non-emergency health programs to residents of the Central Salinas Valley. Among these are child health screening clinics which are held regularly in Gonzales and King City, communicable disease control, emergency and disaster services, environmental health services, health services for the elderly, maternity and prenatal services in Gonzales and King City, mental health services, and community health field services.

The Rural Health Project is a private, non-profit health provider serving the residents of the Planning Area through clinics in King City and Soledad. Transportation is provided for those otherwise unable to reach the clinics. The Soledad Ambulance Service also provides emergency care and transportation to Planning Area residents.

Social Services

Social services are provided in the Planning Area by two branch offices of the County Social Services Department located at 1000 Division Street in King City, and 1025 State Street in Soledad. The Department provides its services into benefit payment programs and social work services. The former provides direct aid payments to individuals and families in need, including families with dependent children, general assistance, food stamps, and medicare. The latter provides information and counseling for social and health problems, as well as counseling for veterans and the unemployed.

10. AMBAG, Draft Systems Capacity Analysis (June, 1986), p. 57.

County Library Services

The Central Salinas Valley is served by four public libraries. The libraries located in Gonzales, Greenfield, and Soledad are branches of the County library system. The King City Public Library is operated by the City with some services contracted from the County. The County Library System also operates a mobile library with 9,274 volumes. This service operates 25 hours a week making three regular weekly stops in Chualar and one in Pine Canyon.

Park and Recreational Facilities

Residents of the Central Salinas Valley have access to a variety of recreational opportunities including community and regional parks, National forests and National monuments.

The cities of Gonzales, Soledad, and King City have local parks. Gonzales has two such community parks. King City, in addition to its community parks, is the site of a County regional park, San Lorenzo County Park, the County Fairgrounds, rodeo grounds, and a golf course. San Lorenzo County Park contains a history center and a agricultural history museum supplementing more conventional park facilities. Two other regional recreational facilities, Pinnacles National Monument and the Los Padres National Forest, are also located in the Planning Area. The Pinnacles,located east of Soledad along Highway 146, provides opportunities for picnicking, hiking, and other day use activities. The Los Padres National Forest also provides a variety of outdoor recreational possibilities including swimming, tubing, fishing, hiking and picnicking. Overnight camping is provided in the Los Padres National Forest and at private camp grounds nearby.

Domestic Water Services

About 80% of the housing units in the Central Salinas Valley are connected to a public or private water system that provides service to six or more households. Table 16 shows more specifically that about 99% of the housing units in the incorporated cities are connected to a system while the majority of the households in the unincorporated area reported private wells as their source of water. These statistics confirm the location of the major water purveyors in the Planning Area. The cities of Gonzales, Soledad, and Greenfield are served by municipal water districts while the City of King is served by the investor owned California Water Service. The Pine Canyon Area west of King City is served by the Little Bear Water Company, which is also investor owned. The Fred's Camp area of Arroyo Seco is supplied by the Arroyo Center Water Company. The unincorporated communities of Chualar and San Lucas are provided water through County Special districts. Mutual water companies and private wells supply the other areas in the Central Salinas Valley. Not surprisingly, all the communities in the Planning Area with a significant population density are provided water through an organized system with more than 50 connections. The source of water for all these purveyors is groundwater. Increased consumption of groundwater by these water purveyors will exacerbate the overdrafting of groundwater resources.

The 1980 Census also reported 117 housing units as obtaining water from sources other than wells or public or private systems. The Census also indicated that there were 210 housing units that lacked complete plumbing facilities.

Wastewater Facilities

Wastewater treatment facilities are necessary where soil conditions or densities are not suitable for septic tank or cesspool treatment of wastewater. Table 16 indicates that roughly three quarters of Planning Area housing units are served by a public sewer system. This is an unusually high proportion for a large, predominantly rural area, however the Table also reflects how this is possible due to the concentration of sewer service and development within Planning Area cities. About 98% of the housing units in the incorporated areas are served by public sewer systems compared to only 34% for the unincorporated area. The remainder of Central Salinas Valley households are primarily served by cesspools and septic tanks. The Census reported 134 housing units which relied on other, illegal means of sewage disposal, such as an individual sewer line running to a creek or stream, units with a privy, or other means. Currently, eight wastewater treatment facilities are serving the sewered areas of the Planning Area, as shown on Table 17. The cities of Gonzales, Greenfield, King, and Soledad are served by municipal facilities while Chualar is served by a County sanitation district. Portions of Pine Canyon are served by a private treatment facility. The California Department of Corrections operates a facility for the Soledad State Prison. Table 17 also shows that three of these facilities are currently exceeding 75% of their design capacity. Facilities operating in excess of this level of capacity are generally considered ready for expansion and unable to accommodate more service. Table 17 also shows that four of the six facilities provide only primary treatment.

An analysis recently completed by AMBAG projected that the population in the Planning Area in the year 2000 would exceed the existing sewer capacity by about 5,600 persons.[11] Wastewater treatment for these persons should be provided by new septic systems, onsite treatment facilities, or expanded wastewater treatment facilities.

Solid Waste Disposal

Solid waste in the Planning Area is disposed of at the solid waste disposal sites at Johnson Canyon and Jolon Road. These sites are operated by private operators under permit from the County Health Department in accordance with the County Solid Waste Management Plan. The Johnson Canyon facility is owned by the County and encompasses about 122 acres. Collection and disposal services to this facility are provided by the the Rural Garbage and Dispos-All Service Co., which serves the area north of Greenfield. The Jolon Road facility, leased by the County, covers 496 acres with collection and disposal services provided by the King City Disposal Service Inc., serving the area south of Greenfield and Arroyo Seco. Both of these facilities are expected to remain in operation past the year 2000.

11. AMBAG, Systems Capacity Analysis (June 1986), p. 44.

TABLE 16
SOURCE OF WATER AND TYPE OF SEWAGE TREATMENT FOR CENTRAL SALINAS VALLEY HOUSING UNITS

Area (Census Tract)	Housing Units	SOURCE OF WATER				MEANS OF SEWAGE DISPOSAL			
		Public/Private Water System	Well Source	Other Source	% on Public or Private System	Public Sewer System	Septic Tank or Cesspool	Other Means	% on Sewer System
Census Tract 108	1,745	1,259	429	27	73%	1,227	432	56	71%
Unincorporated	862	406	407	27	48%	378	419	43	45%
Gonzales	883	853	22	0	98%	849	13	13	98%
Census Tract 109	16	16	0	0	100%	16	0	0	100%
Unincorporated	16	16	0	0	100%	16	0	0	100%
Census Tract 111	1,972	1,631	318	11	83%	1,598	340	22	82%
Unincorporated	525	211	285	8	41%	186	316	12	36%
Soledad	1,446	1,420	33	3	98%	1,412	24	10	98%
Census Tract 112	1,729	1,362	346	9	79%	1,337	360	20	78%
Unincorporated	503	156	330	5	31%	127	344	20	26%
Greenfield	1,226	1,206	16	4	99%	1,210	16	0	99%
Census Tract 113	2,923	2,454	363	70	85%	2,212	639	36	77%
Unincorporated	977	514	357	70	53%	285	629	27	29%
King City	1,946	1,940	6	0	99%	1,927	10	9	99%
Total Planning Area	8,385	6,722	1,456	117	80%	6,390	1,771	134	76%
Unincorporated	2883	1092	1094	102	38%	806	1392	90	28%
Cities	5501	5419	77	7	99%	5398	63	32	98%

TABLE 17
WASTE WATER TREATMENT PLANTS IN CENTRAL SALINAS VALLEY

Wastewater Treatment Provider	Service Area	Treatment	Percent of Capacity
Municipalities			
City of Gonzales	Gonzales	Primary	72%
City of Greenfield	Greenfield	Primary	60%
City of King	King City	Primary & Secondary	63%
City of Soledad	Soledad	Primary	68%
Special Districts			
Chualar County Sanitary District	Chualar	Primary	66%
State			
California Department of Corrections	Soledad Prison	Secondary	89% +
Private			
Sierra Vista Properties - Little Bear Water Company	Pine Canyon	Primary +	100%

Note: + indicates plants exceeding 75% design capacity.
Sources: Central Coast Regional Water Quality Control Board, 1980
City of King, 1987

Gas and Electric Services

Electrical power and natural gas service in Monterey County is provided by the Pacific Gas and Electric Company (PG&E). PG&E is an investor owned utility company regulated by the Public Utilities Commission. Electrical transmission lines serving the Planning Area are generally above ground, but are being buried in new construction. Six electrical substations are located in Chualar, Gonzales, Soledad, King City, and on Camphora Road and Los Coches Road.

A natural gas transmission line parallels Highway 101 and provides gas to the incorporated cities and their adjacent areas, as well as Chualar. The community of San Lucas and the more rural areas of the Planning Area rely on other energy sources such as bottled butane and propane which is delivered to the home, electricity, wood, solar, and wind.

Television and Radio Communication

Three television stations serve the Planning Area. Each station is affiliated with one of the major networks. Seventeen local radio stations, seven AM and ten FM, also serve the County. All of these may be received with varying quality in the Planning Area.

Telephone Service

Telephone services are provided throughout the County by Pacific-Bell. The telephone lines in the Planning Area are generally above ground.

HOUSING

The Housing portion of this Area Plan, similar to the other other portions, is intended to expand upon the 1985 Housing Element of the County General Plan in a way that will enable the goals, policies, and programs of the 1985 Housing Element to apply more specifically to the Planning Area. This section contains more detailed information about the households and housing in the Central Salinas Valley than is found in the countywide Housing Element. Based on this information particular goals, policies, and programs of the Housing Element may find more applicability in addressing the specific housing concerns in the Planning Area.

Population trends and household data are important indicators of future housing demand with respect to number, size, and type of unit. When considered with respect to the condition of existing housing and housing affordability, this data can be used to indicate the most appropriate course of governmental action to insure that the housing needs of area residents are met. Population trends and demographic data for the Central Salinas Valley are discussed in the Human Resources portion of this Area Plan. Household and housing unit data are discussed below.

Household Characteristics

A variety of housing information from the 1980 U.S. Census is summarized in Table 18. The housing characteristics shows that the Planning Area contained 7,646 households, 68 % of which were located in the incorporated areas. The average household size in the Planning Area was 3.60 persons per household. The average household size in the unincorporated area was larger than in the incorporated cities at 3.76 versus 3.53 respectively. These average household sizes are larger than the County's average of 2.85 persons per household. Furthermore, average household size in the Planning Area has been increasing. The mid-decade census indicated that in 1975 the average household sizes in the unincorporated area and the cities were 3.73 and 3.46 respectively. This trend of increasing household sizes contrasts with stabilized or decreasing household sizes in the County's other planning areas.

The increase in household sizes may be attributed to a number of factors. The low median age of 23.3 in the Planning Area indicates a large percentage of children and young adults living at home. The age structure of the Planning Area also indicates that large household sizes may persist with almost 40% of the population being of child bearing age. Socio-cultural patterns may be another factor contributing to large household size. Larger families and the extended family system may account for the fact that 83% of the households in the Planning Area were families, compared to only 73% for the County as a whole. About 14% of the households were one-person households, with 42% of that figure being elderly persons living alone. The County as a whole had a higher percentage of one-person households, 21%, but a lower percentage, 36%, of those households were the elderly living alone.

The indication of large household sizes in Central Salinas Valley may also be the result of escalating housing costs. The increase in housing prices over the past decade may have caused some families to "double-up" in one unit to share housing costs. Increases in rent may have caused young adults to remain with their parents rather than move out. Similarly, fixed income elderly may have opted to share a house rather than live alone. Large or shared households are in part responsible for the fact that 12,242 people, almost 40% of Planning Area residents, lived in over-crowded units. The average household size in overcrowded units was about six persons per household.

Other factors affecting overcrowding are size and number of housing units available. Overcrowding occurs when the dwelling units are too small to accommodate the size of the households or too few to serve the number of households in the area forcing families to "double up".

Housing Unit Data

In 1980, the Planning Area contained 8% of the County's housing stock, of which 5.3% was in the cities and 2.7% was in the unincorporated area. This 8% share of County housing was about the same as the 1970 share.

TABLE 18
SELECTED HOUSING INFORMATION FOR THE CSV

HOUSEHOLD CHARACTERISTICS

Area	Total Housing Units	Total Year-round Housing Units	Seasonal and Migratory Units	Vacant Year-round Total	Gross Vacancy Rate in Percent	Vacant for Sale	Vacant for Rent	Total for Sale/Rent	Effective Vacancy in Percent
Total Unincorporated within Planning Area	2,884	2,792	92	321	11.1%	15	90	105	3.7
Total Cities within Planning Area	5,501	5,449	52	274	5.0%	66	108	174	3.2
Total Planning Area	8,385	8,241	144	595	7.1%	81	198	279	3.4
Total County	103.557	103.236	321	7,502	7.3%	1,091	2,359	3,450	3.3

HOUSING CHARACTERISTICS

Area	Total Households	Family Households	Non-Family Households	One-Person Households	Female Head with Minor Age Children	One-Person 65+	Large Households 6+	Household Population	Persons Per Household	Population in Group Quarters	Owner Occupied Units	Renter Occupied Units
Total Unincorporated within Planning Area	2,471	2,058	413	340	109	136	482	9,289	3.76	3,308	1,025	1,446
Total Cities within Planning Area	5,175	4,275	900	758	419	322	833	18,262	3.53	233	2,670	2,505
Total Planning Area	7,646	6,333	1,313	1,098	528	458	1,315	27,551	3.60	5,541	3,695	3,952
Total County	95,734	70,211	25,523	20,183	6,643	7,230	6,768	272,425	2.80	18,019	50,794	44,940

HOUSING UNIT CHARACTERISTICS

Area	One Room	2-3 Rooms	4-5 Rooms	6+ Rooms	Median Size	Overcrowded Owner	Overcrowded Renter	Persons in Overcrowded Units	Average Household Size in Overcrowded Units	Units Without Plumbing	Units Without Plumbing and Overcrowded	Median Home Value	Median Home Rent
Total Unincorporated within Planning Area	76	819	1,211	686	4.3	120	604	4,505	6.21	96	41	$67,153	$196
Total Cities within Planning Area	160	1,368	2,649	1,272	4.4	466	865	7,753	5.82	77	51	$61,507	$191
Total Planning Area	236	2,187	3,860	1,958	4.4	586	1,469	12,258	5.96	73	92	$63,099	$189
Total County	2,597	20,618	47,694	32,327	4.7	3,137	6,583	54,466	5.60	917	314	$86,500	$263

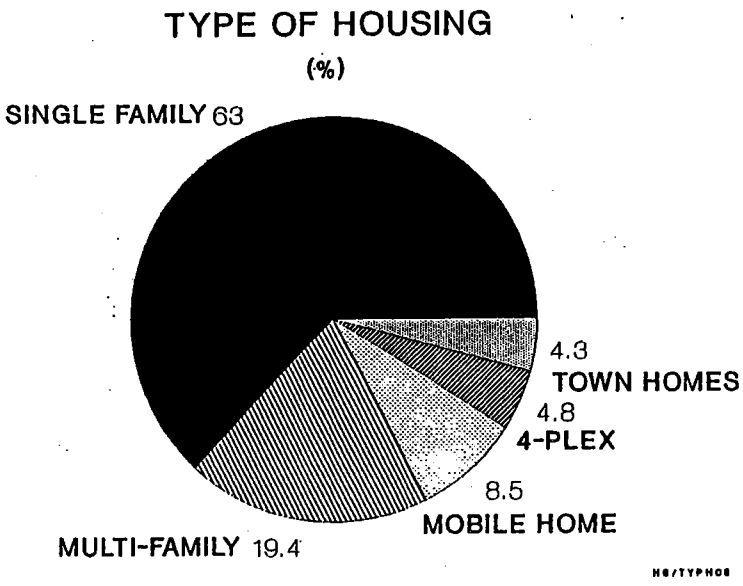
Source: 1980 U. S. Census of Population.

According to the 1980 U.S. Census, there were about 8,385 year round housing units in the Central Salinas Valley Planning Area. This was an increase of 34% over the 1970 figure of 6,248. The cities experienced the majority of this increase with a 43% increase in housing units compared to 19% for the unincorporated area.

Among the housing units that were owner occupied, the median home size was 5.2 rooms. This figure was larger than than the county wide median of 4.7 rooms per home. The median number of persons living in owner occupied housing units was about 3.3. Among the housing units occupied by renters, the median number of rooms was 3.7. The median number of persons living in rental units was 3.4. This data indicates that while rental units generally had fewer rooms than those that were owner occupied, the number of people living in these units was greater.

The Planning Area had an effective vacancy rate of 1% for units for sale, and 2.4% for rental units, for an overall vacancy rate of 3.3%. According to the State Department of Housing and Community Development, the overall effective vacancy rate should be approximately 4% for the market to operate effectively. A 2% vacancy rate for sale units is considered adequate while an adequate level for rental units is about 6%.

Types of Housing



The majority of housing units in the Planning Area, 63%, were detached single family homes. The next largest housing type was multi-family, or apartment units, making up 19.4% of the housing stock. Mobile homes comprised 8.5% of the housing stock. The housing type represented least in the Planning Area was multiple-family dwellings consisting of duplex, triplex, and fourplex units, with 4.8%, and townhouses at 4.3%. The major difference in housing types between the cities and the unincorporated area was that that the cities tended to have more multiple-family units than the unincorporated area. Conversely, mobile homes were more prevalent in the unincorporated areas.

Farm labor camps are also a significant source of housing in the Planning Area. The County Health Department currently permits 28 labor camps in Central Salinas Valley capable of housing 1,041 people. However, other studies have estimated the number of farm labor housing units to be much larger. Many labor camps have been offered as rental housing units

available to the general public, thus removing them from the Health Department Inspection Roster. Additionally, smaller camps housing either four employees or two families, or less, were considered part of a farming operation and were therefore, not recorded as labor camps. With 47% of the Planning Area's population employed in the agricultural industry, it can be expected that farm labor camps are a significant source of housing. The 1980 Census reported 144 seasonal and migratory units in the Planning Area, the majority of which were probably built as farm labor housing.

Shifts in agricultural production methods and the type of work force needed have given rise to a housing problem for farm laborer families. Barracks which were originally intended for seasonal workers and single men have been converted to year round family use. This change in tenure has led to a rapid deterioration of farmworker housing. The inadequacies of existing farm labor camps have been repeatedly documented in farmworker, housing surveys conducted in Monterey County. The County Growth Management Task Force reported in 1979 that a major portion of the low income families in the Valley are farmworkers. Many of these families are housed in existing farm labor camps that are deteriorating and generally are in poor condition. Farmworker households are by far the largest single group with long-standing and severe unmet housing needs.

Housing Tenure

The proportion of renter-occupied and owner-occupied housing units within the Planning Area as a whole was fairly even, about 51.7% and 48.3% respectively. Within the cities, the figures were 48.4% and 51.6% renter-occupied and owner-occupied, and 58.6% to 41.4% in the unincorporated area respectively. The larger proportion of renters in the unincorporated area of Central Salinas Valley contrasted with the County's other planning areas where the majority of households in the unincorporated area were owner-occupied. The larger percentage of renters in the Planning Area may be due in part to the large number of farm laborers renting in the unincorporated area.

Condition of Housing Stock

Although U.S. Census reports no longer contain statistics on dilapidated housing, statistics describing the lack of standard facilities such as plumbing are a viable indicator of sub- standard units. Overcrowding may also cause a structure to deteriorate more rapidly. Table 19 indicates the number of housing units in the Planning Area which can be considered sub- standard. Table 19 shows that a significant proportion of housing units lack adequate plumbing or heating facilities.

Table 19

SUB-STANDARD HOUSING IN CENTRAL SALINAS VALLEY

	Year-Round Housing Units	Percent
Incomplete Kitchen Facilities	141	1.7%
Incomplete Plumbing	210	2.5%
Inadequate Heating	191	2.3%
Overcrowded	2,053	24.9%
Built Before 1950	2,589	31.4%

Housing conditions can also depend on the age of the structure. About 31% of the Planning Area's housing was built before 1950. By comparison, only 25.4% of the housing stock County-wide was built before 1950. The 1981 AMBAG Housing Needs Report states that a disproportionate share of these substandard units are probably occupied by lower income farmworker families. Other groups most likely to live in substandard housing include low-income and elderly households.

Housing Costs

Housing affordability is usually described in terms of the percentage of households with incomes large enough to afford the median-priced new home.[12] Although interest rates and home financing packages are key determinants of housing affordability, income levels are the most important factor in determining the number and type of units which can be produced at prices affordable to Planning Area households. However, as previously mentioned, the majority of the Planning Area's households had incomes significantly below the County median income. About 47% of all Planning Area households were lower income, which is defined as 0 to 80% of the County median income. The unincorporated areas surrounding Gonzales and Greenfield had median household incomes that were only 75.8% and 78% of the County median, respectively. Household income levels for the Planning Area are presented in Table 14.

According to the 1980 Census, the median home value in the Planning Area was $61,800, which is about 71% of the County's median home value of $86,000. Within the Planning Area, the unincorporated area had a median home value of $67,153; and in the incorporated cities the median home value was $61,551. Lower home values in many portions of the Planning Area are probably due in part to the relatively low cost of land. The median monthly contract rent level

12. Seymore I. Schwartz and Robert A. Johnston, Local Government Initiatives for Affordable Housing(Institute of Governmental Affairs, U.C. Davis, 1981), p.3.

in the Planning Area of $191 was the lowest of the County's eight planning areas, or about 73% of the county-wide median of $263. Housing affordability ranges for lower income households in Monterey County, as projected by AMBAG, are shown in Table 20. Table 20 indicates that lower income households are not able to afford market rate housing in the Planning Area.

Table 20
Housing Affordability for Lower Income Families

	Maximum Household Income	Affordable Rental Range	Affordable Sales Price Range
1970:	$0-$7,784	$0-$162	$0-$19,460
1976:	$0-$9,484	$0-$198	$0-$23,710
1980:	$0-$14,720	$0-$307	$0-$36,800
1985:	$0-$18,188	$0-$380	$0-$45,470

Source: AMBAG, Housing Needs Report, February 1981.

Households paying more than 25% of their gross income for housing are considered to be overpaying for housing expenses. For the Central Salinas Valley, 25% of the median income households annual income amounted to $3,912, or $326 per month for housing expenses. While the median household income in 1980 generally seems sufficient to have afforded the median monthly contract rent, those who can least afford housing have the highest incidence of overpayment. The 1980 Census reported that of those renter households earning less than $10,000, 88% paid more than 25% of their incomes for housing. Furthermore, 57% of these households paid more than 35% of their incomes. Of the renter households earning $10,000 to $19,999, 28% overpaid for housing; while among those households earning $20,000 or more only 10.5% overpaid.

For those households wishing to buy a home in the Central Salinas Valley the "affordability gap" between the cost of purchasing a home and the amount of income available for housing is considerable. The median priced home in the Planning Area was about $61,800. With a ten percent down payment and a ten percent fixed rate mortgage for thirty years, the monthly mortgage payments would be about $540. This amount is well beyond what the median income household could afford to pay for housing expenses. It is unlikely that most lending institutions would lend to borrowers who's mortgage payments exceeded 25-30% of their monthly income. Most median-income households without a substantial down payment or existing equity are effectively unable to purchase a home. First-time homebuyers are the hardest hit by this situation.

Housing vacancy rates can also have an effect on housing prices. Housing supply is perhaps the most basic determinant of housing costs. A greater supply of housing reduces the demand for any particular unit, theoretically reducing costs. Unfortunately, the effective vacancy rate in the Planning Area has reached critical lows. Vacancy rates maintained at this level work to keep housing prices relatively high.

Table 21

NEW CONSTRUCTION NEED IN UNINCORPORATED CENTRAL SALINAS VALLEY

Household Growth (1980-1985)	
3001	Estimated Households 1985 (AMBAG)
-2466	Households 1980 (U.S. Census)
535	New Households 1980-1985
Housing Unit Growth	
152	New Housing Units Built 1980-1985 (County Building Permit Records)
Housing Unit Need	
535	New Households
-152	New Housing Units
383	New Households Not Served by New Housing
Projected Household Growth 1985-2000	
4260	Projected Households (AMBAG)
-3001	Estimated 1985 Households (AMBAG)
1259	Household Growth
x1.04	Addition of Vacant Units Needed for a Balanced Market (4%)
1309	New Units Needed
+110	Units estimated to be Demolished (.2% of housing stock annually)
1419	Units Needed to Account for Household Growth, Vacancy Rate, and Demolitions
or 95	Units per Year

Housing Supply

The existing conditions regarding overcrowding and vacancy rates indicate that a housing shortage exists in Central Salinas Valley. New housing construction should therefore exceed the formation of new households in the Planning Area. The Association of Monterey Bay Area Governments has estimated that by the year 2000, the Planning Area will contain 13,518 households, an increase of 5,872 new households. It is also estimated that about 72% of these households will reside within the boundaries of the Planning Area cities. Table 21 indicates that the new construction needs in the unincorporated area amounts to about 1,419 new housing units.

Fair Share

In compliance with Government Code Section 65584, AMBAG has determined that Monterey County's regional "fair share" of lower income households is 41.3% of all households. In order that the County can meet its regional obligation without concentrating lower income households in a particular area of the County, each planning area should attempt to develop 41.3% of its new housing to be affordable to lower income households. The 1980 U.S. Census reported that 3,612, or about 47%, of Central Salinas Valley households were lower income. Therefore, the Planning Area is currently accommodating more than its "fair share" of lower income households. AMBAG household projections estimate that the Planning Area's "fair share" of lower income households should be 4,389 by 1990, and assuming the regional fair share proportion remains unchanged, about 5,583 lower income households by the year 2000. The figures represent an annual increase of about 99 lower income households by the year 2000. The majority of the lower income households are expected to find housing in the Planning Area cities which can supply the infrastructure necessary to accommodate higher density affordable housing.

The unincorporated communities of Chualar and San Lucas are two areas wherein the County may be able to stimulate affordable housing projects for the Planning Area's lower income households. The County Housing Element currently designates Chualar as a Development Incentive Zone (DIZ) because of its relatively urban character and the existence of sewer and water systems. The San Lucas County Water District is presently working with County agencies to secure a sewage treatment system which could enable the community to accommodate urban density residential growth in the future. The County also supplies affordable housing through cooperative programs with the four incorporated cities in the planning area.

PART II: AREA PLAN

CHAPTER V: THE PLAN
THE CENTRAL SALINAS VALLEY AREA PLAN

The Area Plan focuses on the balancing of (1) present character and future needs, (2) conservation of resources and opportunities for development, and (3) the sentiments of local communities. The foundation of the Area 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 Central Salinas Valley and be supplemented by the Area Plan policies. The Central Salinas Valley Area Plan Land Use Plan shall supersede the 1982 Countywide Land Use Plan for the planning area. The Central Salinas Valley Area Plan is adopted as an amendment to the Monterey County General Plan and must be fully in conformity with the intent and philosophy of the Countywide General Plan.

Major assumptions and issues of the Central Salinas Valley Area Plan are stated herein.

ASSUMPTIONS

1. Agriculture such as farming and grazing will remain the leading industry in the Central Salinas Valley.

2. The preservation of viable agricultural land and the statements expressed in the Monterey County Growth Management Policy are the guiding principals used to develop the Area Plan.

3. The growth rate in the Central Salinas Valley Planning Area will follow historic growth patterns.

4. Residential, commercial, and industrial growth will continue to be concentrated within the Planning Area's four incorporated cities.

5. The cities of King, Greenfield, Soledad, and Gonzales will expand their jurisdictional boundaries and their spheres of influence.

6. Interest will continue in developing the area west of Chualar, and the Pine Canyon, River Road, Arroyo Seco, San Lucas, and Soledad Mission areas.

7. County, state, and federal standards for public health, safety, and welfare will not be changed significantly and will be judiciously administered and enforced.

8. Continued county, state, and federal budget limitations will restrain the future provision of public services.

9. Scenic qualities and open space in the Central Salinas Valley are a valued resource, worthy of protection.

ISSUES

Natural Resources

1. Considerable development pressure exists to convert valuable agricultural lands to urban uses, particularly around the incorporated cities. To what extent should these lands be preserved?

2. Encroachment of urban and agricultural land uses on natural areas is providing the greatest threat to native plant and animal life. What actions should be taken to protect native plant and animal species?

3. 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 County's natural resources and enhance its scenic qualities?

4. Chronic water shortages are occurring, raising the costs of water and, in some cases, forcing abandonment of the use of the land. What methods should be developed to increase water supply? What conservation practices should be initiated?

5. The location, extent, and type of rare and sensitive plant and animal populations within the Planning Area are largely unknown. What measures should be taken to obtain this information which will ultimately aid in the preservation of these resources?

6. Information is generally lacking on the Planning Area's archaeological resources. Many sites have been destroyed or permanently altered through development. How can the County encourage and require proper handling of these resources?

Environmental Constraints

1. Agricultural and urban land uses exist in flood hazard areas. To what extent should this practice be curtailed?

2. The Planning Area has a broad range of fire hazards. What policies should the County adopt to reduce these hazards?

3. Hazardous materials are stored, used, and transported throughout the Planning Area creating exposure risks. What action should the County take to ensure the safety of the public.

4. High nitrate and sulfur levels are causing health hazards and the closure of some domestic wells. What improved management practices need to be initiated?

Human Resources

1. Does economic growth in manufacturing and commercial areas necessarily mean a change in the Planning Area's basic rural character or agricultural land use?

Area Development

1. Where should growth occur in the Planning Area?

2. What methods are available to accommodate needed development while maintaining the area's rural, scenic character?

3. Low vacancy rates indicate a need to increase the housing supply. How can the County provide sufficient land for housing while still preserving land for agriculture and open space?

4. Development in the Planning Area occurs on one-acre and two-acre parcels. In the long term, this development pattern appears to be an inefficient way to develop residential land. Should the County encourage residential development at higher densities to create an adequate supply of affordable housing?

5. How can transit use and car pooling be increased or other measures taken to reduce energy consumption, parking demand, and air pollution in the Central Salinas Valley?

6. Much of the unincorporated area lacks organized fire protection. How can a minimum level of fire protection be provided?

7. Are there enough parks and recreation facilities within the Planning Area? If not, where are they needed most?

8. None of the proposed scenic routes in the 1982 General Plan have been designated. To what extent should this be carried out?

Supplemental Policies

Natural Resources

3.2.4 (CSV) Except in areas designated as either Medium or High Density Residential or in areas designated as either Commercial or Industrial where residential use may be allowed, the following formula shall be used in the calculation of maximum possible residential density for individual parcels based upon slope:

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

2. 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.

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

4. 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 according 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.

Water Resources

5.1.2.0 (CSV) Areas identified by the County as prime-groundwater recharge areas shall be preserved and protected from sources of pollution. Development in prime-groundwater recharge areas shall be restricted to land uses which will not cause groundwater contamination as determined by the Director of Environmental Health.

5.1.2.1 (CSV) Development shall be designed to maintain groundwater recharge capabilities on the property.

5.1.2.2 (CSV) The County should identify and protect areas in the Central Salinas Valley which are valuable for the purposes of either natural- groundwater recharge or the development of artificial-groundwater recharge projects. Development shall not diminish the groundwater recharge capabilities of such areas, especially those which are highly susceptible to water quality degradation because of either high water tables or rapid percolation rates. Existing agricultural land uses in such areas should be maintained to preserve groundwater quality.

5.1.2.3 (CSV) The main channels of the Arroyo Seco River and the Salinas River shall not be encroached on by development because of the necessity to protect and maintain these areas for groundwater recharge, preservation of riparian habitats, and flood flow capacity.

6.1.3 (CSV) New development shall be phased to ensure that existing groundwater supplies are not committed beyond their safe-long term yields in areas where such yields can be determined by both the Director of Environmental Health and the Flood Control and Water Conservation District. Development levels which generate a water demand exceeding the safe-long term yields of local aquifers shall only be allowed when additional-satisfactory water supplies are secured.

6.2.2. (CSV) The County shall place a high priority on water development projects which can offer a viable water supply to water deficient areas in the Central Salinas Valley.

Objective

6.3.1 (CSV) Prepare an integrated, basin-wide, long-range water-resource plan for the County by 1992.

6.3.2 (CSV) New development which will have a high water use potential should be approved in accordance with an integrated, basin wide, long-range-water-resource plan which will be developed by the County.

Environmentally Sensitive Areas

11.1.6 (CSV) The County should identify environmentally sensitive habitat areas which are unique, limited, and fragile resources; and promote conservation of these habitat areas within the Central Salinas Valley.

Archaeological Resources

12.1.8 (CSV) The Central Salinas Valley Archaeological Sensitivity Map shall be used to identify archaeological resources within the Planning Area. The map shall be updated when new information becomes available.

Energy Resources

14.3.1 (CSV) The County should encourage energy-efficient business and agricultural practices.

14.3.2 (CSV) The County should encourage the development and utilization of renewable energy sources such as solar, wind generation, and biomass technologies in the Central Salinas Valley.

Environmental Constraints

Seismic, Flood, and Fire Hazards

15.1.1.1 (CSV) The Central Salinas Valley Seismic Hazards Map shall be used to delineate high seismic hazard areas addressed by the countywide General Plan. Areas shown as moderately high, high, and very high hazard shall be considered as "high hazard" areas for the purpose of applying General Plan policies. The map may be revised when new accepted geo-technical information becomes available.

16.2.1.1 (CSV) Site plans for new development shall indicate all flood plains, flood hazards, perennial or intermittent streams, creeks, and other natural drainages. Development shall not be allowed to occur within these drainage courses nor shall development be allowed to disturb the natural banks and vegetation along these drainage courses, unless such disturbances are approved by the Flood Control and Water Conservation District. Development shall adhere to all regulations and ordinances related to development in flood plains.

16.2.1.2 (CSV) Increased stormwater runoff from urban development shall be controlled to mitigate impacts on agricultural lands located downstream.

17.4.13 (CSV) The Central Salinas Valley Fire Hazards Map shall be used to identify areas of high and very high fire hazards for the purpose of applying General Plan policies regarding fire.

Water Quality

21.1.2.1 (CSV) Groundwater recharge areas must be protected from all sources of pollution. Groundwater recharge systems shall be designed to protect groundwater from contamination and shall be approved by both the Director of Environmental Health and the Flood Control and Water Conservation District.

21.1.2.2 (CSV) The County shall encourage participation in a program to manage irrigation run-off that might adversely affect water quality.

21.3.1.4 (CSV) Development shall meet both water quality and quantity standards expressed in Title 22 of the California Administrative Code and Title 15.04 of the Monterey County Code subject to review of the Director of Environmental Health.

21.3.1.5 (CSV) New development shall meet the minimum standards of the Regional Water Quality Control Basin Plan when septic systems are proposed. The minimum lot size shall be one acre. New development shall provide evidence to the Director of Environmental Health that any proposed septic systems will not adversely affect groundwater quality. Inclusionary and clustered housing shall also meet the 1 acre/unit density when septic systems are proposed.

Area Development

Land Use

26.1.4.2 (CSV) Property owners in the Arroyo Seco area must undertake a land suitability study for their property before development proposals can be reviewed by the County. The study shall be prepared by a consultant chosen by the County, but funded at the expense of the property owner. The scope and specificity of the study shall be sufficient to address the magnitude of the development which will be proposed. The study shall address:

1. hydrology; including depth to groundwater, sustained water yield in terms of quality and adequate quantity, and conditions of the aquifer;

2. sewage disposal solutions including nitrate and chemical loading on the aquifer; the effects of wastewater reclamation if proposed; and how the sewage disposal system meets the standards of the Regional Water Quality Control Basin Plan and the California

Administrative Code; and

3. soils; including percolation tests, geology, drainage, and runoff.

26.1.4.3 (CSV) A tentative map application for either a standard or minor subdivision shall not be deemed complete until:

(1) an applicant provides proof of an assured, long-term water supply in terms of sustained yield and adequate quality for all lots which are proposed to be created through subdivision. The water supply must meet both water quality and quantity standards expressed in Title 22 of the California Administrative Code and Title 15.04 of the Monterey County Code subject to review of the Director of Environmental Health, and

(2) an applicant provides proof that sewage disposal systems, both individual and package, for all lots which are proposed to be created through subdivision will not exceed nitrate and chemical loading levels in aquifers pursuant to the Regional Water Quality Control Basin Plan. If wastewater reclamation is proposed for a subdivision, the reclamation system must comply with the Basin Plan and the California Administrative Code subject to the review of the Director of Environmental Health.

26.1.6.1 (CSV) Development shall have appropriate review where it is permitted in sensitive or highly sensitive areas as shown on the Scenic Highways and Visual Sensitivity Map.

26.1.13.1 (CSV) Development of any kind on the Broome property in Chualar, APN 145-011-08, shall require the following conditions of approval:

1. All land which is designated for "Public/Quasi Public" land use on the Land Use Plan shall be dedicated to the Chualar Union School District for school expansion;

2. A permanent, open space easement shall be dedicated to the County along the entire eastern and southern boundaries of any developed property. The open space easement shall be maintained as a greenbelt and shall function as a well- defined buffer to avoid conflicts between residential and agricultural land uses;

3. A permanent, agricultural conservation easement shall be dedicated to the County on all farmland adjoining any developed property;

4. The developer shall fund all costs necessary to expand both the Chualar County Sanitation District and the Chualar County Water District to support new development; and

5. On the Broome property, not more than 4 acres may be developed at a density of not more than "18 units/acre" only if all of the units are constructed to serve low income persons.

26.1.13.2 (CSV) The County staff shall review proposals for annexation and pre-zoning by the Central Salinas Valley Cities to ensure the protection of prime farmland.

26.1.14.1 (CSV) The County shall actively pursue cooperative land use planning with Central Salinas Valley Cities especially with regard to city expansion, watershed management, water resources planning, and soil conservation. The planning shall include the designation of areas of Urban Reserve adjoining existing Spheres of Influence and their accurate placement on the Planning Area land use maps.

26.1.14.2 (CSV) The County shall protect prime, productive farmland adjoining Central Salinas Valley Cities by designating less viable farmlands adjoining the Cities with an Urban Reserve overlay designation. The County shall discourage annexation of prime, productive farmlands adjoining Central Salinas Valley Cities if less viable farmlands are available for annexation and urban expansion.

26.1.14.3 (CSV) The County and Central Salinas Valley Cities shall cooperatively plan for the orderly, contiguous growth of the Cities, consistent with the ability of the respective Cities to provide urban-type services and facilities.

27.2.3 (CSV) The County should consider working with the Southern Pacific Railroad and the Public Utilities Commission to provide a railroad crossing at the northwest end of Main Street in San Lucas.

28.1.1.1 (CSV) Recreation and visitor serving land uses for the Paraiso Hot Springs property may be permitted in accordance with a required comprehensive development plan. The resort may include such uses as a lodge, individual cottages, a visitor center, recreational vehicle accommodations, restaurant, shops, stables, tennis courts, aquaculture, mineral water bottling, hiking trails, vineyards, and orchards. The plan shall address fire safety, access, sewage treatment, water quality, water quantity, drainage, and soil stability issues.

28.1.1.2 (CSV) Recreation and visitor-serving commercial uses shall only be allowed if it

can be proven that:

1. areas identified by the Flood Control and Water Conservation District as prime-groundwater recharge areas can be preserved and protected from sources of pollution as determined by the Director of Environmental Health and the Flood Control and Water Conservation District;

2. proposed development can be phased to ensure that existing groundwater supplies are not committed beyond their safe-long term yields where such yields can be determined by both the Director of Environmental Health and the Flood Control and Water Conservation District;

3. the main channels of either the Arroyo Seco River or the Salinas River will not be encroached on by development because of the necessity to protect and maintain these areas for groundwater recharge, preservation of riparian habitats, and flood flow capacity as determined by the Flood Control and Water Conservation District;

4. the proposed development meets both water quality and quantity standards expressed in Title 22 of the California Administrative Code and Title 15.0.4 of the Monterey County Code as determined by the Director of Environmental Health;

5. the proposed development meets the minimum standards of the Regional Water Quality Control Basin Plan when septic systems are proposed and also will not adversely affect groundwater quality, as determined by the Director of Environmental Health; and

6. the proposed development will not generate levels of runoff which will either cause erosion or adversely affect surface water resources as determined by the Flood Control and Water Conservation District.

28.1.1.3 (CSV) All recreation and visitor-serving commercial land uses shall require a use permit on sites of 10 acres or less. On sites greater than 10 acres, visitor serving recreation and commercial uses may be permitted in accordance with both a use permit and a required comprehensive development plan. The comprehensive development plan shall address hydrology, water quantity and quality, sewage disposal, fire safety, access, drainage, soils, and geology.

29.1.1.1 (CSV) Industries locating adjacent to San Lucas shall be non-polluting in nature. Industries related to agriculture shall be encouraged.

30.0.1.1 (CSV) The Old Mission Union School property, APN 165-033-02 & 165-073-16, shall be designated as a special treatment area. Winery-related facilities including a food service, gift shop, and a reception hall may be conditionally allowed by use permit in the special treatment area. The facilities shall be subject to the review and requirements of the Monterey County Public Works Department, Director of Environmental Health, Flood Control and Water Conservation District, and Director of Planning.

30.0.3.1 (CSV) Divisions of farmland shall be permitted only when such division does not adversely affect the land's long-term agricultural financial viability and shall be conditioned to ensure continued long-term agricultural use.

30.0.3.2 (CSV) The area bounded by Old Stage Road, Encinal Road, and Quail Creek; and the area south of Potter Road to a depth of 1,000 feet shall be designated as a "special treatment" area. The "special treatment" area shall permit on-site-soil-dependent agricultural greenhouses. The minimum parcel size in the area shall be 10 acres. Subdivision of land in the area shall only be approved subject to the following conditions:

a. the residential development rights of parcels created through subdivision approval must be dedicated via an agricultural conservation easement to either the County or a qualified organization specified in Section 501(c) (3) of the Internal Revenue Code;

b. a drainage management plan for the entire "special treatment" area must be prepared to mitigate drainage impacts on adjoining farmlands;

c. the concrete foundations of all structures shall be the minimum allowed under the Uniform Building Code;

d. only agricultural land uses shall be allowed on subdivided parcels within the "special treatment" area;

e. one mobile home may be allowed for residential purposes for the exclusive use of caretaker or security personnel.

30.0.5.1 (CSV) The Lohr property, APN 109-271-02 & 03, shall be designated as a special treatment area to enable two-adjoining 20 acre parcels to be reconfigured into one 39 acre parcel, and one 1 acre parcel to enhance the

agricultural capabilities of the land. The Lohr property shall be rezoned to prohibit further subdivision. Deed restrictions shall also be implemented to prohibit further subdivision in the special treatment area.

30.0.8 (CSV) Agricultural Support Services such as coolers, cold storages, loading docks, and farm equipment shops may be conditionally allowed by use permit on lands designated "Agricultural Farmlands 40 Acre Minimum." The following findings supported by substantial evidence must be made to obtain a use permit:

1. The land on which the support facilities are proposed is not suitable for cultivation because of irregular terrain, inadequate soil quality, or other physical constraints which limit agricultural productivity.

2. The proposed support facilities are a necessary accessory to the cultivation, harvesting, or processing of crops raised by the applicant on the same property where the support facilities are proposed.

3. The maintenance and operation of the proposed support facilities will not impair the ability to produce crops on either the remainder of the subject property or neighboring properties.

Agricultural Support Facilities shall be subject to the following standards as determined by the Director of Planning:

a. Agricultural Support Facilities may be conditionally allowed in connection with the cultivation, harvesting, processing, or storage of crops grown on lands in close proximity to the subject property, especially when the maximum amount of prime farmland for production would be preserved, expanded, or enhanced.

b. The land on which the support facilities are constructed shall not be subdivided from the remainder of the subject property.

c. Agricultural Support Facilities shall be compatible with land uses on neighboring properties.

35.1.3 (CSV) Conversion of uncultivated lands to crop lands shall not be permitted on slopes in excess of 25%.

35.1.4 (CSV) Conversion of historically uncultivated lands to farmlands on parcels having an average cross slope of 15% - 25% shall require a use permit.

Approval of the use permit shall follow the submission of an adequate agricultural management plan. The plan should include an analysis of soils; erosion potential and control; water demand and availability; proposed methods of water conservation and water quality protection; preservation of important vegetation and wildlife habitats; crop rotation schedules; and such other means appropriate to ensure the long-term viability of agriculture on the parcel.

Holding Capacity

36.0.4 (CSV) Except in areas designated as medium or high density residential, or in areas designated as commercial or industrial where residential uses may be allowed, an applicant wishing to apply for a subdivision under the countywide General Plan and Central Salinas Valley 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:

1. One factor in density determination shall be the land use designation. The maximum density allowable under the Area Plan land use designation 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 density of 40 sites.

2. The slope of the property shall be determined and the slope density formula defined in Policy 3.2.4 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.

3. 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.

4. The maximum density allowable according to the Area Plan land use designation (Step 1 above) and the maximum density allowable according to Plan policies (Step 2 and 3 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.

5. 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

40.1.2 (CSV) The County shall pursue measures to obtain official Scenic Route designations from the state for Highways 146 and 25, Arroyo Seco Road, Bitterwater Road, and Elm Avenue.

Public Services and Facilities

46.1.2 (CSV) Emergency access issues within the Central Salinas Valley Planning Area should be identified and addressed before further development is allowed to occur.

51.2.5 (CSV) The County should study the feasibility of obtaining park sites such as the Greenfield Bridge area on the Arroyo Seco River.

Objective

62.2.1 (CSV) Designate the area within the San Lucas County Water District; the area located 1,280 feet to the immediate north of San Lucas; and the area located 500 feet to the immediate west of San Lucas as a Development Incentive Zone (DIZ) study area.

62.2.2 (CSV) The County shall evaluate the San Lucas Development Incentive Zone study area in conjunction with the scope of work for the San Lucas Sewage Treatment Plant. The evaluation shall also include consideration of all factors expressed in the 1985 Monterey County Housing Element.

62.2.3 (CSV) The County should develop a public services accounting system for growth areas to ensure that new development has sufficient sewage capacity and water availability.

Recreational Trails

51.1.4 (CSV) The County should implement a trails plan which shall consist of a Central Salinas Valley Trails map and policies. The Central Salinas Valley Trails Committee, appointed by the Board of Supervisors, shall refine the trails plan and supervise its implementation. The trails system shall be established for pedestrian, equestrian, and bicycling uses only. Unauthorized motor vehicles shall be prohibited from using the trails system.

51.1.5 (CSV) The dedication of recreational trail easements shall be encouraged where appropriate either for establishing a planned Central Salinas Valley trails system, or where an established trail is jeopardized by impending development.

51.1.6 (CSV) Recreational trail easements should be located within County-required easements of private roads.

51.1.7 (CSV) A land owner shall not be held responsible for either trail maintenance or public liability when a public-recreational trail easement is appurtenant to private land. Public-recreational trail easements shall not be required to be opened to public use until either a public agency or private association agrees to accept liability and responsibility for maintenance of the trail easement. The County shall implement necessary measures for services that cannot be adequately provided by private organizations. The implementation of such measures shall be funded by user fees and tax revenues.

51.1.8 (CSV) The County may, through the public hearing process, cancel its agreements with private landowners for existing, public-recreational trail easements under the following conditions:

(1) the easement must not be used as an existing public-recreational trail easement, and

(2) the easement must not be a useful segment of the Central Salinas Valley trails system because of either its location or some other reason.

51.1.9 (CSV) The County shall enforce public access on legally established recreational public-recreational trail easements.

AREA LAND USE PLAN

The Central Salinas Valley Planning Area land use plan, as represented by Figure 14, is a graphic representation of the general distribution, 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 policies contained within this Area Plan, constitutes a "blueprint for the future" of Central Salinas Valley during the next 20 years. The land use plan represents the desires of the Central Salinas Valley community, as expressed by both the Central Salinas Valley Area Plan Citizens Advisory Committee and the opening philosophy of this document.

The Central Salinas Valley Area Plan is intended to provide refinement to the countywide General Plan in order to reflect local concerns which could not be addressed at the countywide level. However, policies and land use modifications contained within this area plan must be fully in consistent with the intent and overall direction of the countywide General Plan. Thus, modifications at the area plan level which require alterations in land use type or intensity must be fully in conformity with the General Plan's goals, objectives, and policies.

Preparation of the Land Use Plan

The land use plan was prepared after careful consideration of the various factors which are critical to the County's planning program. These factors include the countywide General Plan, the Growth Management Policy, the existing land use pattern which includes emerging growth centers in Central Salinas Valley, current subdivision activity, and the U.S. Forest Service plans for the Los Padres National Forest. Finally, aspects of the land suitability study were incorporated into land use and density decisions.

Land Suitability

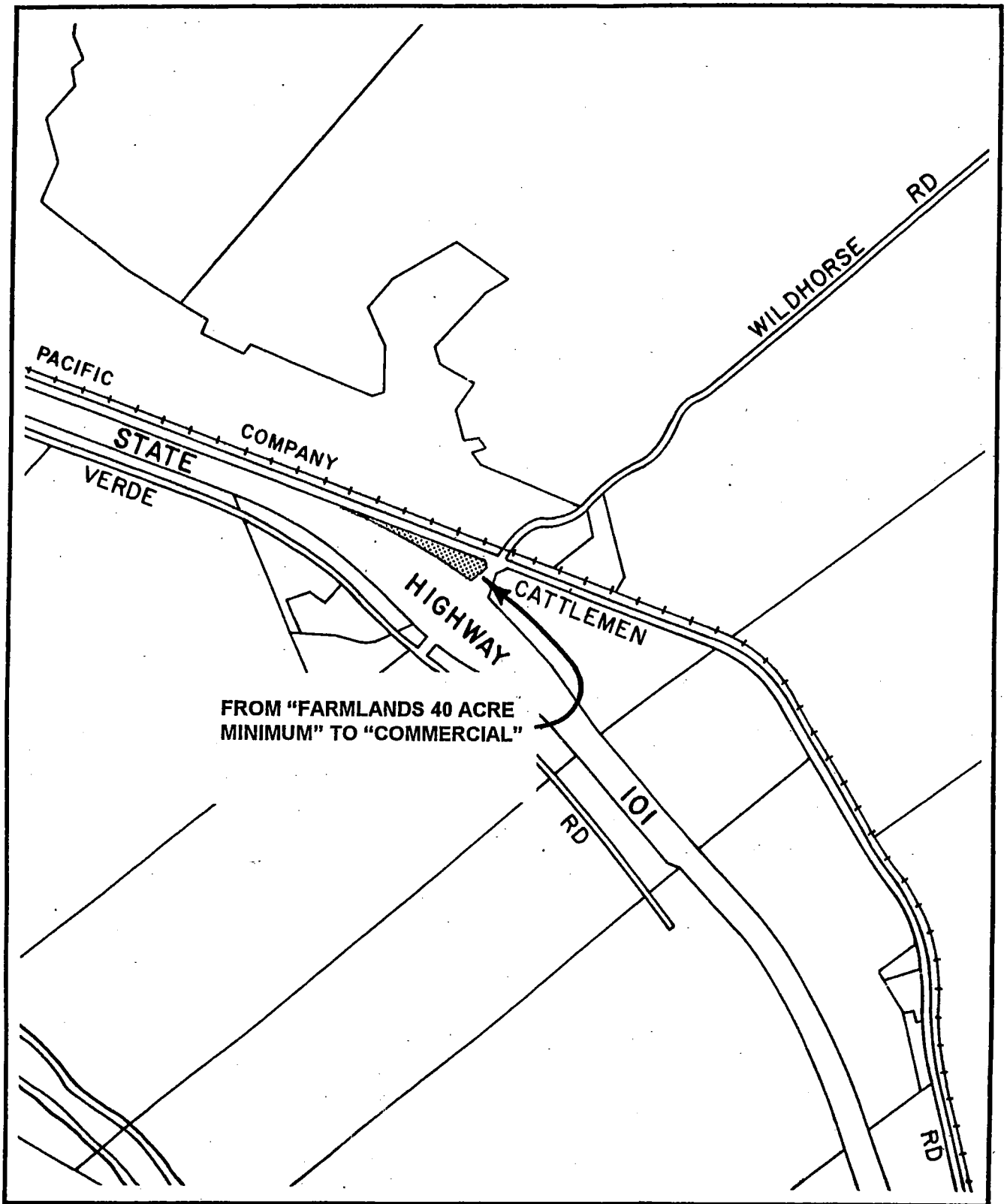
The first step in developing the land use plan for the Central Salinas Valley Planning Area was a comprehensive study of the area's resources and environmental constraints. The best available information for the area was collected, studied, and mapped where appropriate. Some of the subjects of study were soil characteristics, geologic and seismic hazards, topography, vegetation, flood hazards, fire hazards, road capacities and access, water quality and availability, and public services.

Findings on these topics are summarized in the Inventory and Analysis section of this document.* The above factors were studied to determine the relative land suitability within the Planning Area for three broad categories of land use: farmlands, grazing, and development.

* The complete Central Salinas Valley Inventory and Analysis is available at the Monterey County Planning Department.

UPDATE INDEX #1 *CENTRAL SALINAS VALLEY AREA PLAN*

MAP CHANGE - APN 235-071-16 *AUGUST 30, 1988*



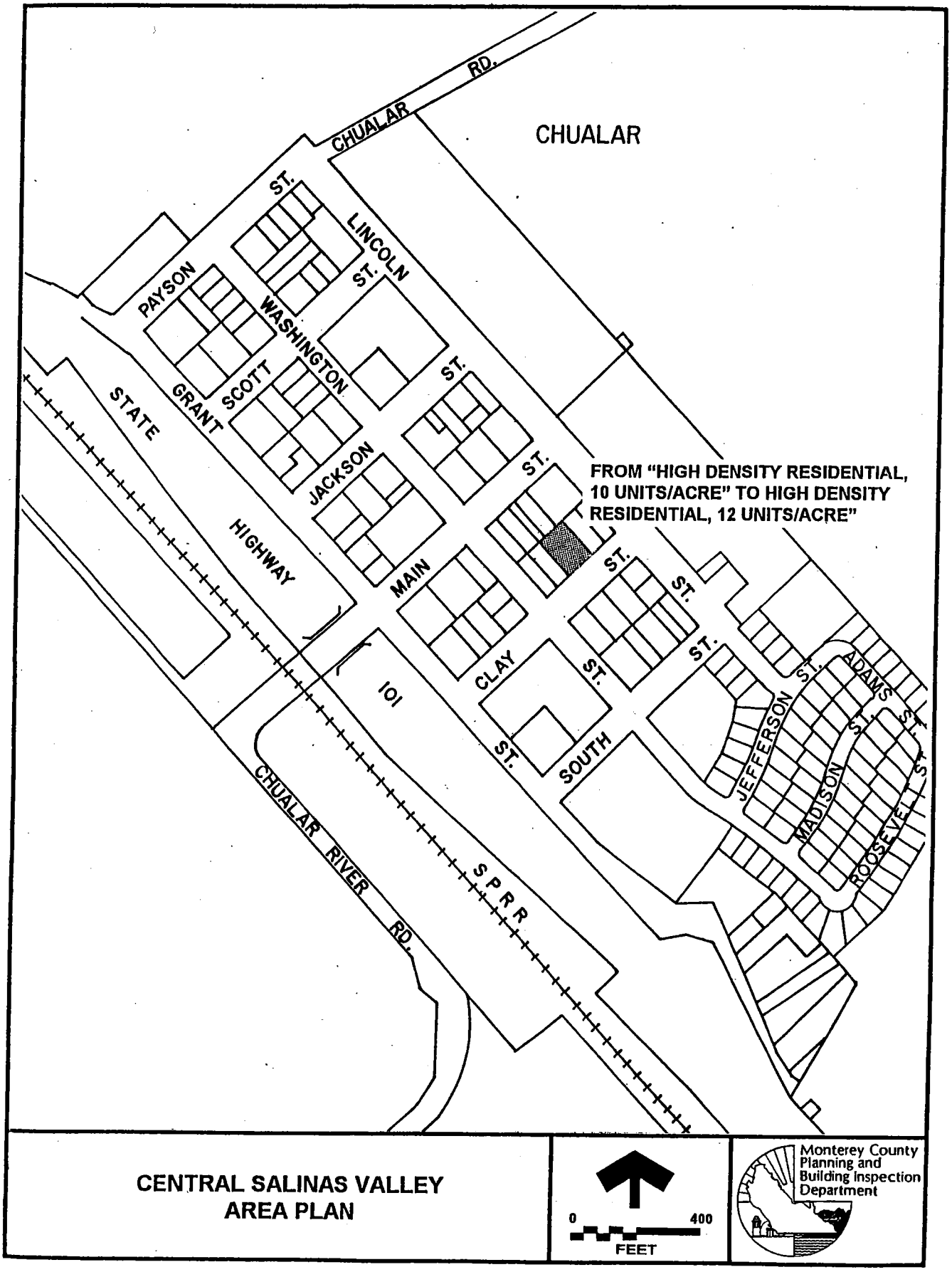
CENTRAL SALINAS VALLEY AREA PLAN

500' 1000'

SCALE IN FEET

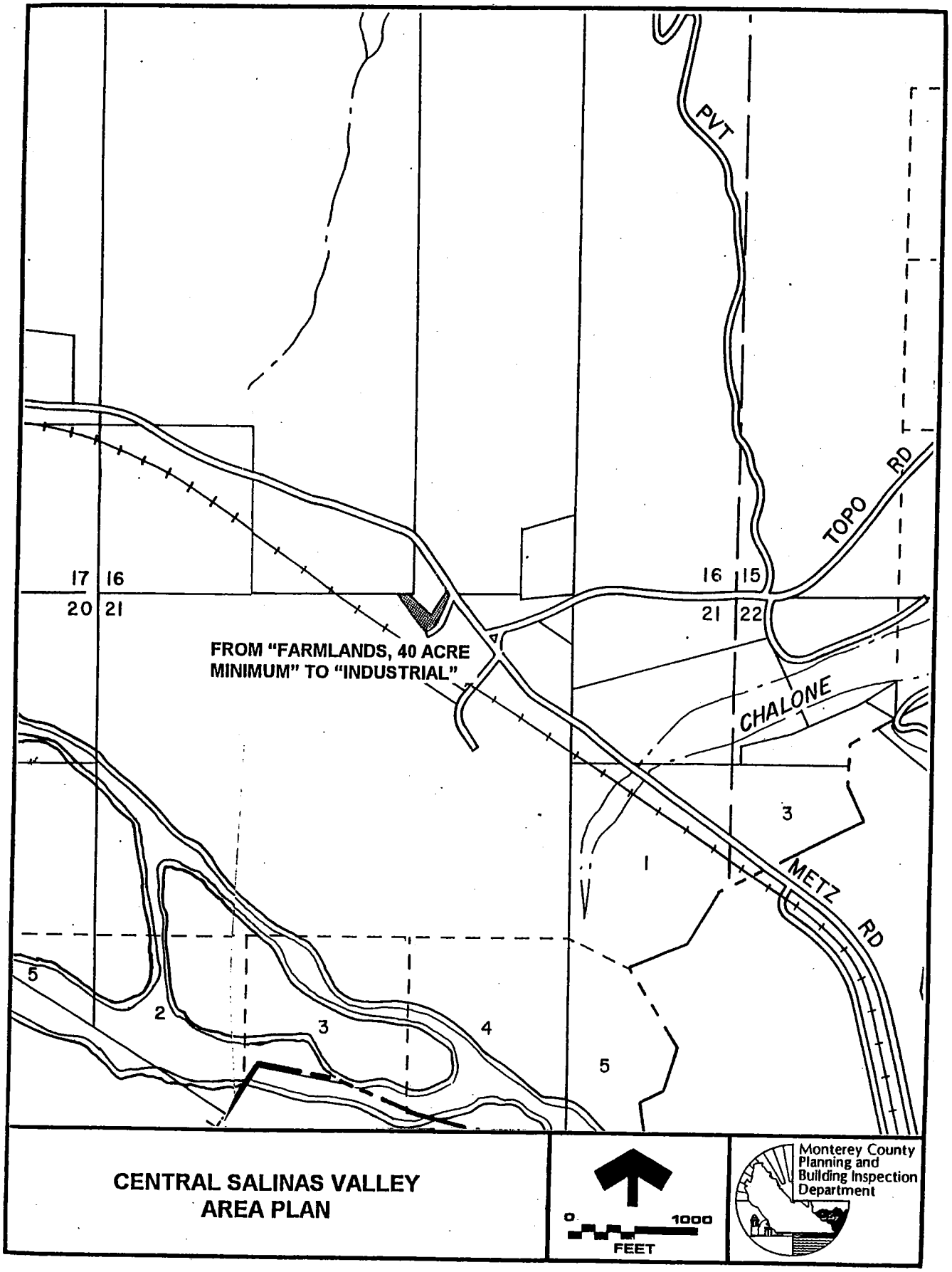
Monterey County Planning and Building Inspection Department

UPDATE INDEX #2 *CENTRAL SALINAS VALLEY AREA PLAN*
MAP CHANGE - APN 145-052-03, 04 *DECEMBER 12, 1989*

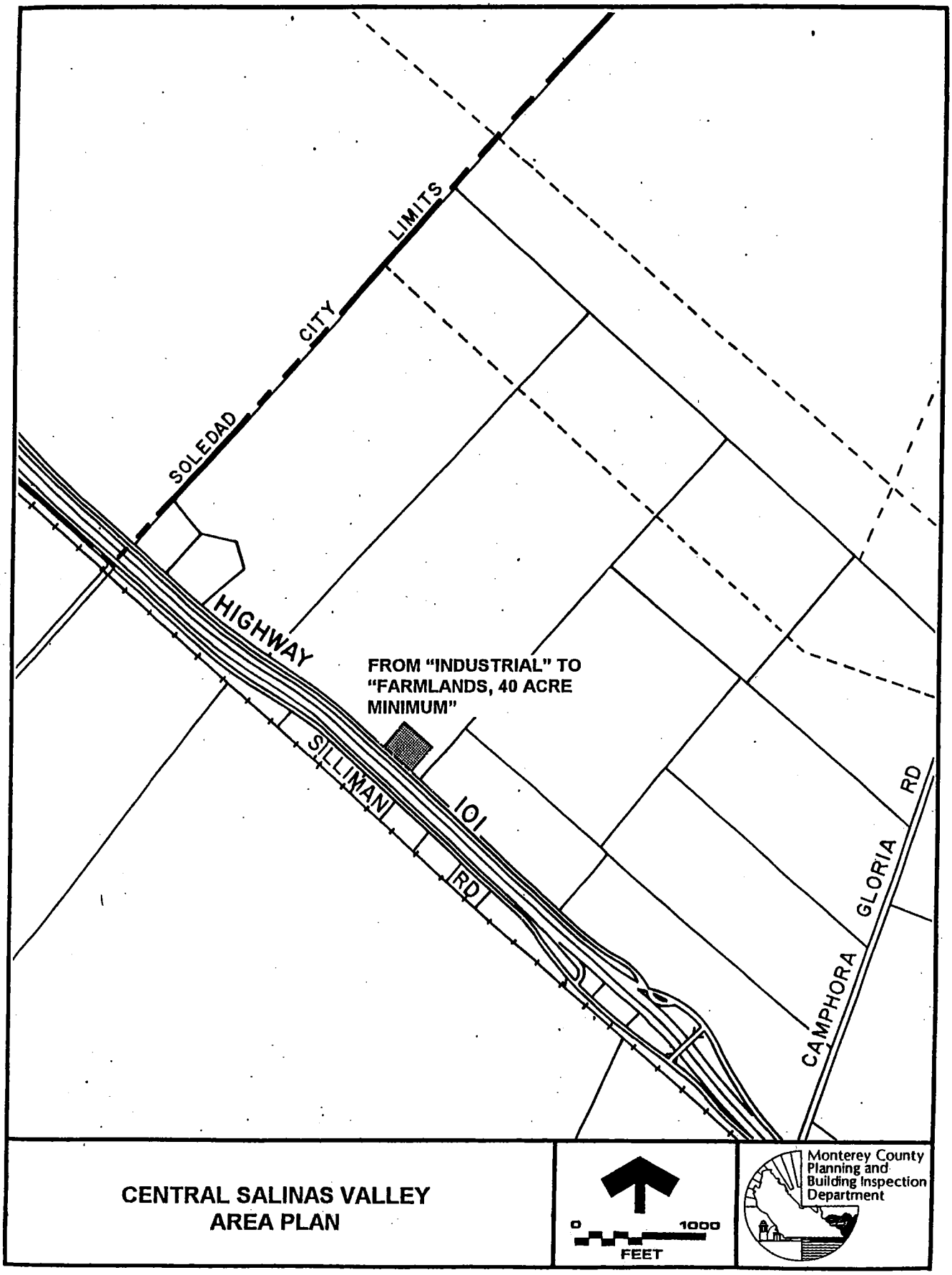


UPDATE INDEX #3 *CENTRAL SALINAS VALLEY AREA PLAN*

MAP CHANGE - APN 418-401-23 *DECEMBER 12, 1989*



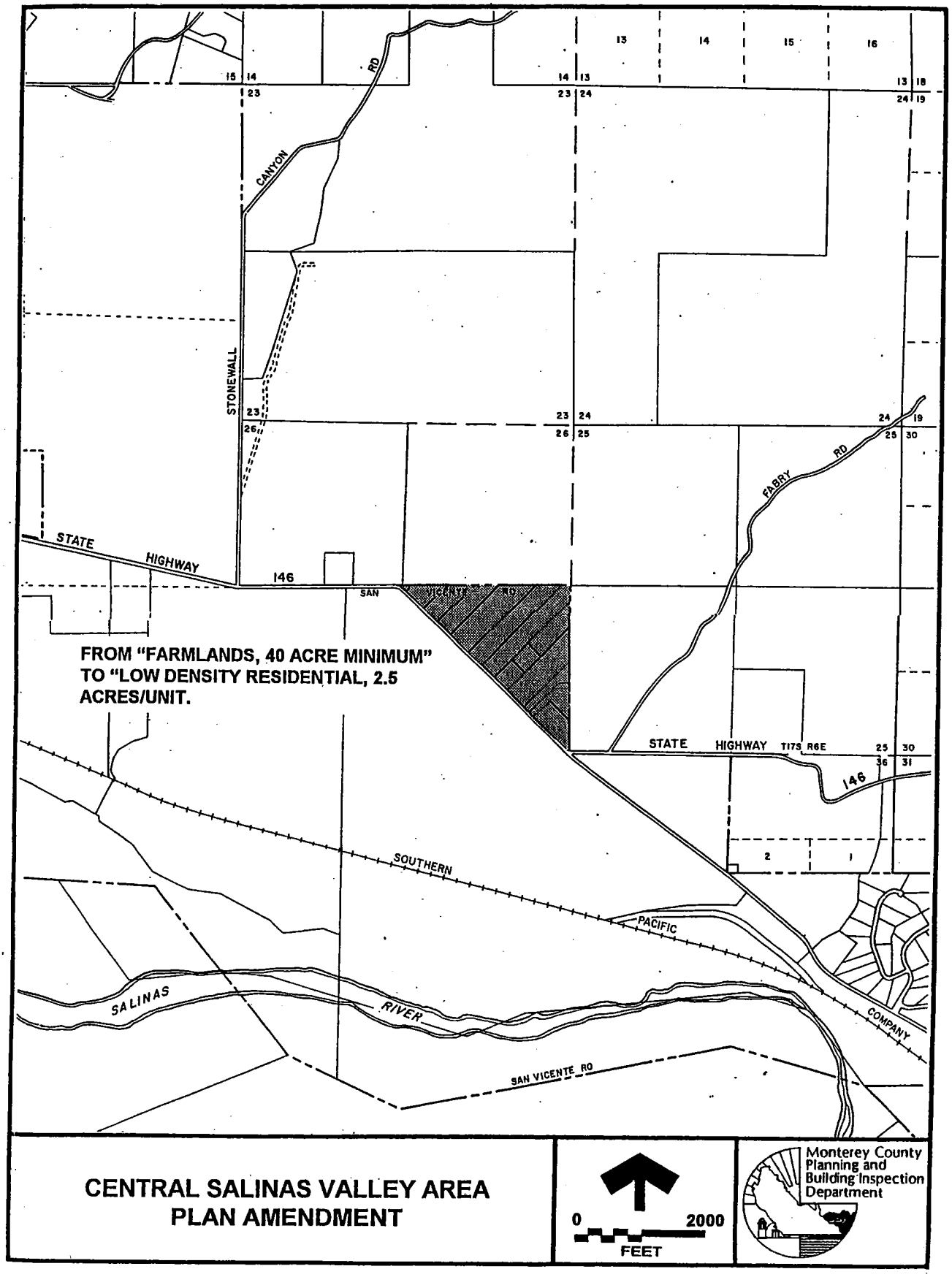
UPDATE INDEX #4 *CENTRAL SALINAS VALLEY AREA PLAN*
MAP CHANGE - APN 257-031-02 *DECEMBER 11, 1990*



UPDATE INDEX #5 *CENTRAL SALINAS VALLEY AREA PLAN*

MAP CHANGE *DECEMBER 15, 1992*

APN(s) 257-121-006; 007; 009; 011; 013; 015-023



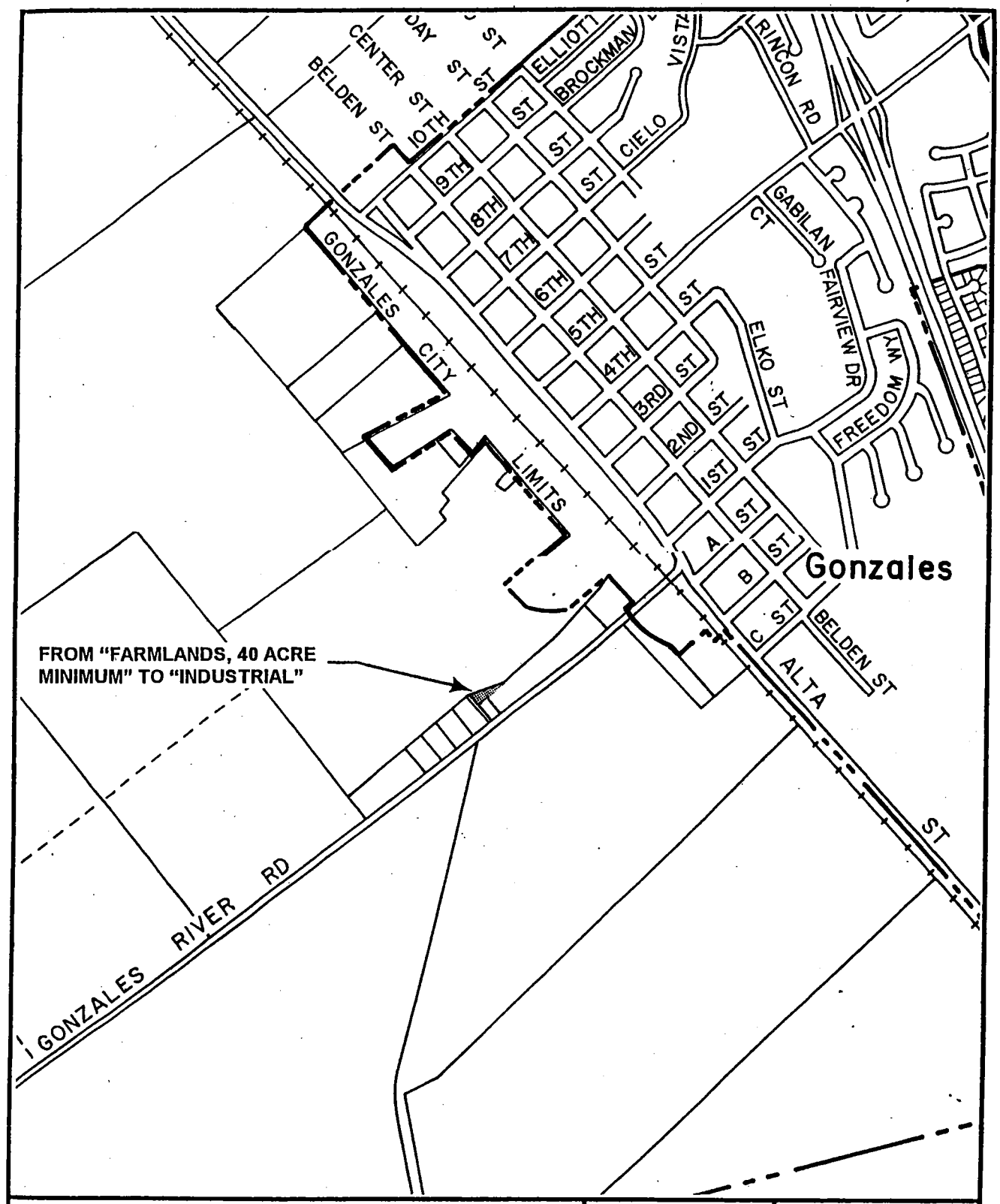
CENTRAL SALINAS VALLEY AREA PLAN AMENDMENT

0 2000 FEET

Monterey County Planning and Building Inspection Department

UPDATE INDEX #6 *CENTRAL SALINAS VALLEY AREA PLAN*

MAP CHANGE - APN 020-021-11 *AUGUST 24, 1993*



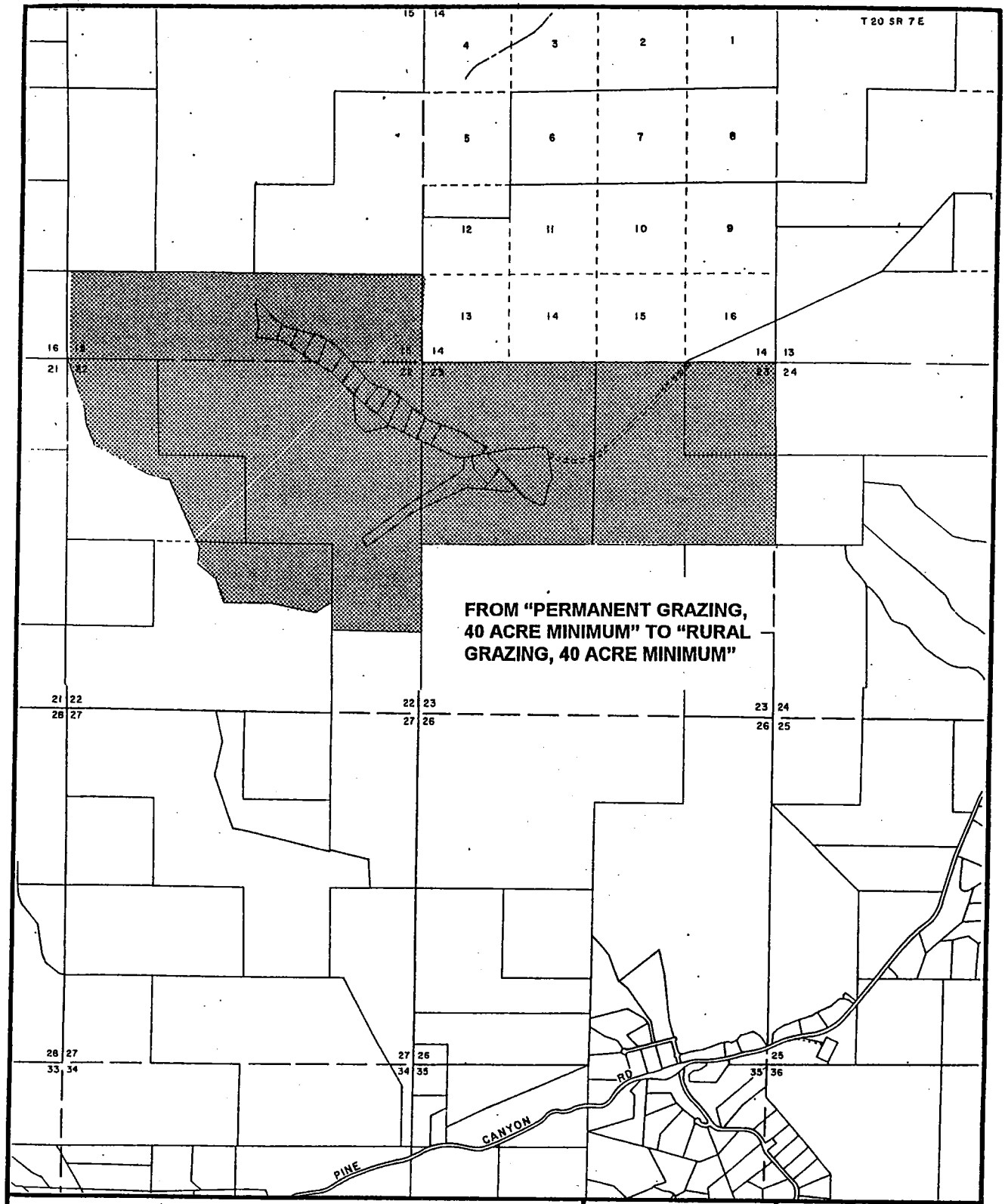
CENTRAL SALINAS VALLEY AREA PLAN

0 1000 FEET

Monterey County Planning and Building Inspection Department

UPDATE INDEX #7 *CENTRAL SALINAS VALLEY AREA PLAN*

MAP CHANGE - APN 420-063-033-000M *AUGUST 24, 1993*



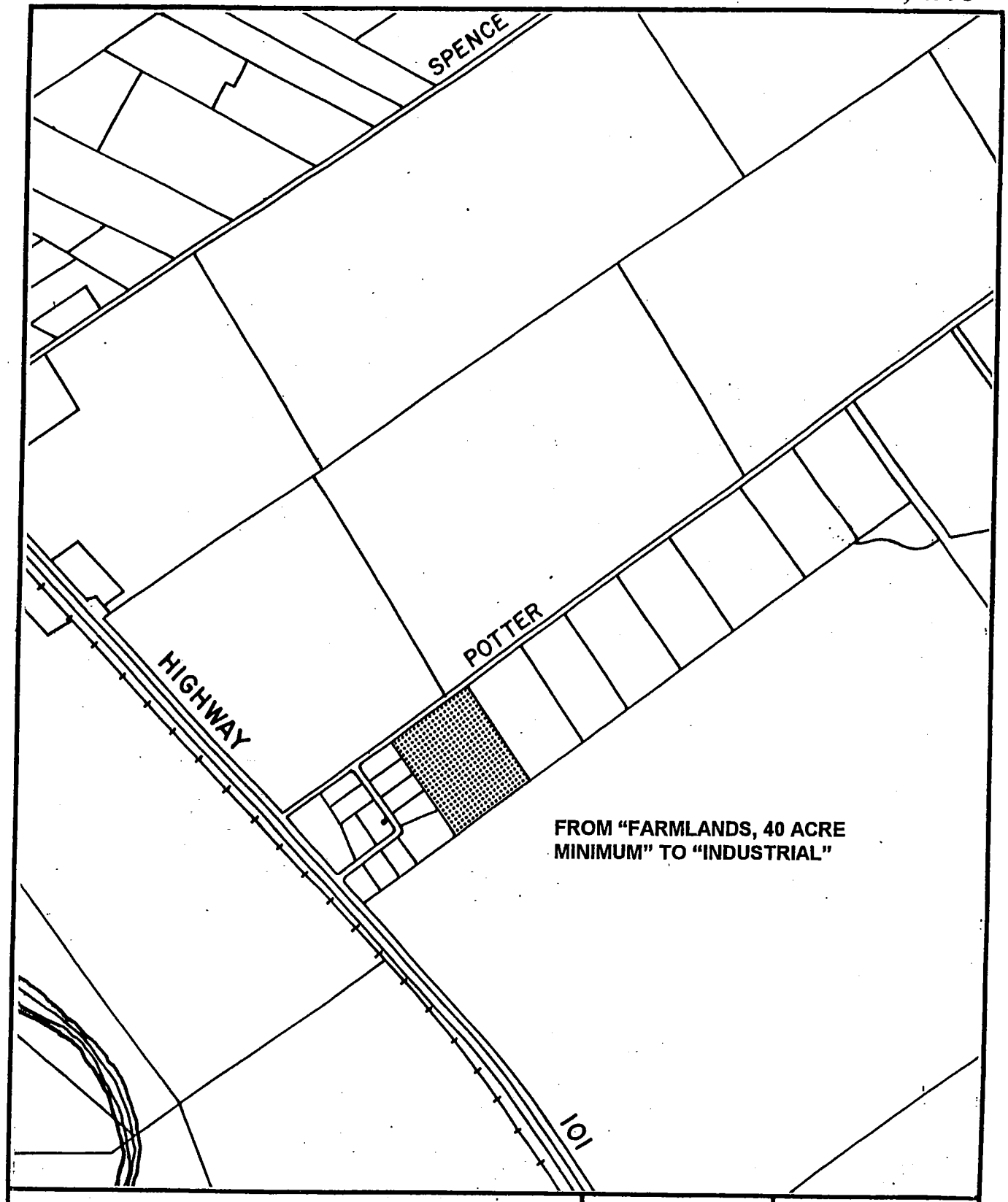
CENTRAL SALINAS VALLEY AREA PLAN

0 2000 FEET

Monterey County Planning and Building Inspection Department

UPDATE INDEX #8 *CENTRAL SALINAS VALLEY AREA PLAN*

MAP CHANGE - APN 137-051-028 *DECEMBER 14, 1993*



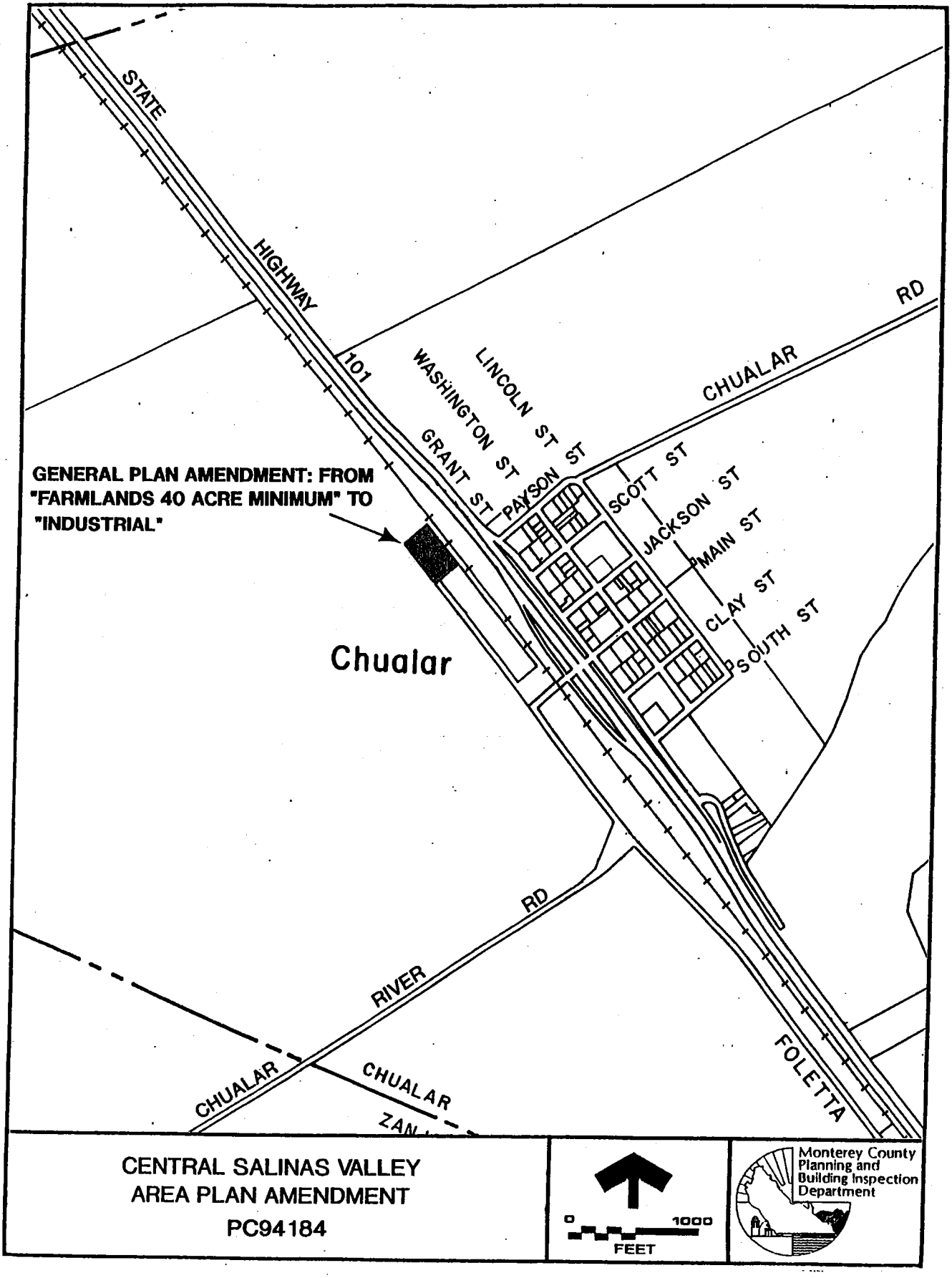
CENTRAL SALINAS VALLEY AREA PLAN

0 1000 FEET

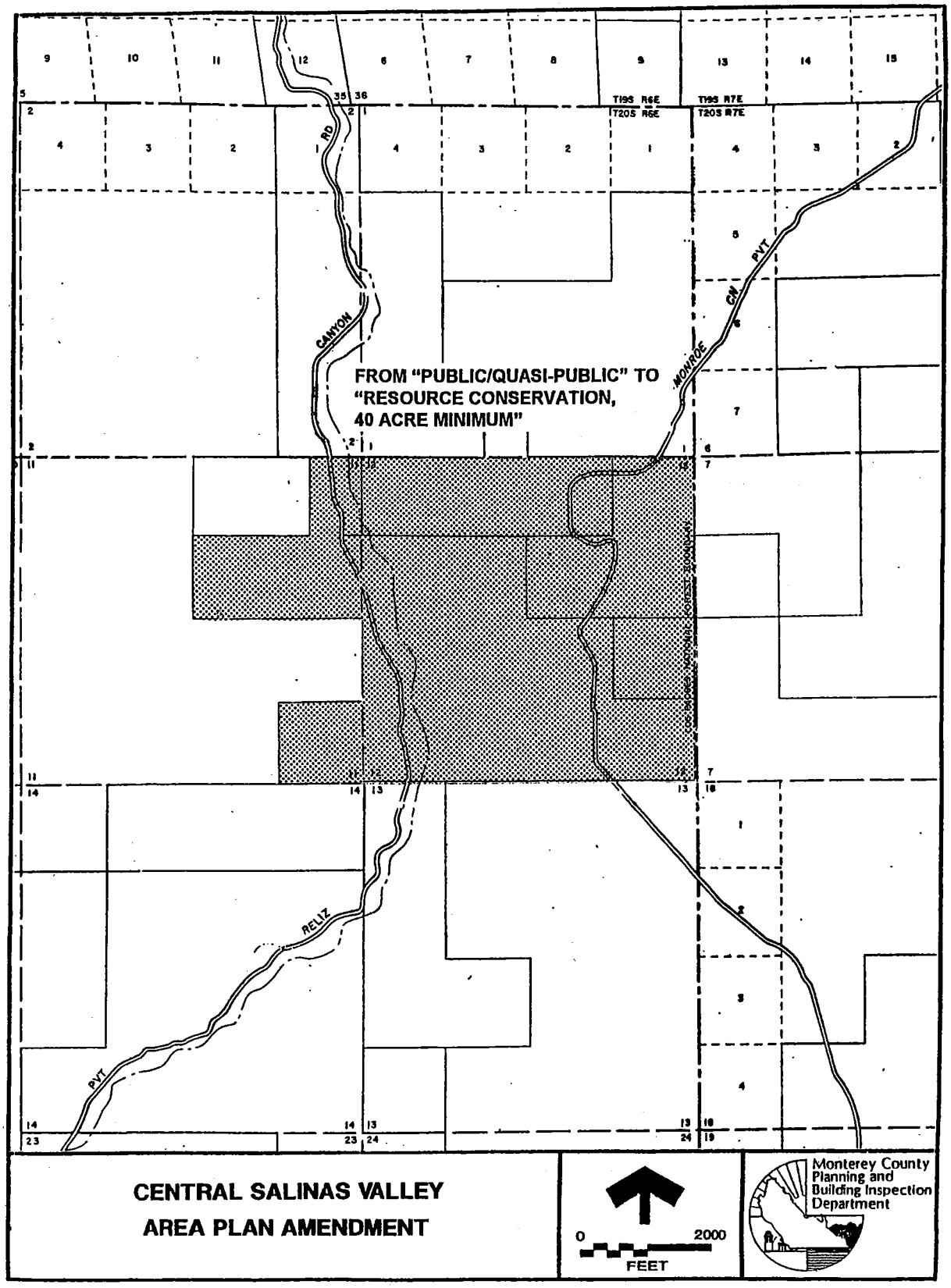
Monterey County Planning and Building Inspection Department

UPDATE INDEX #9 *CENTRAL SALINAS VALLEY AREA PLAN*

MAP CHANGE - APN 145-021-001 *JUNE 14, 1994*



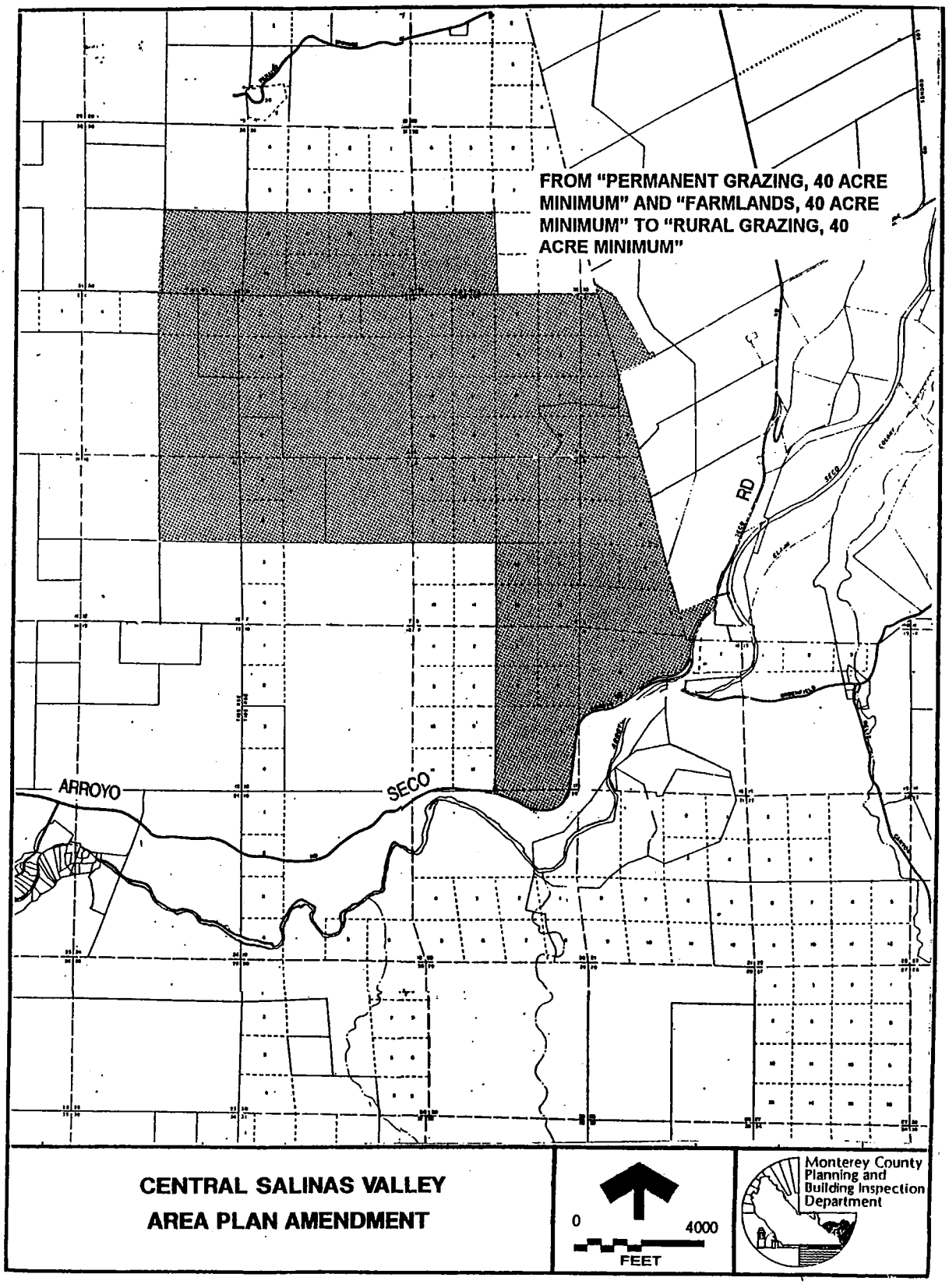
UPDATE INDEX #10 *CENTRAL SALINAS VALLEY AREA PLAN*
MAP CHANGE *DECEMBER 5, 1995*
APNs 420-051-011-000; 420-051-012-000; 420-051-013-000; 420-051-014-000



UPDATE INDEX #11 *CENTRAL SALINAS VALLEY AREA PLAN*

MAP CHANGE *DECEMBER 5, 1995*

APNs 419-101-001-013-000; 017-000; 057-000; 060-000; 419-081-012-000; 062-000; 063-000; 418-361-006-000; 418-381-026-000; 111-021-006-000; 109-491-005-000



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.

Of the three land use types considered in the land suitability analysis, inherent physical characteristics of the Planning Area dictate that farming and grazing have the greatest potential. A significant amount of land in the Planning Area is also suitable for development.

By far the majority of the Central Salinas Valley is best suited for agriculture. Agricultural uses currently occupy almost 74% of the land in the Planning Area. With the exception of only the steepest slopes along the eastern border of the Planning Area, the Los Padres National Forest, and a small area in Pine Canyon, almost all of the Planning Area is highly or moderately suited to grazing. Although grazing suitability in some areas is low, grazing may still be the most appropriate land use. Many of the low grazing suitability lands are either too steep or remote to be acceptable for any other land use and in most cases have extremely low development potential.

The fertile Salinas Valley floor, while highly suited to grazing, is also highly suited to farming due to the prime agricultural soils and level terrain. As illustrated in Figure 3, most of the valley floor throughout the length of the Planning Area is highly suited to farming and row crop production. Many other areas highly suited for grazing can be farmed depending upon the soil, slope, availability of irrigation water, and the prevailing markets for agricultural products. Depending upon location, surrounding land uses, and the property owner's level of commitment, much of the Planning Area can be maintained in long-term agricultural use. Appropriate planning for the conservation of farmlands and good rangeland management are the keys to continued viability of Central Salinas Valley agriculture.

Analysis of the development suitability findings shows that most of the areas highly suited to development occur along the valley floor in the same areas highly suited to farming. Narrow areas along Highway 25, Reliz Canyon Road, and the larger canyons also exhibit high development suitability. East of the Salinas River large areas along the foothills of the Gabilan Range show moderate suitability to development. The remainder of the Planning Area exhibits extremely low development suitability.

Although the land suitability analysis may indicate that a particular parcel has characteristics which render it relatively developable, the land use plan must consider how that development will affect the larger land use pattern of the Planning Area and the County as a whole. Factors such as public services and facilities and existing infrastructure, which were not part of the land suitability study, should be considered in the formulation of the land use plan. Competing needs for land should also be considered and procedures determining which of those needs are most important should be established. Existing urban patterns indicate possible competition between farming and urban land uses in those areas highly suited to both. A balanced land use plan

establishes a framework for agriculture, grazing, housing, industry, recreation, and any other activity essential to Planning Area residents. Due to its importance to the local and regional economy, long-term farming and crop production are probably the highest and best use of land highly suited to farming in the planning area. A balanced plan may require that development be directed to highly and moderately suited areas away from prime farmlands.

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 overlay designations for urban reserve and special treatment, 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 provision for an adequate level of facilities and services exists, and where plan policy requirements and criteria can be met.

Residential

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

Rural Density - requires greater than 5 acres per dwelling unit;
Low Density - requires 5 acres per dwelling unit up to 1 acre per unit;

Medium Density - requires less than 1 acre per dwelling 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 - requires less than 0.2 acres per dwelling unit up to 0.05 acres per unit (i.e. more than 5 units per acre up to 20 units per acre).

Commercial

The Commercial 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 of 50 percent, excluding parking and landscaping requirements.

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

Industrial

The Industrial 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

The Agricultural category includes the sub-categories of Farmlands, Rural Grazing lands, and Permanent Grazing lands.

The Farmlands sub-category includes those farmlands designated by the USDA Soil Conservation Service Important-Farmland Inventory system as prime, of statewide importance, unique, or of local importance. The minimum parcel size for these farmlands shall be at least 40 acres.

The Permanent Grazing sub-category is applied to those portions of Central Salinas Valley 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, but they shall not be less than the existing zoning designation on the date of adoption of the Countywide General Plan.

Subdivision of land in Permanent Grazing may be allowed only for (1) agricultural purposes if the exclusive grazing use of the parcel is preserved, enhanced, and expanded and the parcel to be subdivided is not under Williamson Act contract, (2) farm labor housing where the proposed parcel is 40 acres or larger and clearly consistent with the intent of the "Permanent Grazing" category as stated in the Countywide General Plan, or (3) creation of one building site for the immediate family of the property owner who earn their livelihood from the grazing use of the family land.

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, but they shall not be less than the minimum parcel sizes on the date of adoption of the Countywide General Plan.

Clustering of residential uses shall be encouraged provided that total site density does not exceed the minimum lot size allowed by the appropriate rural grazing land use category. Density for clustering shall be numerically consistent with established 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 dwelling 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

The Resource Conservation category is intended to ensure conservation of a wide variety of the County'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. The floodways of the major rivers and water bodies in the County are also included in Resource Conservation.

All land uses in Resource Conservation areas must conform with the conservation intent of the category. For example, allowed uses may include grazing, 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 as specified on the Land Use Plan. 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 compromised. Density for residential uses, if allowed, shall range from 10 acres or more per unit to 160 acres per unit.

Public/Quasi-Public

The Public/Quasi Public 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:

- Schools, both public and private;
- Parks, Recreation Areas, and Public and Privately Operated Recreational Facilities (i.e. tennis clubs and golf courses with accessory uses such as clubhouse, pro shop, restaurant, and administrative/business office;
- Natural Reserves;
- Emergency Services such as police, fire, and hospital;
- Solid and Liquid Waste Disposal;
- Military Facilities;
- Religious Facilities; and
- Other Public Facilities.

Transportation

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

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The Industrial 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.

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- Parks, Recreation Areas, and Public and Privately Operated Recreational Facilities (i.e. tennis clubs and golf courses with accessory uses such as clubhouse, pro shop, restaurant, and administrative/business office;
- Natural Reserves;
- Emergency Services such as police, fire, and hospital;
- Solid and Liquid Waste Disposal;
- Military Facilities;
- Religious Facilities; and
- Other Public Facilities.

Transportation

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

Urban Reserve

The Urban Reserve overlay designation may be used in conjunction with any of the County's land use categories. It is used to denote areas adjoining the four incorporated cities which the County believes should be annexed and developed as a part of an incorporated city to ensure the effective provision of urban services and facilities. Until annexation occurs, the County will allow those 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.

Major Land Use Recommendations

The following sections describe major recommendations for each of the land use designations shown graphically on the land use plan (see Figure 14). The land uses and designated densities must be reviewed in conjunction with policies contained in both the General Plan and the Area Plan. Certain areas may be less suited for a particular density than other areas with the same density because of either environmental constraints or scenic values. For example, areas with steep terrain will have a lower density because of Policy 3.2.4 (CSV) related to slope density.

Residential

The Land Use Plan designates new residential development in areas which are already committed to some degree of residential development.

Low Density Residential land use is designated (1) in Pine Canyon west of King City along Pine Canyon Road at densities of 1 acre, 2.5 acres, and 5 acres per unit, (2) in San Lucas at a density of 1 acre per unit, (3) in Arroyo Seco at Sycamore Flats and along Carmel Valley Road at a density of 1 acre per unit, (4) along Foothill Road between Mission Road and Colony Road at a density of 2.5 acres per unit, and (5) along Bitterwater Road, six miles east of King City, at a density of 1 acre per unit.

Medium Density Residential land use is designated in Pine Canyon west of King City at a density of 5 units per acre. Any development or subdivision in the area designated Medium Density Residential must be supported by adequate sewage treatment capacity and water system capacity pursuant to General Plan Policy 26.1.4.

High Density Residential is defined by the Countywide General plan as having a range of 0.2 acres per dwelling unit to 0.05 acres per unit, or a range from more than 5 units per acre to 20 units per acre.

High Density Residential land use is designated (1) in Pine Canyon from Burns Road to Los Ositos Road at a maximum density of 8 units per acre, (2) in San Lucas in an area bounded by Main Street, San Lucas Street, Julius Street, and Teresa Street at a maximum density of 5 units

per acre, and (3) in Chualar northeast of Highway 101 at a maximum density of 10 units per acre. However, on the Broome property in Chualar, not more than 4 acres may be developed at a density of not more than "18 units/acre" only if all of the units are constructed to serve low income persons. In Chualar, all of the High Density Residential areas are designated as a Development Incentive Zone.

Any development or subdivision in the areas designated High Density Residential must be supported by adequate sewage treatment capacity and water system capacity pursuant to General Plan Policy 26.1.4.

Commercial

Commercial land use is designated (1) in Chualar along Grant Street from Payson Street to Clay Street at a depth of 150 feet northeast of Grant, (2) in San Lucas east of Main Street from Anita Street to Rosa Street back to the first alley, (3) in the Paraiso Hot Springs area, (4) in three areas along Jolon Road, and (5) in six areas along U. S. Highway 101.

Industrial

Industrial land use is designated (1) in Chualar west of Highway 101, (2) in San Lucas on both sides of Highway 101, (3) along Metz Road east of Greenfield, and (4) along Highway 101 north of Camphora Gloria Road.

Agricultural

Farmlands are designated along the entire length of the Salinas Valley in the Planning Area. Farmlands are also designated along Highway 146 and Highway 25.

Rural Grazing lands are designated (1) in Chualar Canyon at a density of 10 acre minimum, (2) in the Arroyo Seco at a density of 10 acre minimum, (3) in Reliz Canyon at a density of 10 acre minimum, (4) along Elm Avenue west of Reliz Canyon at a density of 10 acre minimum, (5) in Pine Canyon at densities of 10 acre, 20 acre, and 40 acre minimums, and (6) on Oasis Road at a density of 10 acre minimum.

Permanent Grazing lands are designated in the steeper lands of the Gabilan Ranges, Sierra de Salinas, and Santa Lucia Ranges.

Resource Conservation

Resource Conservation lands are designated on the steep, eastern slopes of the Sierra de Salinas and Santa Lucia Ranges which adjoin the Los Padres National Forest and the Fort Hunter Ligget Military Reservation.

Public/Quasi Public

Public/Quasi Public land use is designated (1) in the Los Padres National Forest, (2) in the Pinnacles National Monument, (3) on the State Correctional Facility north of Soledad, and (4) on all solid waste disposal sites and sewage treatment plants.

Transportation

All transportation provisions of the Countywide General Plan are retained in the Area Plan. In addition, the Plan encourages the County to consider working with the Southern Pacific Railroad and the Public Utilities Commission to provide a railway crossing at the northwest end of Main Street in San Lucas (see Policy 27.2.3 (CSV)).

The Plan directs the County to pursue measures to obtain official Scenic Route designations from the state for (1) Highways 146 and 25, (2) Arroyo Seco Road from Carmel Valley Road to Elm Avenue, (3) Elm Avenue between the Greenfield Bridge and the City of Greenfield, and (4) Bitterwater Road from King City to the eastern border of the Planning Area (see Policy 40.1.2 (CSV)).

The Section 21670.1 et seq. Public Utilities Code 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 carrier certified by the Public Utilities Commission or 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. Pertinent portions of the Area Plan may serve as the basis for the comprehensive land use plan prepared by the ALUC to address the unincorporated area surrounding the Mesa Del Rey Airport.

Urban Reserve

The Land Use Plan designates about 647± acres of land as urban reserve north of the City of Soledad in El Rancho San Vincente. Urban Reserve lands adjoining the Cities of Gonzales, Greenfield, and King are limited to areas within the existing Sphere-of-Influence of each respective City.

Special Treatment Area

A Special Treatment area is property specifically delineated on the Land Use Plan which must be addressed in a manner different from other surrounding properties within the same land use designation. A special treatment area is used to facilitate a planned approach via policy language for property where unique circumstances exist that may not otherwise be addressed by the the provisions of the Area Plan.

Special Treatment areas are delineated (1) for the Old Mission Union School on Foothill Boulevard west of Soledad (see Policy 30.0.1.1 (CSV)), (2) in the area bounded by Old Stage Road, Encinal Road, and Quail Creek; and the area south of Potter Road to a depth of 1,000 feet (see Policy 30.0.3.2 (CSV)), and (3) for the Lohr property west of Greenfield (see Policy 30.0.5.1 (CSV)).

CHAPTER VI

PLAN IMPLEMENTATION

PLAN IMPLEMENTATION

As in the Monterey County General Plan, the Central Salinas Valley Area Plan consists of policies and a land use plan, 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 Central Salinas Valley Area Plan, as a part of the General Plan, is to be used as the basis for discretionary action by the Board of Supervisors and the Planning Commission. 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 goals, 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 Central Salinas Valley Area Plan.

The tools for implementation of the General Plan are derived 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 in integrated program of complementary and mutually reinforcing actions. In addition to the requirements that the General Plan address seven 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 Ordinance

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 and conditional land uses and development standards related to height, bulk, volume, and intensity 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 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 of in-lieu fees for improvements such as street, 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 ordinances 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 major 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 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) coordination with Public Works and other agencies responsible for construction and maintenance of public facilities, (3) establishment of priorities to promote staged development of capital facilities in a manner consistent with the General Plan, and (4) development 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 area plans, 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 on 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 coordination 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 General Plan will be incorporated into 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 and 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 in 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.