Chapter 5
Alternatives to the 2007 General Plan

5.1 Introduction

In accordance with CEQA Guidelines Section 15126.6, this EIR contains a comparative impact assessment of alternatives to the proposed project. The primary purpose for this section is to provide decision makers and the public with a reasonable degree of feasible project alternatives that could attain most of the basic project objectives, while avoiding or reducing any of the project's significant adverse environmental effects. CEQA Guidelines Section 15126.6 sets forth the following parameters for the analysis of project alternatives:

- an EIR need not consider every conceivable alternative to a project;
- an EIR should identify alternatives that were considered by the lead agency, but rejected as infeasible during the scoping process;
- reasons for rejecting an alternative include:
  - failure to meet most of the basic project objectives;
  - infeasibility; and/or
  - inability to avoid or reduce any of the project's significant environmental effects.

The CEQA Guidelines state that the discussion of alternatives shall focus on alternatives to the project or its location, which are capable of avoiding or substantially lessening any significant effects of the project, even if these alternatives would impede to some degree the attainment of the project objectives, or would be more costly. The feasibility of an alternative may be determined based on a variety of factors including, but not limited to: site suitability, economic viability, availability of infrastructure, general plan consistency, other plans or regulatory limitations, jurisdictional boundaries, and site accessibility and control. This section also identifies the environmentally superior alternative. As required by CEQA, if the environmentally superior alternative is the No Project Alternative, this chapter identifies an environmentally superior alternative among the other alternatives.

As stated in Section 3.0, Project Description, the objectives of the 2007 General Plan are to:

- provide direction for growth that supports continued viability of agricultural production and preserves as much of the County's scenic and environmental resources as possible;
- provide decision makers, County staff, and the public with an updated General Plan that accurately reflects the existing physical conditions and constraints in the County and provides a range of comprehensive policies to guide future development based upon those conditions and constraints;
- modify existing land use designations to patterns that accommodate the most-recent population growth, housing, and employment projections in an orderly manner that minimizes environmental impacts as feasible while meeting the County's obligations under California Planning Law to provide housing for all income levels
- direct new development to Community Areas and Rural Centers to facilitate the efficient provision of infrastructure and services while reducing the impacts of population growth, additional housing and employment opportunities on agriculture, water supplies, and environmental resources.
- establish policies that will conserve limited water supplies for current and projected future uses, incljuding urban, rural and agricultural uses
- establish new comprehensive policies and modify existing policies in the existing 1982 General Plan that reflect the latest legal, statutory, scientific, and technical changes and advances; and
- consider advice, concerns, and suggestions regarding future growth and development from all segments of the County population and, to the extent feasible, address these issues through new or modified goals, policies, or land use concepts.
- Support the continued viability of the agricultural industry by allowing routine and ongoing agricultural uses to proceed subject to standard regulations
- Establish the AWCP to facilitate the development of wineries along a corridor in the central and southern Salinas Valley to achieve a balance between the wine-grape production and wine processing capacity within the County.

This Section provides a qualitative analysis of five alternatives to the 2007 General Plan that is intended to provide a relative comparison between the potential impacts of the 2007 General Plan and each alternative. In some cases, the significance conclusion of an impact may be the same under each scenario when compared to the Thresholds of Significance. However, the actual degree of impact may be slightly different.

The discussion provides a numeric comparison of development under each alternative based upon implementation to the Year 2030. The qualitative comparative analysis will focus on the differences between each alternative and GP2007 based upon development to the 2030 planning horizon. This EIR has provided a methodology for determining the date of potential full buildout, and

assumes that could occur by 2092. However, to determine with any precision when full buildout might occur for the other alternatives would be very difficult and entirely speculative. For example, because the GPI alternative requires voter approval of future amendments the County would not be able to predict whether voters would approve future amendments allowing additional growth to accommodate affordable housing. For another example, the EIR certified for the 1982 General Plan assumed that full buildout could have added about 30,000 additional residential units in the County and assumed that would occur at a relatively early date. Yet 25 years later, actual growth has been closer to 6,000 additional units. Basing a comparison on 30,000 would not provide a meaningful analysis to the public or decision-makers. A comparison of full buildout would likely result in a comparison of the dates into the next century when hypothetical buildout would occur, rather than a realistic comparison of the impacts of those alternatives.

The estimates of new residential development to 2030 under the various alternatives are based on two sources. The 1982 General Plan, GPI, and GPU 4 alternatives' estimates reflect the February 2007 report prepared by Bay Area Economics comparing the effects of those three alternatives in anticipation of placing the GPI on the countywide ballot. The GPU3 estimate is derived from applying the historic residential growth rate (based on AMBAG forecasts) to the available land under that alternative. The TOD estimate is, by the nature of the alternative, the same as the 2007 General Plan.

5.2 Description of Alternatives

The principal criteria for selecting the alternatives studied in the EIR are to comply with CEQA, to describe a reasonable range of alternatives that could feasibly accomplish most of the basic project objectives and avoid or substantially lessen one or more of the significant effects of the project, and to ensure that the impact analysis provides sufficient information to the public and public officials to make informed decisions about the 2007 General Plan. An EIR conceivably could analyze an infinite number of alternatives or variations on alternatives. However, CEQA directs EIR preparers to analyze a "reasonable range" of alternatives to the project or project location, including the No-Project alternative.

Monterey County started the process of a comprehensive general plan update in 1999. Since then, there have been multiple versions of a general plan prepared, including a community-based plan prepared as a ballot initiative. This Supplemental EIR examines five alternatives to the 2007 General Plan as presently proposed.

In order to offer decision-makers and the public a comparison of the most recent prior versions of the General Plan update, this EIR examines two alternatives—GPU 3 and GPU 4—that would not otherwise meet all three criteria for being among the range of alternatives. While these two alternatives are potentially

feasible and meet the project objectives, they do not substantially reduce the potential significant effects of the 2007 General Plan.

The five alternatives are listed below with a summary description following the list:

- No Project Alternative (Existing 1982 General Plan)
- 21st Century Monterey County General Plan, February 2004 Alternative (GPU3)
- General Plan Initiative Alternative (GPI)
- 2007 General Plan Alternative (GPU4)
- TOD (Transit-Oriented Development)

The No Project Alternative considers an option to not accept any updates and retain the existing 1982 General Plan. This alternative consists of the 1982 General Plan with an amended Housing Element adopted in 2003. It also includes the existing four Local Coastal Programs (North County Land Use Plan, Del Monte Forest Land Use Plan, Carmel Land Use Plan, and the Big Sur Coast Land Use Plan) and eight Area Plans that are considered subsets of the 1982 General Plan.

The projected level of development under the 1982 General Plan is somewhat uncertain. The 1982 General Plan's EIR estimated that it would accommodate up to 63,735 new dwelling units. More recently, the 2007 report prepared for the Monterey County Board of Supervisors comparing the GPI to the 1982 General Plan estimated that future development would total 13,570 new residential units. (Bay Area Economics 2007)

The focus of growth under the 1982 General Plan is in urban areas (cities). New residential growth is to be concentrated in areas already committed to a degree of residential development and provide for an adequate level of services. Much of this would occur at low or rural density. The Plan also designates four "Area of Development Concentration Study Areas" and establishes an urban reserve overlay area, which would be developed through annexation to an incorporated city. There are ten Special Treatment Areas (STAs) identified in the 1982 General Plan.

GPU3 is the third version of a comprehensive General Plan Update. This version was considered, but not adopted, by the Board of Supervisors in 2004. A Draft EIR was prepared and circulated for this document but not certified. GPU3 consolidates the four Local Coastal Programs into a single new Coast Area Plan. The county's eight Area Plans are incorporated into GPU3, but are amended with their own sets of vision statements, policies, and goals. Estimated new residential development under GPU3 to the 2030 horizon year is 13,675 residential units.

GPU3 establishes eight Community Areas as targets for urban growth. These are unincorporated communities that have already begun to develop at urban

densities, or have been planned for urban development for many years. These include Boronda, Castroville, Pajaro, a portion of Fort Ord, Rancho San Juan, Pine Canyon, San Lucas, and an expanded area of Rancho San Juan. Pine Canyon and the expanded area of Rancho San Juan would be developed in a second phase of Community Plan development. There are also 18 Rural Centers identified in this alternative that could ultimately be converted to Community Areas in the future, based upon a tiered system of phased growth. Policies establishing an agricultural wine corridor are proposed as part of this alternative. GPU3 included 16 Special Treatment Areas or"STAs" (including the 10 existing STAs from the 1982 General Plan).

GPI is a proposed General Plan Initiative that was placed on the June 2007 countywide ballot, but did not pass. It amends part of the existing 1982 General Plan (primarily Chapter IV Area development, and the 2003–2007 Housing Element as well as the North County Coastal Land Use Plan and sections of each of the inland area plans). The remaining coastal plans would not be amended. Estimated new development under the GPI to the 2030 horizon year is 13,973 residential units. (Bay Area Economics 2007)

The GPI limits all new growth in the unincorporated area to five Community Areas: Boronda, Castroville, Pajaro, East Garrison portion of Fort Ord, and Chualar. Growth in Chualar is limited to 100 acres. No Rural Centers would be created. Subdivisions outside Community Areas are significantly constrained. A net increase in lots would require voter approval of a separate countywide initiative. Property owners are permitted to construct single-family residences on legal lots of record.

GPU4 is the 2006 General Plan update adopted by the Board of Supervisors in January 2007. It makes no changes to any of the Local Coastal Programs. GPU4 establishes 6 Community Areas and 11 Rural Centers in locations where populations have developed over the past 20 or more years. GPU4 also proposes 17 Special Treatment Areas (including the 10 existing STAs in the 1982 General Plan) totaling 7,832 acres, plus three Study Areas to be**.** evaluated for possible future designation as STAs. A separate agricultural wine corridor plan (ACWP) would be enacted in conjunction with GPU4.

The estimated development of new residential units under GPU4 to the 2030 planning horizon year is 16,900 dwelling units. (Bay Area Economics 2007)

TOD is an alternative that focuses new development along existing and future transportation corridors. These corridors would be served by high-capacity and high-frequency public transportation. Public transportation in this alternative includes fixed-route bus service, rail, express bus service and Bus Rapid Transit (BRT). Development in these corridors would be concentrated at "nodes" adjoining public transportation stations.

Under the TOD Alternative, new development outside the Community Areas, Rural Centers, and AHOs would be restricted to the first single-family home on existing legal lots of record in the North County, Greater Monterey Peninsula

(along the Route 68 corridor only) Greater Salinas, and Toro (along the Route 68 corridor) Area Plans. The Bradley and Lockwood Rural Centers would be considered third tier development priority areas. They would not be developed until the transit system is funded and built to King City. Otherwise, this alternative would share the same policies as the 2007 General Plan. Areas subject to subdivision restrictions would be designated as "sending" sites under a Transfer of Development Rights (TDR) program, with cities, Community Areas, Rural Centers, and AHOs identified as "receiving" areas. In effect, development credits could be transferred from the sending areas to the receiving areas, resulting in more intense development at the latter.

Table 5-6, Summary of 2007 General Plan Alternatives, in the discussion of the Environmentally Superior Alternative that follows compares the relative impacts of the alternatives to the impacts of the 2007 General Plan.

5.2.1 Growth Projections under the Alternatives

The residential growth projections to 2030 for most of the alternatives are taken from the 2007 Bay Area Economics report *Analysis of Monterey County General Plans and Quality of Life Initiative* prepared for the County Board of Supervisors. The two exceptions are the GPU3 and TOD alternatives.

Growth to 2030 under GPU3 is estimated on the basis of the 10,567 dwelling units described as potential development in the draft of GPU3 before the Board of Supervisors added more Community Areas, with an additional increment added to conservatively estimate the residential units that might be allowed in the additional Community Areas and un-built lots. This additional 28 percent increment is based on the ratio of development potential for the 2007 General Plan under full buildout to the development potential in 2030.

The Alternatives impacts are not individually analyzed at buildout in 2092. The method of estimating 2092 growth for the 2007 General Plan has been to apply the historic growth rate (expressed in housing units per year) within the unincorporated area of the county. Using this approach, each of the alternatives would add 25,903 residences by 2092. As a result, the relative degree of impact when the alternatives are compared to one another would remain essentially the same as during the 2030 planning horizon.

5.3 No Project Alternative—Existing 1982 General Plan

5.3.1 Description

Under this alternative, the existing 1982 General Plan would be retained as the County's blueprint for growth. No land use designations would change, and it is assumed that existing undeveloped lots of record ultimately would be built out to their highest use, as envisioned by the 1982 General Plan land use map. The 1982 General Plan is designed to encourage growth in the 12 incorporated cities. The 1982 General Plan includes the STA overlay that allows for unique land use concepts that reflect site-specific constraints or features. Ten STAs are included in the 1982 General Plan and the Rancho San Juan Area of Development Concentration Study Area. In comparison, the 2007 General Plan would establish five Community Areas and seven Rural Centers where populations have developed over the past 20 or more years, while also encouraging growth in the cities.

The 1982 General Plan does not include an Agricultural Winery Corridor, and the development of wine-related facilities would continue in accordance with current practices.

5.3.1.1 Development Comparison-

A comparison of potential new residential development between the existing 1982 General Plan (as amended) and the 2007 General Plan over the planning horizon of 2030 is provided in Table 5-1. Implementation of the 1982 General Plan would result in about 130 more dwelling units than development of the 2007 General Plan to the 2030 planning horizon. For all intents, implementation of the two plans would be approximately the same.

Table 5-1. Comparison: No Project Alternative and Proposed Project to 2030

Category	Existing 1982 General Plan	2007 General Plan	Difference* (No Project vs. 2007 General Plan)
Residential	13,570 dwelling units	13,420 dwelling units	130more dwelling units

* Difference in projected new dwelling units is based on the difference between the estimated housing units within the unincorporated County from 2005 to 2030 for the No Project Alternative and from 2006 to 2030 for the 2007 General Plan.

Source: Bay Area Economics. 2007. *Analysis of Monterey County General Plans and Quality of Life Initiative.* February; Association of Monterey Bay Area Governments (2004).

The difference in development potential between the two plans, as well as the difference in goals and policies, will serve as the basis for the analysis of the 1982 General Plan (No Project) alternative. The analysis below is based in part upon the *Analysis of the Monterey County General Plans and Quality of Life Initiative* prepared by Bay Area Economics and dated February 2007.

5.3.2 Environmental Effects

5.3.2.1 Land Use

The existing land use pattern provided in the 1982 General Plan and subsequent amendments would remain in effect. Although not designated as Community Areas per se, the communities of Pajaro, Boronda, and Castroville are designated for high-density residential, commercial, and industrial uses and could proceed consistent with 1982 General Plan policies. Also, the Specific Plans adopted for Fort Ord and Rancho San Juan (Butterfly Village) could proceed in accordance with those plans. As required under State Planning Law (Government Code Section 65300 et seq.), the 1982 General Plan provides for future development to meet anticipated growth. Overall, impacts under the No Project Alternative would be significant and unavoidable.

The 2007 General Plan provides more specific and extensive development policies than the 1982 General Plan. The 1982 General Plan does not include a designation for Rural Centers; however, these areas would remain subject to the policies of the plan with respect to maintaining low densities and provision of services. In contrast, the 2007 General Plan would allow development at a density of 1 to 5 residential units per acre, or up to 10 to 15 units per acre if processed as part of an Affordable/Workforce Housing Incentive Program. The 2007 General Plan would also establish Affordable Housing Overlays(AHOs) allowing higher densities in selected areas. Both plans require that adequate water and wastewater facilities be provided concurrently with development. The 2007 General Plan also states that Rural Centers should have a commercial focal point, and expansion of Rural Centers may be considered only after preparation of a Capital Improvement and Financing Plan.

Accordingly, because, the 2007 General Plan establishes more detailed policies specifying where new growth would be directed and has more specific policies guiding activities for Commercial, Industrial, Agricultural, and Open Space land

use, there is greater assurance that land use conflicts can be avoided or reduced under the 2007 General Plan.

As such, the more detailed policies contained in the 2007 General Plan would better prevent adverse land use impacts such as division of established communities or conflicts with adopted land use plans than would the 1982 General Plan. Therefore, the 1982 General Plan would have greater impacts on land use than the 2007 General Plan.

5.3.2.2 Agriculture Resources

The 1982 General Plan is generally protective of agricultural uses, discouraging "premature and scattered development" and providing that growth areas will be designated only where adequate levels of urban services and infrastructure can be provided. In addition, it includes policies calling for the prevention of non-agricultural uses that could interfere with normal agricultural operations and the establishment of permanent, well-defined buffer areas as part of new non-agricultural development proposals located next to agricultural uses. The buffer areas are to be dedicated in perpetuity and sufficiently large to protect agricultural operations from incompatible development. The 1982 General Plan limits the subdivision of viable, important farm land to divisions necessary to agricultural purposes or when demonstrated to not be detrimental to the agricultural viability of adjoining parcels. The 1982 General Plan also provides that the County is to make every effort to preserve, enhance, and expand viable agricultural uses on important farmland. Nonetheless, the growth projected under the No Project Alternative would convert substantial amounts of farmland to urban uses. This is a significant and unavoidable impact.

The 2007 General Plan contains more specific policies intended to channel development into existing cities, Community Areas, and Rural Centers, in that order. The policies of the 2007 General Plan would focus growth into higher density Community Areas as the first tier for new development, with subsequent growth in Rural Centers (second tier for new development). The 2007 General Plan also provides for agricultural buffers and identifies specific criteria by which to establish those buffers, but does not require that all buffers by permanent or dedicated in perpetuity. Other policies state that agriculture is to be the "the top land use priority for guiding future economic development on agricultural lands" and require the County to establish a program that requires mitigation for the conversion of important farmland that is to be annexed to cities, with specified exceptions. The 2007 General Plan also establishes policies intended to avoid regulatory constraints on "routine and ongoing agricultural activities." This is meant to encourage continued agricultural activities. Along this line, the ACWP would authorize wineries within its boundaries that would enhance tourism and provide additional income to wine grape growers.

The existing 1982 General Plan, because of its more generalized policy approach would have slightly greater impacts on agriculture resources than the 2007 General Plan, which directs future development to cities or specifically identified

growth areas and requires a mitigation program for annexing important farmlands. Although the 1982 General Plan has a stronger buffer policy (requiring permanent buffers), the policy in the 2007 General Plan is more detailed with regard to the requirements for buffer areas, compensation for loss of agricultural lands and a stronger provision with respect to preventing the subdivision of agricultural lands for non-agricultural purposes. Furthermore , the 2007 General Plan has incentives for the continuation of agricultural uses including numerous policies in the Agricultural Element. Accordingly, the 1982 General Plan would have greater impacts on agricultural lands than the GP2007.

5.3.2.3 Water Resources

The existing 1982 General Plan contains general policies intended to protect water quality and avoid groundwater overdraft. This includes a policy prohibiting "water consuming development in areas which do not have proven adequate water supplies." The 1982 General Plan lacks goals and policies that stipulate additional erosion control requirements, water conservation measures, or the preparation of a drainage design manual, all of which are found in the 2007 General Plan. The impact would be significant and unavoidable.

The potential effects of the 1982 General Plan on groundwater overdraft would appear to be greater than 2007 General Plan. Although the 1982 General Plan contemplates about the same level of new development during the planning period as the 2007 General Plan, the 1982 General Plan does not include provisions for requiring a sustainable water supply prior to development.

The effects of implementation of the 1982 General Plan would be greater than those of the 2007 General Plan with regard to soil erosion and sedimentation from construction and agricultural land use activities, wastewater disposal (i.e., septic tanks), groundwater overdraft, seawater intrusion, well competition and interference, and levee and dam failure. All of these are existing significant problems that are not addressed in the 1982 General Plan at the level of policy detail found in the 2007 General Plan. In addition, the 2007 General Plan includes several sections in the Public Services Element and Open Space Element that specifically address water quality protection, water consumption, long term water supply, and erosion protection that are not in the 1982 General Plan. Therefore, the 1982 General Plan would have more impacts on water resources than the 2007 General Plan.

5.3.2.4 Geology, Soils, and Seismicity

The existing 1982 General Plan moderates the exposure of persons and property to geologic, soil, and seismic hazards through policies requiring geologic and soils reports prior to subdivision of land and in areas of potential instability. The 2007 General Plan contains more specific and extensive policies that would avoid substantial adverse effects, such as the establishment of a Geologic

Constraints and Hazards Database to identify hazardous areas. Therefore, potential adverse impacts on geology, soils, and seismicity from the 1982 General Plan would be greater than those of the proposed 2007 General Plan.

5.3.2.5 Mineral Resources

Oil production in the southern Salinas Valley and South County is the only mineral resource extraction activity that may be affected by development and land use activities. Economic conditions and legal constraints make it highly unlikely that either the existing 1982 General Plan or the proposed 2007 General Plan would result in the premature termination of oil extraction operations in these areas. Therefore, the 1982 General Plan Alternative would have a less-than-significant effect on mineral resources, as would the 2007 General Plan.

5.3.2.6 Transportation

The existing 1982 General Plan includes general policies encouraging land use patterns that would reduce the need for driving and requiring proposed development to remain "within an acceptable level of service." The 1982 General Plan does not include any mechanism to require that new development activities fund transportation improvements necessitated by the traffic generated by those activities. As a result, the traffic impacts resulting from the No Project Alternative would be significant.

The 2007 General Plan would establish, with specific exceptions, LOS D as the standard for maximum allowable congestion within the County. The proposed policies would include a commitment to prepare Capital Improvement and Facilities Plans, by benefit area, to finance road improvements. The proposed policies include a prohibition on projects that would result in congestion exceeding LOS D unless improvements are being installed concurrently. Nonetheless, there will be significant impacts on road congestion.

All of the roadways contemplated as AWCP corridors currently operate at acceptable levels of service. The AWCP would accelerate the current pace of development of wine-related facilities, which would result in a corresponding increase in traffic. Absent new wineries, grape production would continue to be exported out of the County creating regional truck traffic during certain times of the year. The AWCP would not eliminate this traffic, but would contain it locally, thus reducing trip lengths. The AWCP would also generate new visitor traffic along the corridor, but that traffic would occur outside the wine industry's peak periods. Such local traffic would not be expected to be substantial enough to cause roadway performance to operate at deficient levels.

The No Project scenario represents buildout of the County to the year 2092 under the 1982 General Plan currently in effect. Table 4.6-24 earlier compared the housing, population and employment forecasts between the 1982 and 2007

General Plans. The comparison indicated that buildout of the 2007 General Plan would result in a net increase in daily trips greater than what would be generated at buildout of the 1982 General Plan. Therefore the LOS impacts of buildout of the 2007 General Plan would be greater than those of the 1982 General Plan.

The absence of a fee or mechanism from the 1982 General Plan is expected to result in deficient roadway performance conditions that will worsen with future development activities. The absence of the regional and local fee mitigation measures as well as the increased development and sprawl potential of the 1982 General Plan would lead to the conclusion that the potential adverse impacts on transportation from the 1982 General Plan would be greater than those of the 2007 General Plan.

5.3.2.7 Air Quality

The North Central Coast Air Basin, which includes Monterey County, is not in attainment for the state ozone (O_3) standard. The existing 1982 General Plan includes general policies that encourage development to meet air quality standards. However, these policies are not sufficient to avoid a significant effect on air quality from implementation of the No Project Alternative.

In comparison, the 2007 General Plan contains policies that are consistent with the air quality objectives of the North Central Coast Air Basin 2004 Air Quality Management Plan (AQMP). Moreover, the 2007 General Plan's policies requiring a Traffic Impact Fee and linking occupancy of new development to related roadway improvements would significantly reduce idling on roadways, which would result in a corresponding reduction in adverse air quality impacts. Additionally, future wineries under the ACWP would introduce new sources of air emissions. These would be subject to permitting by the Monterey Bay Unified Air Pollution Control District.

The combination of a lack of transportation improvement mechanisms, and absence of more specific air quality protection policies in the 1982 General Plan would result in potential adverse impacts on air quality greater than those of the proposed 2007 General Plan.

5.3.2.8 Noise

The existing 1982 General Plan includes general policies requiring new construction to meet noise standards established in the General Plan and to be enforced through a future noise ordinance. This includes conformity between new development and noise limits established in the 1982 General Plan. The increase in development that would be allowed under the No Project Alternative would result in a significant and unavoidable noise impact, particularly along major roads.

The proposed 2007 General Plan similarly establishes policies and would be implemented through a future noise ordinance. The 2007 General Plan contains policies establishing the contents of the noise ordinance. Its policies also set out standards for requiring acoustical and vibration analyses as part of the environmental review process for projects.

Both the 1982 General Plan and the proposed 2007 General Plan would increase exposure of residents to noise by virtue of allowing additional growth within the County. The 2007 General Plan's policies address noise impacts more comprehensively than do the policies in the 1982 General Plan. Accordingly, potential adverse noise impacts from implementation of the 1982 General Plan would be somewhat greater than those of the 2007 General Plan.

5.3.2.9 Biological Resources

Implementation of the existing 1982 General Plan would result in development with significant impacts on sensitive habitats, wetlands, riparian areas, wildlife movement, and tree preservation. The current trend of conversion of grazing lands, which provide wildlife habitat, to intensive agricultural cultivation, which provides little habitat value, would continue. The policies of the 1982 General Plan encourage the conservation and maintenance of native plant communities near new development and promote the conservation of large contiguous areas of native vegetation to provide wildlife habitat. The policies also call for careful planning of areas that are of value to wildlife to maintain that habitat. Nonetheless, the No Project Alternative would result in extensive new development that would have a significant and unavoidable impact on biological resources.

In comparison, the proposed 2007 General Plan would not substantially increase the rate of conversion of grazing land to more intensive agricultural uses, however, the 1982 General Plan Area Plans have more restrictive policies regarding the conversion of land on steep slopes. Additional policies are proposed in the 2007 General Plan to inventory natural habitats, avoid state and federally listed wildlife species, including designated federal critical habitat, and evaluate and mitigate impacts on special status species or their critical habitat that are not included in the 1982 General Plan. The 2007 General Plan also contains a policy committing the County to develop and implement a future program for mitigating the loss of critical habitat as a result of new projects. Mitigation of losses would also be required under state and federal law. The 1982 General Plan and 2007 General Plan would be somewhat comparable on balance with respect to impacts on biological resources; however, with the imposition of the mitigation measures proposed in this EIR with respect to special status species, kit fox habitat mitigation, stream setbacks, oak woodland protection and raptor protection, the 1982 General Plan would have greater impacts to biological resources than the 2007 General Plan.

5.3.2.10 Cultural Resources

The existing 1982 General Plan includes policies that encourage the conservation of historical resources, including the preparation of a historic inventory. There are no policies for the protection of archaeological or paleontological resources. However, state law is protective of archaeological resources to the extent that it requires consultation with appropriate Native American representatives and proper reburial in the event of the discovery of Native American human remains. Under the current General Plan, protection relies primarily on CEQA compliance. Absent a comprehensive approach, the 1982 General Plan would result in significant effects on archaeological and paleontological resources.

In comparison, the proposed 2007 General Plan includes specific policies to inventory resources, survey in sensitive areas, and protect important representative and unique archaeological sites and features. Similar policies are included in the 2007 General Plan relative to paleontological resources. In addition, the 2007 General Plan contains policies to encourage the conservation of Native American cultural sites, sacred places, and burial sites, including provisions for consultation with tribal representatives. The 2007 General Plan would be more protective of these resources; therefore, the 1982 General Plan would have a greater impact on cultural resources.

5.3.2.11 Public Services and Utilities

Implementation of the existing 1982 General Plan would result in adverse impacts from new or expanded fire protection, sheriff's protection, schools, libraries, medical facilities, wastewater, and solid waste facilities. The 1982 General Plan does not provide for concentrating new development within the unincorporated County within Community Areas and Rural Centers. If desired levels of services were to be maintained, more facilities, albeit smaller, might be required than under the proposed 2007 General Plan. Domestic water supplies are limited in several areas of the County, including the Monterey Peninsula and Pajaro area. The 1982 General Plan includes policies encouraging coordination among water service providers to assure that groundwater is not overdrafted, prohibiting water-consuming development in areas that do not have proven adequate water supplies, and requiring new development to connect to existing water suppliers, where feasible. The 1982 General Plan has not been effective in avoiding this significant effect.

The 2007 General Plan, in comparison, would result in the same impacts from new or expanded services and infrastructure.

With respect to potable water supply, the 2007 General Plan includes policies for the development of a Hydrologic Resources Constraints and Hazards Database to assist in managing conservation and water quality improvement. Additional 2007 General Plan policies will require that all projects be designed to increase the site's predevelopment absorption of rainfall and to recharge groundwater

where appropriate, and to require the management of construction of impervious surfaces in important groundwater recharge areas through discretionary permits. Therefore, potential adverse impacts on potable water supply from the 1982 General Plan would be greater than those of the proposed 2007 General Plan.

5.3.2.12 Parks and Recreation

The existing 1982 General Plan contains policies that encourage park planning, the equitable distribution of County parks, the formation of a self-supporting park system, and facilitating the acquisition and operation of community parks by other agencies. The development of future parks will result in impacts such as traffic, noise, and lighting, depending upon the location and recreational opportunities provided. Parks tend to be built in urbanized areas, so their impacts are not expected to be significant. However, the No Project Alternative would not provide adequate levels of new parks. This would have a significant effect through overuse of existing facilities.

By comparison, the 2007 General Plan includes additional policies, including the establishment of Adequate Public Facilities and Service standards, that will be used to obtain park and recreation facilities along with residential subdivisions and require that Community Area Plans identify adequate park and recreation facility sites. These standards do not, however, establish a specific level of service for parks and recreation facilities, which weakens their effectiveness. The potential adverse impacts on parks and recreation from the 1982 General Plan would be the same as those of the 2007 General Plan. However, Mitigation Measure PAR-1 in this EIR would require the County to enact a general policy establishing a ratio for acreage to population. This would make the impacts of the 1982 General Plan greater than those of the project.

5.3.2.13 Hazards and Hazardous Materials

The existing 1982 General Plan does not contain policies that avoid potential impacts from hazardous materials, emergency response, and wildland fire protection. As a result, the No Project Alternative would have a significant effect in these areas of concern.

The 2007 General Plan contains new goals and policies to address these areas, including extensive policies concerning fire hazards and emergency preparedness. Therefore, the 1982 General Plan has greater adverse impacts on hazards and hazardous materials relative to the proposed 2007 General Plan.

5.3.2.14 Aesthetics, Light, and Glare

The existing 1982 General Plan does not contain explicit policies that would reduce aesthetic impacts from implementation. Visual character and light and

glare would experience significant adverse impacts as a result of development under the 1982 General Plan.

In comparison, the 2007 General Plan includes general policies intended to reduce the impacts of development within designated visually sensitive areas. Additional policies restrict ridgeline development, encourage transfer of development rights to direct development away from areas with unique visual features, encourage new development to direct lighting away from sensitive neighbors, and commit to mapping of visually sensitive resources to assist in reducing impacts. New wine-related facilities would alter the visual character of agricultural areas and would introduce new sources of light and glare in those rural areas.

In either case, new development will result in a significant effect from increased light and glare. Because it would not provide protective policies, the aesthetic, light, and glare impacts of the 1982 General Plan would be greater than those of the 2007 General Plan.

5.3.2.15 Population and Housing

The existing 1982 General Plan is a local land use plan that prescribes where and at what intensity future growth will occur. Pursuant to state law, it must provide opportunities for future residential growth to meet anticipated residential demand. As such, the No Project Alternative would induce future growth and result in a significant effect. To the extent that development would displace existing residents, the requirements of state law (Government Code Section 7260, et seq.) would apply to limit the adverse effects.

Neither the No-Project Alternative nor the 2007 General Plan is expected to result in the displacement of substantial numbers of dwelling units or persons. Therefore, the 1982 General Plan's impacts on population and housing would be essentially the same as those of the proposed 2007 General Plan.

5.3.3 Conclusion

The No Project Alternative (Existing 1982 General Plan) would preserve the existing land use patterns, continue existing policies, and maintain the current development potential for the unincorporated areas of the County. This would result in greater environmental impacts as compared to the 2007 General Plan on land use, agricultural resources, water resources, geology and soils, transportation, air quality, noise, biological resources, cultural resources, public services, parks and recreation, hazardous materials, and light and glare. Impacts of the two plans with respect to mineral resources and population and housing are largely the same. With adoption of the proposed mitigation measure for parks and biological resources, the 2007 General Plan would have less impact on parks

and recreation and biological resources than the 1982 General Plan (No-Project Alternative).

The No Project Alternative does not meet any of the objectives of the 2007 General Plan because it maintains the existing 1982 General Plan and does not update its policies or land use map to account for changing economic conditions, land use patterns, socioeconomic changes, or technological advancements.

5.4 21st Century Monterey County General Plan, February 2004 Alternative (GPU3)

5.4.1 Description

The 21st Century Monterey County General Plan February 2004 Alternative (GPU3) is a version of Monterey County's effort to update the existing 1982 General Plan; it was considered but ultimately not adopted by the Monterey County Board of Supervisors.

GPU3 employs the Community Area concept that is incorporated into the 2007 GPU with a few differences. GPU3 establishes eight Community Areas: Boronda, Castroville, Fort Ord (Specific Plan area), Pajaro, Pine Canyon (King City), 4,000 acre Rancho San Juan, Rancho San Juan Expansion, and San Lucas. Growth in Boronda, Castroville, and Pajaro would be facilitated by redevelopment activities, while entirely new communities would be established at Ford Ord and Rancho San Juan. These five areas would be where most of the initial Community Area growth would be concentrated. The Pine Canyon (King City), San Lucas, and Rancho San Juan Expansion Community Areas would be developed later in the life of GPU3 (second phase).

In GPU3, future growth, though on a limited basis, would also occur in areas designated as Rural Centers. Under GPU3, 18 Rural Centers would be designated under a three-tier system. Tier I areas are Rural Centers that could ultimately be converted to Community Areas. There are two Tier I Rural Centers: Bradley and San Ardo. Tier II areas are Rural Centers that could potentially support infill and limited subdivision within their boundaries once infrastructure improvements are completed. The nine Tier II Rural Centers are Aromas, Chualar, Del Monte Forest, Las Lomas, Lockwood, Moss Landing, Mouth of Carmel Valley, Pleyto, and Prunedale. Tier III Rural Centers are areas that are built out and areas where there is no local interest for new subdivisions or intensification of existing land uses. The seven Tier III Rural Centers are Carmel Highlands, Carmel Valley Village, Corral de Tierra/San Benancio, Mid-Carmel Valley, River Road, Spreckles, and Toro Park.

GPU3 includes an Affordable Housing Overlay designation to promote the development of affordable housing. The overlay designation in GPU3 allows for

higher densities (10 to 30 dwelling units per acre) than would otherwise be allowed by the land use designation and zoning requirements. To take advantage of the overlay designation, 100% of a proposed residential development must meet affordability requirements to facilitate the co-location of jobs and housing. The overlay has a potential to apply to 27,891 acres and would be implemented in two phases. Phase I consists of a total overlay potential of 12,285 acres in the following areas: Greater Monterey Peninsula along Highway 68, Lower Carmel Valley, Fort Ord, Rancho San Juan, and Boronda. Phase II consists of a total overlay potential of 6,876 acres in the following areas: Castroville, Pajaro, Pine Canyon (King City), San Lucas, Aromas, Pleyto, Moss Landing, River Road, San Ardo, San Benancio/Corral de Tierra, Spreckles, and Toro Park.

In addition, GPU3 includes a STA overlay to allow for unique land use concepts that reflect site-specific constraints or features. Ten STAs were originally included in the existing 1982 General Plan, and six more (for a total of sixteen) are proposed in GPU3.

GPU3 includes Winery Corridor policies that are similar to the AWCP proposed as part of the 2007 General Plan. Both plans divide the corridor into three segments. The number of wine-related facilities permitted within the corridor was established in the GPU3 Draft EIR. As a result, differences between the two plans are relatively minor and pertain primarily to implementation. Differences include the following: GPU 3 would authorize up to 8 bed and breakfasts associated with wineries, while the 2007 General Plan would instead authorize up to 8 inns. GPU 3 would allow up to 40 single-family homes and an additional 40 guest houses among the wineries; the 2007 General Plan would allow up to 50 single-family homes, 50 guest houses, and 150 workers' residences. Regarding residences, the Monterey County zoning ordinance (Chapter 21.30) actually has a more liberal policy for other farmland properties, authorizing up to three single-family residences, one guest house, and five residences for farmworker families (or housing for up to 12 workers in a group residence) on any parcel.

Finally, GPU3 amends the four Land Use Plans that are part of the four Local Coastal Programs in effect in Monterey County (North County Land Use Plan [includes Moss Landing Community Plan], the Del Monte Forest Land Use Plan, the Carmel Land Use Plan, and the Big Sur Coast Land Use Plan) and consolidates them under a new Coast Area Plan. Amendments to the Local Coastal Programs would be subject to review and final approval by the California Coastal Commission.

5.4.1.1 Development Comparison

A comparison of development potential between GPU3 and the 2007 General Plan during the 2030 planning horizon is provided in Table 5-2. In comparison to projected growth under the 2007 General Plan during the planning horizon, implementation of GPU3 would result in 3,650 fewer new dwelling units.

Table 5-2. Comparison: GPU3 and Proposed Project (2030)

Category	GPU3	2007 General Plan	Difference* (GPU3 vs. 2007 General Plan)
Residential	13,675 dwelling units	10,015 dwelling units	3,650 more dwelling units

*Difference in projected dwelling units is based on the difference between the estimated housing units within the unincorporated County from 2005 to 2030 for GPU3 and from 2006 to 2030 for the 2007 General Plan.

Source: Association of Monterey Bay Area Governments (2004).

The difference in development potential between the two plans, as well as the difference in goals and policies, will serve as the basis for the analysis of the GPU3 alternative.

5.4.2 Environmental Effects

5.4.2.1 Land Use

GPU3 provides for substantial growth during its planning horizon. It would provide for growth beyond existing development levels in the Rancho San Juan area and 18 designated Rural Centers that would result in conflicts with nearby land uses. In addition, the Affordable Housing Overlay would allow higher density development in low-density residential and agricultural areas covering up to 27,891 acres, creating the potential for land use conflicts. As a result, GPU3 would have a significant effect on land use.

In comparison, the 2007 General Plan limits development in Rancho San Juan to the approved Butterfly Village and provides for seven Rural Centers. The 2007 General Plan would designate Chualar as a Community Area, allowing urbanization, but otherwise does not have as expansive an urban development pattern as proposed under GPU3. The proposed 2007 General Plan would require an Infrastructure and Financing Study to ensure that growth is properly served with utilities and public services. Growth outside of Community Areas and rural centers would be subject to a residential Development Evaluation System that will be provide a "pass-fail" system of ensuring the development has sufficient services. As a result, although the potential for significant land use impacts is not eliminated by the policies of the 2007 General Plan, it is less than under GPU3.

GPU3 also contains policies designed to limit the unmitigated expansion of cities. GPU3 sets forth a policy that the County will oppose City annexation requests if housing development outpaces job growth and roadway impacts are not properly mitigated. This set of policies may reduce many potential land use impacts from city growth on unincorporated county lands.

Overall, GPU3 envisions substantially more growth than the 2007 General Plan and proposes to accommodate it through a variety of approaches. In terms of

development potential, GPU3 would accommodate 3,650 more new dwelling units than the 2007 General Plan. While GPU3 does contain a rigorous annexation policy that would address city-county land use conflicts, this would not fully address the land use conflicts created in the unincorporated county because of the number of Rural Communities established. In addition, GPU3-proposed amendments to the coastal zone land use plans have the potential to create land use conflicts with the Local Coastal Program. Therefore, GPU3 would have greater impacts on land use than would the 2007 General Plan.

5.4.2.2 Agriculture Resources

Development and land use activities contemplated by GPU3 would result in the conversion of approximately 32,900 acres of Important Farmland. Most of this loss of farmland would occur as a result of the Affordable Housing Overlay, which would affect as much as 27,900 acres. Additional losses would be incurred with development of the 18 Rural Centers and the 4,000-acre Rancho San Juan. GPU3's policy regarding city annexation could indirectly limit the loss of Important Farmland by slowing city growth; however, this policy would only partially offset the conversion within unincorporated areas. Overall, GPU 3 would have a significant effect on agricultural resources.

In comparison, urban development proposed as part of the 2007 General Plan would result in a loss of approximately 5,500 acres of Important Farmland. Therefore, GPU3 would have greater impacts on agriculture resources than would the 2007 General Plan.

5.4.2.3 Water Resources

GPU3 would have significant impacts on soil erosion and sedimentation from construction and agricultural land use activities, wastewater disposal (i.e., septic tanks), groundwater overdraft, seawater intrusion, well competition and interference, and levee and dam failure. GPU3 would prohibit development in 100-year flood plains, establish a Comprehensive Integrated Water Management Plan, require long-term water supplies for new development, and expand the Watershed Permit Coordination Program. GPU3 also has strong policies protecting water resources in the Coastal Areas. GPU3 shares with the 2007 General Plan an increased demand on groundwater resources and potential for exacerbating overdraft conditions. It is unlikely that these policies would be sufficient to solve the water supply and overdraft problems identified in this EIR and therefore, GPU 3 would have a significant and unavoidable impact.

The 2007 General Plan policies, with the exception of the long-term sustainable water requirement, are less stringent. However, the proposed 2007 General Plan would restrict development in floodplains, limits development where there is no long-term sustainable water supply, and would establish groundwater overdraft monitoring systems. It is therefore likely that, on balance given the greater

development potential under GPU3, the significance level of potential GPU3 overall impacts on water resources would be similar to those of the 2007 General Plan.

5.4.2.4 Geology, Soils, and Seismicity

GPU3 includes specific policies that reduce geologic risk by limiting development near fault zones, requiring geologic reports in areas identified as having geologic hazards or constraints, and requiring geotechnical reports for subdivisions in areas of risk. These policies, in concert with building codes and the County Erosion Control Ordinance (Chapter 16.12 of the Monterey County Code), would avoid a significant effect on the environment.

The 2007 General Plan has similar policies to minimize geologic risk and would also work with existing County building codes and ordinances to minimize soil erosion. Based on its greater development area (eight Community Areas and 18 Rural Centers), GPU3 has the potential to expose more persons and property to geologic, soil, and seismic hazards than does the proposed 2007 General Plan. Therefore, potential GPU3 impacts on geology, soils, and seismicity would be greater than those of the 2007 General Plan.

5.4.2.5 Mineral Resources

Oil production in the southern Salinas Valley and South County is the only mineral resource extraction activity that may be affected by development and land use activities contemplated by GPU3. Economic conditions and legal constraints make it highly unlikely that GPU3 would result in the premature termination of oil extraction operations in these areas. Therefore, GPU3 would have the same impacts on mineral resources as those of the proposed 2007 General Plan.

5.4.2.6 Transportation

GPU3 establishes a standard of LOS C for County roads outside Community Areas. If successfully implemented, this would result in less congestion than the proposed 2007 General Plan, which would adopt LOS D as the standard. However, in order to maintain traffic flow at LOS C, extensive road widening would be needed. The widening would likely result in significant indirect effects on noise, biology, agricultural land conversion, and land use. GPU3 would allow more new development during the planning horizon than would the proposed 2007 General Plan and sets a lower congestion threshold (LOS C). It is reasonable to conclude that potential adverse indirect impacts from GPU3 would be greater to those of the 2007 General Plan because the former would allow more residential development in more places. GPU3 would, however, have less traffic congestion than the proposed 2007 General Plan, assuming that financing

would be available for the road improvements needed in order to meet the LOS C standard.

5.4.2.7 Air Quality

The North Central Air Basin is not in attainment for the State O_3 standard. Ozone is the product of NO_X and SO_X emissions mixing in the presence of sunlight. Implementation of GPU3 would allow for 13,675 new dwelling units, as well as other development that will, in turn, result in additional emissions of ozone precursors from vehicle exhaust. This would be a significant effect.

GPU3 would allow an estimated 3,650 more new dwelling units by 2030 than are proposed under the 2007 General Plan. As a result, there would be less traffic congestion once roadways attained LOS C, but potential air quality impacts related to vehicular sources of emission would likely be greater than what would occur under implementation of the 2007 General Plan as a result of more automobiles and presumably more vehicle miles travelled under GPU3. The potential adverse impacts on air quality from GPU3 would be greater than those of the 2007 General Plan.

5.4.2.8 Noise

GPU3 includes strong policies intended to ensure that new development of sensitive receptors will not be exposed to excessive noise (i.e., noise levels exceeding County standards), including noise from roadway improvement projects. However, the policies also prohibit the use of masonry sound walls in rural areas. This prohibition may act to make roadway improvement noise attenuation infeasible where existing rural residences adjoin those roads. As a result, GPU3 would be expected to have a significant effect on noise in rural areas where roads are widened to meet the LOS C congestion standard.

The proposed 2007 General Plan has similar noise policies, with additional policies intended to limit noise and vibration from construction activities. The 2007 General Plan would also discourage the use of masonry walls for noise attenuation in rural areas. Although the 2007 General Plan would probably not require the road widening associated with GPU3, it would allow greater congestion on County roads, and therefore would result in higher noise levels along roads that become more congested.

Implementation of GPU3 would allow for 3,650 more dwelling units than the 2007 General Plan. As a result, the potential for noise impacts would be greater than the 2007 General Plan. Because GPU3 lacks policies limiting construction noise, short-term construction-related noise and vibration impacts would also be expected to be correspondingly less. Accordingly, potential adverse noise impacts from implementation of GPU3 would be less than those of the 2007 General Plan.

5.4.2.9 Biological Resources

Overall, the 8 Community Areas and 18 Rural Centers established under GPU3 would result in new urban development within those areas. In some cases, this development will occur on or near natural habitats inhabited by special status wildlife and plant species, or affect open lands currently used by special status species as foraging habitat or movement corridors. In addition, the road widening needed to maintain LOS C into the future may also affect habitats such as wetlands and riparian areas. At the same time, GPU3 contains strong policies for the protection of biological resources. These include requiring analysis and mitigation of impacts in conjunction with development in Community Areas, limiting development in rural areas to "building envelopes" that minimize effects on critical habitats, and designing new development to avoid sensitive resources where possible. Development on rural lands or in Rural Centers would also be required to comply with setbacks from habitat areas to minimize development impacts. These policies would reduce the potential effects of new development but may not be sufficient to reduce all effects below a level of significance.

In comparison, the biological resources policies of the 2007 General Plan would require inventorying sensitive habitats and avoiding impacts on state and federally listed species and designated critical habitat. The CEQA process would be used to mitigate impacts from individual development projects, as such projects are proposed. The 2007 General Plan also would require preparation and implementation of a program to comprehensively mitigate the loss of critical habitat.

The 2007 General Plan contains less restrictive standards for protection of biological resources than GPU3. With the addition of the proposed mitigation measures to the 2007 General Plan, the two alternatives become more comparable with respect to protecting biological resources. Accordingly, balancing differences in growth with stringency of protection policies, the impacts of GPU3 on biological resources would be similar to that of GPU2007.

5.4.2.10 Cultural Resources

GPU3 includes strong policies for the identification and evaluation of cultural resources, including historical resources and archaeological sites. However, its policies for protecting those resources are vague and largely dependent upon the CEQA process. Previously undiscovered burials would be managed under the state law for the treatment of buried remains. Taken as a whole, the policies in GPU3, CEQA, and state law would avoid a significant effect on cultural resources.

In comparison, the 2007 General Plan has a similar set of policies for archaeological and paleontological resources, with additional policies governing the protection of burial sites. The proposed 2007 General Plan does not have specific policies for the protection of historic resources, but the County's adopted

Historic Preservation Plan and Historic Preservation Ordinance reduce the need for such policies.

Therefore, the 2007 General Plan would have a less-than-significant effect on cultural resources. GPU3 and the 2007 General Plan would have basically the same potential impacts on cultural resources.

5.4.2.11 Public Services and Utilities

GPU3 contains a rigorous requirement for the concurrent provision of public services and utilities. This would avoid significant effects. In comparison, the proposed 2007 General Plan has similar policies. Because the design and location of future services and utilities are largely unknown, the impacts of the construction and operation of new facilities cannot be reasonably ascertained at this time. These facilities will probably be built within the cities, Community Areas, and Rural Centers that they would serve. As a result, their impacts would be part of the overall impact of urbanization. Both GPU3 and GP2007 includes provisions for mitigation the impacts of construction of new facilities. Therefore, GPU3 impacts on public services and utilities are similar to those of the 2007 General Plan.

5.4.2.12 Parks and Recreation

GPU3 would require the adoption of park development guidelines, a parks inventory, and park acquisition priorities (by area) in conjunction with new park development, thereby ensuring the provision of park and recreational facilities concurrent with new development. These provisions would avoid a significant effect as a result of insufficient parks and the overuse of existing facilities. The 2007 General Plan has practically the same requirements, by comparison, lacking only the specificity of the park acquisition priorities. However, Mitigation Measure PS-1 would revise the 2007 General Plan's policies to clearly establish dedication standards for on-site park facilities to ensure that future subdivision approvals exact parks and recreation facilities or in-lieu fees. Therefore, GPU3's impacts to parks and recreational resources are relatively similar to those that would result from implementation of GP2007, with mitigation.

5.4.2.13 Hazards and Hazardous Materials

GPU3 contains policies addressing potential impacts on hazardous materials that reflect state law for inventory, avoidance, and clean-up of hazardous materials. The policies also require a site contamination study where contamination is suspected. GPU3 also includes policies concerning emergency response and wildland fire protection, including fire service standards, design requirements, and defensible space requirements for new development. However, absent

stronger policy restrictions on development in high hazard fire areas, GPU3 would have a significant effect.

The 2007 General Plan contains similar policies. In addition, it includes detailed policies requiring annexation to fire districts, and addressing emergency evacuation routes, coordination between emergency response agencies, fire flows, fire vehicle access, and fuel modification zones in areas of high and very high fire hazard. These policies would avoid significant effects. Thus, GPU3 with its larger developed area and greater potential for residential development would have greater adverse impacts on hazards and hazardous materials than the 2007 General Plan.

5.4.2.14 Aesthetics, Light, and Glare

Implementation of GPU3 would have significant impacts on scenic vistas, scenic highways, visual character, and light and glare because of the more intense land uses envisioned under this alternative compared to the existing setting. By comparison, the 2007 General Plan would have similarly significant impacts, albeit over a smaller developable area with fewer Rural Centers. Accordingly, potential impacts on aesthetics, light, and glare would be greater under GPU3 than under the 2007 General Plan.

5.4.2.15 Population and Housing

Both GPU3 and the proposed 2007 General Plan are local land use plans that prescribe where and at what intensity future growth will occur. Pursuant to state law, a general plan must provide for sufficient new development to accommodate projected housing demand. As such, both plans would induce future growth by accommodating future development. Neither plan is expected to result in the displacement of substantial numbers of dwelling units or persons. Given its greater potential for development, GPU3's impacts on population and housing would be greater than those of the 2007 General Plan.

5.4.3 Conclusion

The GPU3 Alternative would be the most growth accommodating option of the alternatives, with eight Community Areas and 18 Rural Centers; more so than the 2007 General Plan. GPU3 has greater impacts on land use, agricultural resources, geology and soils, transportation, air quality, noise, hazardous materials, aesthetics, and population and housing than the 2007 General Plan. It has similar impacts on water resources, minerals, biological resources, cultural resources, public services, and parks and recreation. This alternative would not reduce any of the impacts identified for the 2007 General Plan.

As required by CEQA, this alternative meets all of the objectives of the 2007 General Plan. It would update the existing 1982 General Plan policies and land use map to account for changing economic conditions, land use patterns, socio-economic changes, or technological advancements. With respect to providing for the continued viability of the agricultural industry, it includes provides a wine corridor plan, but does not include an Agricultural Element with as many specific policies targeting the enhancement and protection of the agricultural industry.

5.5 General Plan Initiative Alternative (GPI)

5.5.1 Description

The General Plan Initiative Alternative (GPI) would amend parts of the existing 1982 General Plan, the 2003–2007 Housing Element, and the North County Land Use Plan. The GPI would restrict growth in the unincorporated areas of the County by requiring existing infrastructure deficiencies to be addressed before allowing new development and prohibiting any intensification of land use (e.g., subdivision) outside cities or Community Areas with an adopted Community Plan unless approved by initiative countywide vote. In addition, the GPI is designed to limit maximum potential development to the minimum number of housing units identified in the Regional Housing Needs Assessment. The GPI would create five types of land use categories: Cities, Community Areas, Rural Lands, Agricultural Lands, and Public Lands. With the exception of the Community Area designation, the GPI does not contemplate intensifying the level of land use in the four other land use categories and would not establish any Rural Centers.

The Community Area concept in the GPI is similar to that contained in GPU3 and the 2007 General Plan. However, instead of the eight Community Areas included in GPU3, the GPI proposes the same five identified in the proposed 2007 General Plan: Boronda, Castroville, Chualar, Fort Ord, and Pajaro. Future growth in the unincorporated areas of the County would be limited to Community Areas, and any intensification of use or changes to the boundaries of these identified areas would require prior approval of a majority of County voters. Growth in Boronda, Castroville, Fort Ord, and Pajaro would be facilitated by redevelopment and reuse activities; growth in Chualar would occur on existing agricultural lands, which would be limited to no more than 100 acres at a later timeframe in the life of the General Plan. In addition, the GPI emphasizes that future growth in Community Areas must be phased to first occur where infrastructure currently exists. Outside of Community Areas, only existing lots of record could be developed.

The GPI also contains land use restrictions requiring that any future General Plan amendments be approved by a majority of the County electorate, and a directive that the County work with the Monterey County Local Agency Formation

Commission to promote compact, urban development patterns within the existing boundaries of incorporated cities.

The GPI would also amend the existing Housing Element (last updated in 2003) to include more expansive inclusionary affordable housing requirements. The existing 20% affordable housing requirement would be increased to 30% of units by adding two tiers of workforce housing: Workforce I (5%) and Workforce II (5%). In certain situations, the GPI would require that as much as 40% affordable housing be included in proposed residential developments. In addition, the Housing Element would be amended to include a new right-of-first-refusal program for persons living or working in Monterey County who wish to rent or purchase new housing units.

The GPI includes policies concerning farmworker housing on Agricultural and Rural Lands. Housing for farmworkers would be permitted under the GPI's policies on an existing legal lot of record, if housing will support agricultural uses on site; housing is located to minimize interference with agricultural uses and to minimize impacts; housing complies with all health and safety codes; housing is permanently restricted to farmworker housing; a deed restriction has been recorded defining all units as accessory to the agricultural use on site; and all necessary services can be provided to support the farmworker housing.

In addition, the GPI amends the North County Coastal Plan but exempts the Del Monte Forest Land Use Plan, the Carmel Land Use Plan, and the Big Sur Coast Land Use Plan from the major policy changes in the Initiative with respect to land use classifications, growth and housing policies, and the requirement for voter approval to any Plan changes.

5.5.1.1 Development Comparison

A comparison of development potential between GPI and the 2007 General Plan over the 2030 planning horizon is provided in Table 5-3. Development under the GPI would result in approximately 5,901 more dwelling units than the proposed 2007 General Plan.

Table 5-3. Comparison: GPI and Proposed Project to 2030

Category	GPI	2007 General Plan	Difference (GPI vs. 2007 General Plan)
Residential	13,973 dwelling units	10,015 dwelling units*	5,901 dwelling units

*Difference in projected dwelling units is based on the difference between the estimated housing units within the unincorporated County from 2005 to 2030 for GPU3 and from 2006 to 2030 for the 2007 General Plan.

Source: Bay Area Economics. 2007. *Analysis of Monterey County General Plans and Quality of Life Initiative.* February

The difference in development potential between the two plans, as well as the difference in goals and policies, will serve as the basis for the analysis of the GPI alternative. The analysis below is based in part upon the Analysis of the Monterey County General Plans & Quality of Life Initiative prepared by Bay Area Economics and dated February 2007.

5.5.1.2 Land Use

The GPI policies encourage most new development to occur within the County's cities. The GPI would effectively preclude new urban development in Rancho San Juan and San Lucas, and instead concentrate denser development in the five remaining Community Areas. The GPI does not include the land use concept of Rural Centers found in some of the other alternatives. It would require that future General Plan amendments be approved by a majority of the County electorate, which would likely result in fewer amendments and the possibility that future amendments necessary to update the Housing Element would be problematic.

The GPI will result in urbanization within the cities and the Community Areas. As discussed earlier, by law a general plan must include sufficient provisions for growth to accommodate projected housing demand. As a result, the GPI will be growth-inducing. In this regard, it would have a similar significant impact as the proposed 2007 General Plan.

However, the GPI places greater restrictions on land use than the 2007 General Plan, limiting growth in the unincorporated County area to a smaller geographic area than is proposed under the 2007 General Plan. By concentrating growth in cities and existing urbanized areas, there is less likelihood to create conflicts with existing land uses. However, by amending the North County Coastal Plan, there is some potential for inconsistency between the GPI and existing County ordinances, and the potential for the Coastal Commission to determine that this element is inconsistent with the Coastal Act. Nonetheless, the GPI would have less potential to result in conflicts between land uses than the 2007 General Plan.

5.5.1.3 Agriculture Resources

The GPI's development potential is limited to the existing cities, the five Community Areas, and legal lots of record. As a result, it is reasonable to expect that a smaller overall amount of agricultural lands would be converted to non-agricultural uses under the GPI than under the proposed 2007 General Plan. Furthermore, the GPI's voter approval requirement for future General Plan Amendments is likely to make it much more difficult to convert agricultural lands under the jurisdiction of the County to non-agricultural uses. GPI does not have the specific policies addressing mitigation of impacts from the conversion of agricultural land either within the unincorporated County or as a result of annexation of agricultural land to cities as are included in the 2007 General Plan.

However, these county restrictions would not stop future growth in the cities. AMBAG projections indicate that Monterey County's total population will continue to grow in the future. The cities currently hold approximately 75% of the County's population. The GPI would likely direct an even greater proportion of this population growth to the existing cities than has occurred in the past. Future expansions of the boundaries of the Salinas Valley cities, which are surrounded by Prime Agricultural land, will result in the conversion of a significant amount of those lands to urban uses.

For example, according to the Final EIR certified in 2002 for the Salinas General Plan, the City of Salinas has an existing residential density of approximately 9 dwelling units per acre. In order to accommodate the housing growth currently projected by the *2004 AMBAG Population, Housing Unit and Employment Forecasts* to occur between 2005 and 2030 (approximately 17, 644 new units), the City will need to develop approximately 1,960 acres of land. This does not include the amount of land needed for roads, commercial development, parks, and other related urban development, nor does it include the development that might otherwise have occurred in the County absent the GPI. Therefore, the GPI will have a significant indirect effect on annexation and the conversion of agricultural lands that adjoin cities. This effect will occur primarily in the Salinas Valley where there is sufficient water supply to serve projected growth to 2030, but it is on the most productive agricultural lands.

By comparison, the 2007 General Plan would authorize more extensive urbanization within the County than does the GPI, particularly in areas designated as Rural Centers. However, the Community Areas and Rural Centers designated in the 2007 General Plan are generally less productive lands and grazing lands. Therefore, development under the GPI and under the 2007 General Plan would result in similar levels of conversion and significant effects on agricultural land. GPI would have greater indirect effects on productive agricultural lands based upon the potential growth that would result in cities.

5.5.1.4 Water Resources

The GPI would direct most new development to the existing cities. Additional development would be accommodated within five Community Areas under the regulatory control of the County. The GPI retains the policies of the existing 1982 General Plan with respect to soil erosion and sedimentation from construction and agricultural land use activities, wastewater disposal (i.e., septic tanks), groundwater overdraft, seawater intrusion, well competition and interference, and levee and dam failure. The Erosion Control Ordinance (Chapter 16.12 of the Monterey County Code) would remain in place.

All of these are significant problems that would also result from development under the 2007 General Plan. While the potential effects of the GPI would be less than those of the 2007 General Plan by virtue of the greater compactness of the urban development contemplated, the GPI lacks many of the comprehensive water resource goals and policies contained in the 2007 General Plan. Moreover,

there is greater total development under GPI to the year 2030 than for GP 2007 with significant reliance of providing housing on lots of record throughout the unincorporated area. This would result in greater impacts to water resources overall although it could be offset by the greater intensity of growth in the few community areas and cities. Taking these factors into consideration, development to the 2030 planning horizon under the GPI would have a slightly greater impact on water resources than would the 2007 General Plan.

5.5.1.5 Geology, Soils, and Seismicity

The GPI would center urban development in and adjacent to the existing cities and five Community Areas. Development would be subject to the policies of the 1982 General Plan, plus existing regulations such as the County Erosion Control Ordinance, state Alquist-Priolo Seismic Zone Act, and California Building Code development standards. Additionally, the GPI would prohibit all development on slopes over 25%, and no new agricultural cultivation on slopes over 15%. These would avoid significant effects from implementation of the GPI.

Compared to the 2007 General Plan, the GPI would reduce the exposure of persons and property to geologic, soil, and seismic hazards by virtue of its more compact development pattern. This is exemplified by elimination of the Rural Centers as development nodes. Further, its restrictions on hillside development reduce the potential for soil erosion to occur and for slope instability to adversely affect development. Therefore, potential adverse impacts on geology, soils, and seismicity from the GPI would be less than those of the 2007 General Plan.

5.5.1.6 Mineral Resources

Oil production in the southern Salinas Valley and South County is the only mineral resource extraction activity that may be affected by development and land use activities contemplated by the GPI. Economic conditions and legal constraints make it highly unlikely that either the GPI or the 2007 General Plan would result in the premature termination of oil extraction operations in these areas. Therefore, the GPI would have the same impacts on mineral resources as the 2007 General Plan.

5.5.1.7 Transportation

The GPI retains all of the policies of the existing 1982 General Plan with respect to circulation. The GPI would require that new development within the urban development boundaries of the Community Areas be phased so that all public infrastructure is completed prior to or concurrent with new development. However, because development would continue within Monterey County under the GPI, albeit primarily within the cities and Community Areas, traffic levels would increase over existing conditions. This will be a significant effect.

The GPI has a stricter concurrency policy than the 2007 General Plan. As a result, development in the Community Areas will be supported by necessary local road improvements as it occurs. However, this will not reduce the impacts on regional roads that are expected to occur as a result of new development, nor will it reduce the indirect impacts on the cities as a greater proportion of the County's growth is directed to incorporated areas. The 2007 General Plan commits the County to developing, in cooperation with the Transportation Agency of Monterey County (TAMC) and other agencies, a regional mitigation ee with the goal of achieving LOS D on the regional roadway system. That fee program has been adopted and is currently in effect.

The GPI does not include an AWCP that would encourage future wineries to locate along the AWCP's three road corridors. Assuming that wineries will continue to be built to process the grapes being produced in the County, the GPI would encourage a more dispersed pattern of winery locations than would the 2007 General Plan. To the extent that clustering wineries along three road corridors would result in greater congestion than would dispersed wineries, the GPI would have less impact than the 2007 General Plan.

The GPI would result in a more compact pattern of urbanization than is proposed under the 2007 General Plan although there would be potential traffic from the sprawl of development on lots of record. Concentration of growth would tend to reduce vehicle miles travelled by reducing the number of traffic generators and destinations. Traffic is likely to be more concentrated in the cities which would increase local congestion, but taken as whole, the potential adverse impacts on transportation on regional and county roads from the GPI would be less than those of the 2007 General Plan.

5.5.1.8 Air Quality

The GPI retains air quality policies from the existing 1982 General Plan and does not set a specific LOS standard for County roads. By virtue of its direct and indirect impacts on traffic and urban development, the GPI can be expected to have a significant effect on air quality.

In comparison, the 2007 General Plan contains policies that are consistent with the air quality objectives of the 2004 AQMP. Moreover, the 2007 General Plan's local traffic impact fee and prohibition on occupancy of new development until all roadways operate at LOS D or better would significantly reduce idling on local roadways, which would result in a corresponding reduction in adverse air quality impacts. However, the extent of new traffic expected to be generated by the 2007 General Plan, combined with other sources of emissions resulting from urban development and the ACWP, will result in a significant effect on air quality.

The GPI would result in a more compact pattern of development than the 2007 General Plan. Compact development patterns tend to result in fewer vehicle trips than in less compact settings although air quality in urban areas may deteriorate.

Compact development patterns allow pedestrian, bicycle, and transit trips to substitute for short automobile trips (Urban Land Institute 2008). Accordingly, the GPI may be expected to have less of an impact on air quality than the 2007 General Plan.

5.5.1.9 Noise

The GPI would result in a compact pattern of development and would carry forward the noise policies of the 1982 General Plan. These are intended to be protective of sensitive receptors, but do not include standards for reducing construction noise. Under implementation of the GPI, noise would be generated primarily by new construction, the operation of new urban development in the Community Areas and cities, and additional traffic on roads (particularly in the rural areas where noise levels are generally low). In general, noise impacts would be significant in locations where new construction in the Community Areas adjoins sensitive receptors, and on the urban/rural interface where new urban development and new or widened roads carrying substantial amounts of traffic abut existing residences.

In comparison, the 2007 General Plan would result in the same types and levels of noise impacts but in more areas of concentrated growth. Noise in urban areas in greater than in less intensely developed areas. On balance, weighing difference in the number of growth centers, against the intensity of growth of the more compact areas, GPI impacts with respect to noise would be similar to that of the 2007 General Plan.

5.5.1.10 Biological Resources.

The GPI retains the vegetation and wildlife policies contained in the existing 1982 General Plan. Compliance with these policies would result in development with significant impacts on sensitive habitats, wetlands, riparian areas, wildlife movement, and tree preservation. Conversion of grazing lands, which provide wildlife habitat, to intensive agricultural cultivation, which provides little habitat value, would continue in the flatter portions of the County. However, the GPI would prohibit new agricultural cultivation on slopes over 15%. This would also act to limit the conversion of hilly grazing land to agricultural use, thereby reducing impacts on wildlife in those areas. Additionally, the GPI policies concentrate new development in the cities and the Community Areas, thereby minimizing the conversion of habitat by urban uses. Conversion on lots of record would potentially be greater, however.

In comparison, the 2007 General Plan would allow development over a more extensive area and would likely result in a greater level of conversion of grazing lands to cultivated agricultural land on steeper lots. There would likely be less development on lots of record that contain potential special status species up to the 2030 timeframe under GP 2007, however. With the addition of the mitigation

measures proposed in this EIR for protection of biological resources that are more protective than the policies in GPI (existing 1982 General Plan policies) the GPI would have more adverse impacts on biological resources than the 2007 General Plan.

5.5.1.11 Cultural Resources

The GPI would retain the 1982 General Plan policies for cultural resources. In addition to these policies, development would be required to comply with the County's adopted Historic Preservation Plan and Historic Preservation Ordinance. The GPI does not contain goals and policies addressing paleontological resources and Native American burial sites. To a certain extent, impacts on burials are reduced by California law regulating the treatment of burials found during construction activities. However, the lack of policies concerning paleontological resources and burial sites creates the potential for these resources to be damaged or destroyed and for a significant impact to occur.

The proposed policies of the 2007 General Plan, by comparison, are more protective of these resources than are the provisions of the GPI. In addition, GPI results in the development of more housing units the year 2030. Therefore, the GPI would have greater impacts on cultural resources as the 2007 General Plan.

5.5.1.12 Public Services and Utilities

Development under the GPI would result in a greater demand for public services and utilities than currently exists. In the future, the GPI's policies would result in a compact development pattern focusing on the five Community Areas and expansion of the existing cities. New demand for services and utilities would be concentrated in those areas. The GPI's requirements that new development in Community Areas be phased to occur first in areas with adequate public services and utilities would further lessen potential development impacts.

Because the GPI would direct a substantial amount of future development to the cities, it would avoid the need for the levels of County services that would be necessary to serve the 2007 General Plan implementation. Accordingly, this is expected to result in fewer adverse impacts from new or expanded fire protection, sheriff's protection, schools, libraries, medical facilities, potable water, wastewater, and solid waste facilities. Therefore, potential adverse impacts on public services and utilities under the GPI would be less than the 2007 General Plan. Both GPI and 2007 General Plan have less restrictive policies for development on lots of record, although projected growth on lots of record under GPI is anticipated to be greater under GPI to the year 2030. Accordingly, on balance, one would conclude that the impacts that would result from the construction of new public facilities would be less for GPI than for the 2007 General Plan.

5.5.1.13 Parks and Recreation

As with public services and utilities, development under the policies of the GPI would push most new development into the cities and the five Community Areas. The development in the cities would increase the need for parks and recreation facilities in those jurisdictions. Typically, that demand would be met by the affected cities through impact fees or other financing mechanisms applied in the course of approving development projects. The same would be true for the County in the Community Areas. As a result, the GPI would not result in a significant effect.

The area of future concentrated development in the unincorporated area is smaller under the GPI than under the 2007 General Plan. Less development in the unincorporated areas would translate to less demand for new parks and recreation facilities. Because future growth and the associated residential development will instead be channeled into the cities, there will be an increase in demand for new city parks and recreation facilities, as well as increased demand on existing facilities. The level of increased demand in the cities would depend upon the amount of growth that would be transferred and is not reasonably predictable. The 2007 General Plan, with mitigation requiring adoption of recreational facilities standards for new subdivision, would somewhat balance this impact.

Accordingly, the potential adverse impacts on parks and recreation from the GPI would be somewhat less than the 2007 General Plan in the unincorporated areas of the County but have greater indirect impact in the cities.

5.5.1.14 Hazards and Hazardous Materials

The GPI does not contain policies that adequately address potential impacts on hazardous materials, emergency response, and wildland fire protection. Although the GPI would effectively limit growth in rural areas to existing lots of record, that restriction would not offset the lack of comprehensive wildland fire protection goals and policies. The GPI would have a significant effect in these areas.

The 2007 General Plan contains new goals and policies to address these areas including extensive policies concerning fire hazards and emergency preparedness. Therefore, the GPI would result in potentially greater adverse impacts from hazards and hazardous materials in rural areas than the 2007 General Plan.

5.5.1.15 Aesthetics, Light, and Glare

The GPI would limit future urban growth in a manner that would preserve significant visual resource areas (agricultural fields, ridgelines, natural areas,

etc.) and minimize adverse impacts from new sources of light and glare. Nonetheless, the GPI would result in major new sources of light and glare being built within the cities and the Community Areas. These would adversely affect nearby rural and agricultural areas.

The more compact development pattern, in comparison to development under the 2007 General Plan, would result in fewer adverse impacts on scenic vistas, scenic highways, visual character, and light and glare. Impacts on visual character and light and glare would be significant and unavoidable as result of implementation of the 2007 General Plan. Because it would result in a more compact development pattern, aesthetics, light, and glare impacts of the GPI would be less than those of the 2007 General Plan.

5.5.1.16 Population and Housing

The GPI and the proposed 2007 General Plan are local land use plans that prescribe where and at what intensity future growth will occur. Pursuant to state law, a general plan must provide for sufficient new development to accommodate projected housing demand. As such, both plans would induce future growth by accommodating future development. Neither plan is expected to result in the displacement of substantial numbers of dwelling units or persons. In the near term, the GPI would have similar impacts on population and housing to those of the 2007 General Plan. However, if the voter approval requirement of the GPI resulted in the county being unable to amend its Housing Element to comply with the requirements for housing availability under State Housing Element Law, the County would be placed under legal threat for being out of compliance with that law.

5.5.2 Conclusion

The GPI Alternative would amend the policies of the existing 1982 General Plan to limit growth outside of Community Areas. While this alternative would allow only slightly more growth than the 1982 General Plan which it amends, its stringent land use and transportation infrastructure requirements would effectively curtail future urban expansion in the unincorporated County. The GPI would have a greater impact on cultural resources, hazardous materials and water resources, biological resources and agricultural resources. than the proposed 2007 General Plan. It would have similar impacts with respect to mineral resources, noise, public services and and population and housing. It would have lesser impacts on land use, geology and soils, transportation, air quality, parks and recreation, and aesthetics, light, and glare than the proposed 2007 General Plan.

The GPI Alternative meets three of the five objectives of the 2007 General Plan. It would provide an updated General Plan that reflects the existing physical conditions and constraints in the County and provides a range of comprehensive

policies to guide future residential development based on those conditions and constraints. It does not establish new comprehensive policies and modify existing policies in the existing 1982 General Plan that reflect the latest legal, statutory, scientific, and technical changes and advances. It contains minimal policies with respect to address future employment growth and economic growth in the County in general or more specifically with respect to the agricultural industry. The GPI Alternative would also accommodate forecasted growth, albeit in a different manner than the 2007 General Plan. The GPI Alternative does contain strict limitations on growth outside of designated areas that would limit the County's flexibility in accommodating growth to the planning horizon by requiring that amendment to the General Plan be approved by a majority of the voters.

5.6 2006 General Plan (GPU4)

5.6.1 Description

GPU4 was the basis for the proposed 2007 General Plan that is the subject of this EIR. Accordingly, it shares many of the 2007 General Plan's proposed goals and policies. A discussion of the key differences between GPU4 and the 2007 General Plan follows at the end of this subsection.

GPU4 includes amendments to the seven Area Plans; including them as sections in the General Plan and deleting any Area Plan policies that are otherwise addressed on a County-wide level in the General Plan. This focuses the policies on provisions that are unique to each Area Plan. GPU4 does not propose to amend the County's certified Local Coastal Program or any of its local coastal plans. The 2007 General Plan shares this approach.

GPU4 provides for a range of land uses and densities for the unincorporated areas of Monterey County that are not in federal or state ownership. GPU4 policies encourage most future development to take place within the incorporated cities, with an "urban reserve" designated around each city identifying unincorporated lands that may be available for annexation. Growth areas within the County would be designated where an adequate level of public services is available or "can be assured concurrent with growth and development." The 2007 General Plan shares this approach.

GPU4 provides for limited urban development to occur in selected areas of the unincorporated area of the County. In addition to the previously adopted Carmel Valley and Fort Ord Master Plans, GPU4 establishes six Community Areas where future urban development will be focused. In addition, nine Rural Centers are identified in areas that already contain a concentration of higher intensity uses than are typically found in rural areas. These Rural Centers would evolve into Community Areas over the life of GPU4 should infrastructure and services become available. Urbanization of Rural Centers is intended to be secondary in priority to development in the Community Areas and would be contingent upon

the prior preparation of a Capital Improvement and Financing Plan (CIFP) to ensure that adequate urban services can be provided. There are 17 Special Treatment Areas in GPU4 (including the existing 10 STAs in the 1982 General Plan) and 4 Study Areas. Implementation of GPU4 would result in approximately 8,336 more dwelling units than the proposed 2007 General Plan.

Under GPU4, the CIFP would address benefit areas, the cost of improvements over the life of the general plan, financing/funding sources to accommodate those costs (including a traffic impact fee), a schedule for completion of improvements, and coordination with the TAMC's regional traffic impact fee program, when adopted. GPU4 policy commits the County to reviewing the CIFP every five years after adoption of the General Plan.

GPU4 commits the County to preparing a Residential Development Evaluation System (DES) "to provide a systematic, consistent, predictable, and quantitative method for decision-makers to evaluate residential developments of five or more lots or units in areas of the unincorporated County outside of Community Areas and Rural Centers, and in Rural Centers prior to the preparation of the required Infrastructure and Financing Study." The DES would regulate these developments on the basis of site suitability; infrastructure availability; resource management; proximity to a city, Community Area, or Rural Center; affordable housing; environmental impacts; jobs-housing balance; and other factors. The DES would not be a "pass-fail" system under GPU4. Projects of five or more units in a Rural Center prior to adoption of an Infrastructure and Financing Study would be required to include 35% affordable/workforce housing. Such projects outside of a Community Area or Rural Center would be required to provide at least 50% affordable/workforce housing.

Other goals and policies address such subjects as biological resource conservation; cultural resources preservation; reduction of seismic, geological, and wildland fire hazards; provision of public utilities; and transportation needs. The titles of the elements of GPU4 reflect its comprehensive scope: land use, circulation, conservation/open space, safety, public service, agriculture, and economic development. This is shared with the 2007 General Plan.

In addition to discouraging urban uses outside of cities and Community Areas, GPU4 contains an agricultural element with goals and policies that are intended to be protective of agriculture. These include policies limiting the regulation of "routine and ongoing agricultural activities," authorizing agricultural support uses in agricultural areas, limiting the subdivision of agricultural land, establishing agricultural buffers to separate agricultural uses from urbanization, and committing to adopt a program for mitigating the loss of farmland to urbanization or city incorporation.

GPU4 would require the establishment of a permit process for development on slopes exceeding 25%, or that contain mapped geologic hazards or constraints. A grading permit would be required for the conversion of slopes in excess of 25% to agricultural use. A ministerial permit process would be established for

proposed development on slopes between 15 and 24%, and 10 to 15% on highly erodible soils.

A separate *Agricultural Winery Corridor Plan* (ACWP) that implements General Plan policies is also included in GPU4. The ACWP designates three segments of a winery corridor in the Central Salinas Valley, South County, and Toro areas along River Road, Metz Road, and Jolon Road. GPU4 establishes land use policies to guide the establishment of a defined number of wineries and tasting rooms. Land use policies to guide the development of the Agricultural Winery Corridor include standards that regulate the size and location of wineries. The policies are intended to allow for the development of an Agricultural Winery Corridor that is consistent with the existing agricultural land uses as well as the provisions of the Williamson Act. Under the full development of the AWCP, up to 40 "artisan" wineries, and 10 tasting rooms would be developed, along with 3 restaurants, 5 delicatessens, 8 bed-and-breakfasts, a business cluster, and up to 2 visitor centers. GPU4 specifies the number of each wine-related facility that would be allowed on each of the three segments in order to avoid overcrowding. However, it does not identify specific locations for any facilities within a segment.

5.6.1.1 Differences between GPU4 and the 2007 General Plan

While GPU4 contains many of the same policies as the project, it differs from the 2007 General Plan in the following key areas:

- The 2007 General Plan would commit the County to adopting a Greenhouse Gas Reduction Plan within 24 months of adopting the General Plan. The purpose of the plan would be to quantify County greenhouse gas emissions and establish a set of policies and implementation measures that would reduce projected greenhouse gas emissions to 1990 levels. No such plan is proposed under GPU4.
- The 2007 General Plan would establish five Community Areas rather than the six proposed under GPU4 (San Lucas would be designated a Rural Community under the 2007 General Plan).
- The 2007 General Plan would establish seven Rural Centers rather than the nine proposed under GPU4 (Prunedale, Mouth of the Carmel Valley, San Benancio/Corral de Tierra, and Toro Park Estates/Serra Village would be deleted). In addition, the River Road Rural Center would be reduced in area.
- The 2007 General Plan would limit additional residential subdivision in Carmel Valley to 266 new lots. It would also prohibit the conversion of previously uncultivated land on slopes in excess of 25%.
- The 2007 General Plan includes revisions to the Greater Salinas, North County, and Toro Area Plans that would limit development on properties with residential land use designations to the first single-family residence on

each legal lot of record. In contrast, GPU 4 would allow subdivision of these legal lots when consistent with the plan.

- Under the 2007 General Plan, the DES would be a pass-fail system for sites outside of Community Areas, Rural Centers, and AHOs. The 2007 General Plan would further specify that these developments (as well as development within Rural Centers before adoption of the required Infrastructure and Financing Study) would be required to include at least 35% affordable/workforce housing, or 30% affordable/workforce housing if at least 15% of the housing is for farmworkers.
- The 2007 General Plan proposes specific criteria for development that uses the voluntary TDR program, which GPU4 does not have. These include site suitability; infrastructure availability; resource management; proximity to a city, Community Area, or Rural Center; environmental impacts; proximity to transportation; and avoidance of impacts on productive farmland.
- The 2007 General Plan establishes a voluntary AHO program not found in GPU4 to create an incentive for higher density, affordable housing at particular locations in the County. Three specific AHO districts are identified (Mid-Carmel Valley, Highway 68/Monterey Peninsula Airport, and Reservation Road/Highway 68), and the Community Areas and Rural Centers would be considered AHOs until adoption of their community plans and Infrastructure and Financing Studies. Within an AHO, the residential density would be from 5 to 30 units per acre, with a minimum average of at least 10 units per acre. The 2007 General Plan would require the infrastructure necessary to serve the AHOs to be installed concurrent with development of the affordable housing project.
- The 2007 General Plan would require the Capital Improvement and Financing Plan to be adopted within 18 months of approval of the General Plan.
- Both the 2007 General Plan and GPU4 require the construction of road improvements on impacted roads concurrently with development. The 2007 General Plan would exempt the first single-family residence, non-habitable accessory structure, second unit, and non-discretionary commercial uses from this requirement.
- The 2007 General Plan would prohibit development on slopes greater than 30%, with limited exceptions. Rather than a grading permit for agricultural conversion on slopes exceeding 25%, as in GPU4, the 2007 General Plan would require the County to develop an Agricultural Permit process. The 2007 General Plan sets out a list of criteria (i.e., water quality and supply, biological resources, cultural resources, erosion control, drainage, and flood hazards) that would be weighed to establish whether the agricultural permit might be ministerial.
- The 2007 General Plan would specify that well-defined buffer areas must be provided as partial mitigation for new non-agricultural development located adjacent to important farmland. The criteria for establishing buffers are essentially the same as proposed under GPU4. However, where GPU4

presumes that buffers are not meant to be permanent, the 2007 General Plan would allow permanent buffers as well.

- The 2007 General Plan expands upon GPU4's provisions for adopting a program to mitigate the loss of important farmland to development or annexation. It further provides that mitigation mechanisms will be based on a graduated value of farmland, with the greatest mitigation for prime farmland. It also includes encouragement for non-profit land trusts to assist in implementing the program through voluntary acquisition of development rights.
- The 2007 General Plan would integrate the AWCP, rather than adopting it separately. The 2007 General Plan would allow up to 10 full-scale wineries within the agricultural wine corridors, in addition to the uses identified in GPU4. These would be limited to up to five wineries on the River Road segment, two on the Metz Road segment, and three on the Jolon Road segment. Each full-scale winery would be allowed to include a tasting room and to hold events without a separate permit.

5.6.1.2 Development Comparison

Table 5-4. Comparison: GPU4 and Proposed Project (2030)

Category	GPU 4	2007 General Plan	Difference (GPU4 vs. 2007 General Plan)
Residential	16,900 dwelling units	10,015 dwelling units*	8,828 more dwelling units

*Difference in projected dwelling units is based on the difference between the estimated housing units within the unincorporated County from 2005 to 2030 for GPU3 and from 2006 to 2030 for the 2007 General Plan.

** Employment is based on the same time periods.

Sources: Bay Area Economics. 2007 *Analysis of Monterey County General Plans and Quality of Life Initiative.* February; AMBAG 2004.

5.6.2 Environmental Effects

5.6.2.1 Land Use

GPU4 would pursue a general policy of encouraging most new development to occur within the cities, including within areas of future annexation. Community Areas and Rural Centers would provide first and second preference for urban density growth within the unincorporated County. GPU4 includes policies intended to avoid land use conflicts between incorporated and unincorporated areas through coordination with the cities and the Local Agency Formation Commission. The Urban Reserve land use designation is one way in which unincorporated areas near the cities will be prepared for future annexation and urbanization. Another way is to authorize buffers between agriculture and

incompatible uses, and to encourage mitigation for the loss of important farmland through annexation or conversion.

GPU4 provides for substantial new development over the existing conditions. This is consistent with state law requiring general plans to contain sufficient growth potential to accommodate future housing needs. This growth would be a significant effect.

GPU4's policies regarding city-centered growth, providing for buffers between agricultural and future urban uses, and encouraging compact form through the Community Areas and Rural Centers, will reduce the potential for conflicts between land uses. The potential for land use conflicts is less than significant.

GPU4 contemplates more extensive urbanization than does the proposed 2007 General Plan. By way of comparison, the 2007 General Plan would not designate Community Areas at Rancho San Juan or San Lucas. San Lucas is instead designated as a Rural Center. Rancho San Juan is a Special Treatment Area. The 2007 General Plan also eliminates GPU4's Rural Center designations for Prunedale, San Benancio/Corral de Tierra, and Toro Park Estates/Serra Village. These changes would reduce the area otherwise designated as either a Community Area or Rural Center under GPU4 by approximately 1,831 acres.

Further, GPU4 would allow more extensive development to occur outside of the urbanizing nodes than the 2007 General Plan. GPU4 would allow the further subdivision of existing lots of record within the Greater Salinas, North County, and Toro Area Plans. The 2007 General Plan would limit development on properties with residential land use designations to the first single-family residence on each legal lot of record. Similarly, by creating a pass-fail DES, the 2007 General Plan would restrict development of five units or more on sites outside of the identified Community Areas, Rural Centers, and AHOs. Therefore, GPU4 has a greater latent residential development potential in these areas than does the 2007 General Plan.

In comparison, the proposed 2007 General Plan would specify that AHO districts are also preferred areas for future development. The 2007 General Plan identifies sites in Mid-Carmel Valley (approximately 13 acres), Highway 68/Monterey Peninsula Airport (approximately 85 acres), and Reservation Road/Highway 68 (approximately 31 acres) as voluntary AHO districts, as well as Community Areas prior to adoption of a community plan and Rural Centers prior to adoption of an Infrastructure and Financing Study. The 2007 General Plan sets out detailed policies for considering the acceptability of AHO projects. By virtue of their increased density, the three AHO districts may conflict with the land use expectations of existing residents of lower-density developments. They may result in localized significant effects from land use conflicts. GPU4 would also propose fewer total wineries than the 2007 General Plan.

GPU4 would have a greater effect on growth than the 2007 General Plan by virtue of allowing more expansive residential growth to occur, particularly on lands outside of the Community Areas and Rural Centers. While development

under GPU4 would result in localized land use conflicts, these would be reduced by the policies discussed above. The more expansive growth under GPU4 would be offset by the additional potential for land use conflict under the 2007 General Plan at the full-scale winery sites and the AHOs. As a result, GPU-4 would have essentially the same effect on land use conflicts as the proposed 2007 General Plan.

5.6.2.2 Agriculture Resources

Under GPU4, a net loss of approximately 5,497 acres of Important Farmland and 6,785 acres of Williamson Act lands would occur. The policies of GPU4 would focus growth into higher density Community Areas as the first tier for new development, along with policies that manage subsequent growth in Rural Centers (second tier for new development). Several of the Community Areas encompass agricultural land, including Boronda, Castroville, Chualar, and Rancho San Juan. For the most part, the Rural Community areas avoid high quality agricultural lands. GPU4 would be accompanied by the ACWP, encouraging wineries and related activities along three corridors. The ACWP would lead to the conversion of Important Farmland depending upon the location of future wineries and other facilities.

GPU4 contains numerous policies in its Agricultural Element intended to minimize the potential impacts of incompatible development on agricultural lands. These include criteria for establishing non-permanent buffers, creating tax incentives for agricultural uses, limiting subdivisions, and a commitment to establish an agricultural land mitigation program. A set of policies limiting County regulation of "routine and on-going" agricultural uses is intended to encourage the continuation and economic viability of agricultural operations. Nonetheless, due to the expected conversion of Important Farmlands and lands currently under Williamson Act contract, GPU4 would have a significant effect on agricultural resources.

In comparison, the proposed 2007 General Plan contains similar policies with regard to agriculture. Notable differences include a stronger buffer policy, a more restrictive policy governing the subdivision of agricultural lands and a more detailed program for mitigating the loss of Important Farmland. The 2007 General Plan would also limit residential development within the Greater Salinas, North County, and Toro Area Plans to the first single-family residence on each legal lot of record. Similarly, by creating a pass-fail DES, the 2007 General Plan would restrict development of five units or more on sites outside of the identified Community Areas, Rural Centers, and AHOs. These policies and development criteria would reduce the 2007 General Plan's potential to convert important agricultural lands in comparison to GPU4. In addition, by eliminating Rancho San Juan as a Community Area, the 2007 General Plan result in less conversion of agricultural lands to urban uses..

At the same time, the 2007 General Plan would authorize up to 10 full-scale wineries along the AWCP road segments. This would result in a greater potential

for the conversion of Important Farmland than GPU4, depending upon the location of future wineries and other facilities.

Overall, GPU4 would have a somewhat greater impact on agricultural resources than would the proposed 2007 General Plan.

5.6.2.3 Water Resources

GPU4 would direct most new development in the County to its existing cities. Additional development would be accommodated within the Community Areas and Rural Centers. GPU4 includes policies that would require establishment of a permit process for development on slopes in excess of 25% or that have known geologic hazards/constraints (with less restrictive provisions for conversion of previously uncultivated lands to agricultural use) in order to reduce erosion hazards. The County's existing Erosion Control Ordinance (Chapter 16.12 of the Monterey County Code) would remain in place. As a result, impacts on water quality are expected to be less than significant.

With regard to water supply, GPU4 policies require new development to demonstrate the concurrent availability of adequate public facilities and service (including water supply) before approval can be granted. GPU4 would require the County to develop a Hydrologic Resources Constraints and Hazards Database to identify important groundwater recharge areas, areas with limited groundwater, and areas unsuitable for septic tanks. GPU4 policy would prohibit approval of new development (except for the first single-family residence on an existing lot of record) without proof of availability of a "long-term, sustainable water supply, both in quality and quantity" to serve the development. GPU4 establishes criteria that may show proof of a long-term water supply.

In addition, GPU4 requires the County to develop a program as part of the Capital Implementation and Financing Plan that would eliminate overdraft of water basins. Other GPU4 policies would require that all projects be designed to maintain or increase the site's predevelopment absorption of rainfall and to recharge groundwater where appropriate, that the County use its discretionary permit authority to manage the construction of impervious surfaces in important groundwater recharge areas in order to maintain recharge capacity, and that the County encourage the use of recycled water where possible.

Outside of Community Areas, Rural Centers, and AHO districts, GPU4 commits the County to establish a Development Evaluation System to ensure that development of five or more lots or units considers infrastructure availability, among other things. No such provision is made for the first house built on existing vacant lots of record.

Despite its protective policies, development under GPU4 would have a significant impact on water resources, primarily from its contribution to the existing severe cumulative effect on limited groundwater supplies and overdraft conditions.

In comparison, the water resources-related policies of the proposed 2007 General Plan are similar to, but in some cases more restrictive than, those in GPU4. For example, the 2007 General Plan further specifies that the DES is to be a pass-fail system, thereby requiring disapproval of residential developments that cannot show sufficient infrastructure availability. In addition, based on the smaller number of Community Areas and Rural Centers, the 2007 General Plan would authorize future urban development over a smaller area than GPU4, thereby reducing the number of individual wells and making water conservation programs easier to administer. Further, the 2007 General Plan would limit development to the first residence on existing vacant lots of record within the Greater Salinas, North County, and Toro Area Plans. This would reduce the overall development up to the 2030 planning horizon in comparison to GPU4.

At the same time, while reducing water demand in those areas, the 2007 General Plan would increase potential water demand over GPU4 in the following ways. It would establish three AHOs that would offer participating landowners the opportunity to increase residential densities. This potential increase would be tempered by the fact that such projects at the Mid-Carmel Valley and Highway 68/Monterey Peninsula Airport AHOs would be restricted by the restricted water availability within the Monterey Peninsula Water Management District. The 2007 General Plan would authorize up to 10 full-scale wineries within the Agricultural Winery Corridor. These would result in an incremental increase in f water use for their operations over what would be allowed in GPU4 in the AWCP. This will be tempered by policies requiring evaluation and approval of the adequacy of all new wells (PS-3.4 and PS-3.5).

Overall, potential implementation of the 2007 General Plan to the 2030 planning horizon would have less impact on water resources than of GPU4 to 2030.

5.6.2.4 Geology, Soils, and Seismicity

GPU4 includes policies that would require establishment of a permit process for development on slopes in excess of 25% or that have known geologic hazards/constraints (with less restrictive provisions for conversion of previously uncultivated lands to agricultural use), The County's existing Erosion Control Ordinance (Chapter 16.12 of the Monterey County Code) would remain in place. Development would also be subject to other existing regulations such as the state Alquist-Priolo Seismic Zone Act, and California Building Code development standards. These would avoid significant effects from implementation of GPU4.

Compared to the 2007 General Plan, GPU4 would have greater exposure of persons and property to geologic, soil, and seismic hazards by virtue of its more extensive development. This includes the additional Community Area and four Rural Centers not included in the 2007 General Plan. Additionally, the 2007 General Plan includes restrictions on residential development within the Greater Salinas, North County, and Toro Area Plans that would reduce the potential for additional subdivisions in those areas.

Additionally, GPU4 would allow more development on steeper slopes without permits than would the 2007 General Plan, since GPU2007 includes a provision governing restricting development on slopes over 30% unless there are no other feasible alternatives. Also, the DES under GPU4 would allow approval of projects with environmental impacts whereas the "pass-fail" aspect of the DES under the 2007 General Plan would encourage denial of such projects. Therefore, potential adverse impacts on geology, soils, and seismicity from GPU4 would be greater than those of the 2007 General Plan, but would still be less than significant.

5.6.2.5 Mineral Resources

Oil production in the southern Salinas Valley and South County is the only mineral resource extraction activity that may be affected by development and land use activities contemplated by GPU4. Concentration of development in the San Ardo and Bradley Rural Communities would meet housing needs without encroaching into mineral production areas. Economic conditions and legal constraints make it highly unlikely that either GPU4 or the 2007 General Plan would result in the premature termination of oil extraction operations in these areas. GPU4 and the 2007 General Plan do not have policy differences that would differentiate their impacts on mineral resources. Therefore, GPU4 would have the same impacts on mineral resources as the 2007 General Plan.

5.6.2.6 Transportation

GPU4 provides that, with the exceptions for Community Areas and Carmel Valley,, LOS D will be the standard level of acceptable congestion within the County. GPU4 commits the County to preparing a CIFP that will address the local road improvements needed to maintain acceptable levels of service, and to adopting a County traffic impact fee addressing development in cities and the unincorporated areas. In addition, GPU4 provides that projects that would reduce traffic flow below the acceptable standard would be required to implement a phasing plan that would allow road improvements to be built concurrently with the development. This is intended to avoid a lag between new traffic generation and the installation of road improvements. The concurrency policy would not apply to the first single-family residence on a lot of record, accessory units, or non-discretionary commercial development. GPU4 commits the County to developing, in cooperation with TAMC and other agencies, a regional mitigation fee with the goal of achieving LOS D on the regional roadway system. Localized traffic congestion will be a significant effect of GPU4.

The proposed 2007 General Plan contains nearly the same transportation policies as GPU4. The following are the exceptions. The 2007 General Plan would mandate adoption of the CIFP within 18 months of the general plan's adoption and require a review of the degree to which development is approaching buildout

as governed by the individual traffic fee programs. This would reduce the potential for projects to be built without concurrent improvements. The 2007 General Plan would exempt the following types of projects from the phased concurrency requirement of GPU4: first single-family dwelling, accessory dwellings allowed under state law, and ministerial commercial development. As a practical matter, these are largely exempt under GPU4 as well because the County has limited or no discretionary permitting authority over these uses that would allow it to impose the concurrency policy.

GPU4 would propose a more extensive development pattern than the proposed 2007 General Plan. As a result, the potential adverse impacts on transportation from GPU4 would be greater than those of the 2007 General Plan.

5.6.2.7 Air Quality

GPU4 promulgates air quality policies that are consistent with the air quality objectives of the Monterey Bay Unified Air Pollution District's 2004 AQMP. Moreover, GPU4's local traffic impact fee and prohibition on occupancy of new development until all roadways operate at LOS D or better would significantly reduce idling on local roadways. This would result in a corresponding reduction in adverse air quality impacts. However, the extent of new traffic expected to be generated by the project, combined with other sources of emissions resulting from urban development and the ACWP, will result in a significant effect on air quality.

In comparison, the proposed 2007 General Plan includes the same air quality policies as GPU4. In addition to the air quality policies, however, the 2007 General Plan would require the County to prepare and adopt a Greenhouse Gas Reduction Plan within two years of adoption of the 2007 General Plan. While directing Monterey County to reduce its emissions of greenhouse gases to 1990 levels by 2020, the Greenhouse Gas Reduction Plan will likely include measures that will coincidentally reduce impacts on local air quality. These would probably include programs to reduce motor vehicle use (which would reduce the amount of tailpipe emissions) and to improve the efficiency of water use (which reduces the need to burn natural gas in water heaters). Accordingly, GPU4 may be expected to have a greater impact on air quality than the 2007 General Plan.

5.6.2.8 Noise

GPU4 includes strong policies intended to ensure that new development of sensitive receptors will not be exposed to excessive noise (i.e., noise levels exceeding County standards), including noise from roadway improvement projects. GPU4 also includes policies intended to limit noise and vibration from construction activities. However, the policies prohibit the use of masonry sound walls in rural areas. This prohibition may act to make roadway improvement noise attenuation infeasible where existing rural residences adjoin those roads.

As a result, GPU4 would be expected to have a significant effect on noise in rural areas where roads are widened to meet the LOS C congestion standard.

The proposed 2007 General Plan contains the same noise policies as GPU4. Because GPU4 provides for a more extensive development pattern, particularly with four additional Rural Centers, potential adverse noise impacts from implementation of GPU4 would be greater than those of the 2007 General Plan.

5.6.2.9 Biological Resources

The biological resources policies of GPU4 would require inventorying sensitive habitats and avoiding impacts to state and federally listed species and designated critical habitat. The CEQA process would be used to mitigate impacts from individual development projects, as such projects are proposed. GPU4 also would require preparation and implementation of a program to comprehensively mitigate the loss of critical habitat. These policies would be coordinated with the preparation of Area Plans. The current trend of conversion of grazing lands, which provide wildlife habitat, to intensive agricultural cultivation, which provides little habitat value, would continue under GPU4. All together, GPU4 would have a significant effect on biological resources.

The 2007 General Plan contains many of the the same policies as GPU4, although it would allow development over a less extensive area than GPU4. The proposed mitigation measures identified in this EIR with respect to special status species, stream set-back, kit fox mitigation, protection of woodlands and raptors would provide significantly more protection of biological resources than GPU4. Therefore, based upon the additional conversion of habitat and weaker policies protecting biological resources, GPU4 would have greater adverse impacts on biological resources than the 2007 General Plan.

5.6.2.10 Cultural Resources

GPU4 includes specific policies to inventory archaeological resources, survey in sensitive areas, and protect important representative and unique archaeological sites and features. GPU4 commits the County to adopting a uniform set of guidelines for archaeological assessment and recovery programs and consultations with Native Americans. Similar inventory, survey, and recovery policies are included to protect paleontological resources. GPU4 also contains policies to encourage the conservation of Native American cultural sites, sacred places, and burial sites, including provisions for consultation with tribal representatives. Historic resources are protected by the County's adopted Historic Preservation Plan and Historic Preservation Ordinance. As a result, impacts would be less than significant.

The proposed policies of the 2007 General Plan are identical to those in GPU4. The only differentiating impact factor is that GPU4 would allow more extensive

development. However, the policies would be sufficient to avoid significant impacts. Therefore, GPU4 would have the same potential impacts on cultural resources as the 2007 General Plan.

5.6.2.11 Public Services and Utilities

GPU4 contains a rigorous requirement for the concurrent provision of adequate public services and facilities as development occurs. This would avoid significant effects, except as noted under the water resources discussion. Outside of Community Areas and Rural Centers, GPU4 commits the County to establish a Development Evaluation System to ensure that development of five or more lots or units considers infrastructure availability, among other things. No such provision is made for the first house built on existing vacant lots of record.

The proposed 2007 General Plan has similar policies, although it further specifies that the DES is to be a pass-fail system. This will prohibit new projects that cannot meet the DES criteria, reducing the impact in comparison to GPU4. In addition, the 2007 General Plan would limit development within the Greater Salinas, North County, and Toro Area Plans to a single residence on lots of record. This would reduce the potential for additional subdivisions in those areas in comparison to GPU4 and the necessity of constructing new public facilities to serve those subdivisions. Therefore, GPU4 impacts on public services and utilities are greater to those of the 2007 General Plan.

5.6.2.12 Parks and Recreation

As with public services and utilities, development under the policies of GPU4 would place most new development in the cities and the Community Areas and Rural Centers. Development in the cities would increase the need for parks and recreation facilities in those jurisdictions. That demand would be met by the affected cities through impact fees or other financing mechanisms applied in the course of approving development projects. The same would be true for the County in the Community Areas and Rural Centers under GPU4's Adequate Public Facilities and Services standards.

GPU4 does not contain specific standards for the provision of park and recreation facilities for new development, although there is an existing ordinance requiring compliance under the Quimby Act. This may result in the overuse of other parks and a significant effect on parks and recreation.

The proposed 2007 General Plan contains the same policies as GPU4. Mitigation Measure PAR-1, which would require the County to adopt a general plan policy requiring a specific ratio of park acreage to population, would enable the County to require parks and recreation facilities as conditions of subdivision approval. Therefore, potential adverse impacts on parks and recreation from GPU4 would be slightly greater than those under the 2007 General Plan, as mitigated.

5.6.2.13 Hazards and Hazardous Materials

GPU4 contains policies that address public safety relative to seismic and geologic hazards (including inventorying and requiring geotechnical reports prior to development in areas of risk), flood hazards, hazardous materials, emergency response, and wildland fire protection (including standards for development to achieve an acceptable level of risk). GPU4 also establishes minimum service levels for emergency responders and identifies evacuation routes in case of a disaster. As a result of these policies, GPU4 would not have a significant effect in this area.

The 2007 General Plan contains the same goals and policies as GPU4. Although GPU4 has more extensive development, the additional Community Area and Rural Centers are not in areas that are particularly hazardous. Therefore, GPU4 would result in the same impacts as the 2007 General Plan.

5.6.2.14 Aesthetics, Light, and Glare

GPU4 would limit future urban growth in a manner that would preserve significant visual resource areas (agricultural fields, ridgelines, natural areas, etc.) and minimize adverse impacts from new sources of light and glare. Effective policies include restrictions on ridgeline development, encouragement of "clustered" development in rural areas, and the voluntary transfer of development rights away from areas with unique visual features. Nonetheless, GPU4 would result in major new sources of light and glare being built within the cities and the County's Community Areas, Rural Centers, and artisan wineries. These would adversely affect nearby rural and agricultural areas. GPU4 would have a significant effect on aesthetics, light, and glare.

The proposed 2007 General Plan contains the same policies as GPU4 on this impact issue. By reducing the number of Community Areas and Rural Centers, the 2007 General Plan reduces the development potential proposed in GPU4.as, thereby somewhat reducing aesthetics, light, and glare impacts that would have otherwise occurred under GPU4. The AHO areas identified in the 2007 General Plan are located near existing urban areas and would have minimal additions to existing levels of light and glare.

At the same time, the 2007 General Plan would authorize up to 10 full-scale wineries (in addition to the 40 artisan wineries allowed under GPU4) along the River Road, Metz Road, and Jolon Road segments. These would introduce new sources of light and glare to these rural areas.

Based on the above discussion, the impacts of GPU4 would be somewhat greater with respect to light and glare than for the proposed 2007 General Plan.

5.6.2.15 Population and Housing

GPU4 and the proposed 2007 General Plan are local land use plans that prescribe where and at what intensity future growth will occur. Pursuant to state law, a general plan must provide for sufficient new development to accommodate projected housing demand. As such, both plans would induce future growth by accommodating future development. Neither plan is expected to result in the displacement of substantial numbers of dwelling units or persons.

As a result of its additional Community Area, Rural Centers, and allowance of residential subdivisions within the Greater Salinas, North County, and Toro Area Plans, GPU4 would have a somewhat greater growth-inducing impact on population and housing to those would the 2007 General Plan.

5.6.3 Conclusion

The GPU4 Alternative is similar to the proposed 2007 General Plan. GPU4 would have a greater impact on agriculture resources; water resources, geology, soils, and seismicity; transportation; air quality; noise; biological resources; public services and utilities; parks and recreation; ; light and glare and population and housing. GPU4 would have similar impacts to the proposed 2007 General Plan with respect to land use; water mineral resources; hazardous material. and cultural resources. It would have not any impacts that are less than those expected to result from the proposed 2007 General Plan.

The GPU4 Alternative meets all of the objectives of the 2007 General Plan.

5.7 Transit-Oriented Development Alternative

5.7.1 Description

The Transit-Oriented Development (TOD) Alternative focuses new development along existing and future transportation corridors. These corridors would be served by high-capacity and high-frequency public transportation. Public transportation in this alternative combines fixed-route bus service with rail, express bus service and Bus Rapid Transit (BRT). Development in these corridors would be concentrated at “nodes” adjoining public transportation stations. Under this alternative, new development outside the Community Areas, Rural Centers, and AHOs would be restricted to the first single-family home on existing legal lots of record in the North County, Greater Monterey Peninsula (along the Route 68 corridor only) Greater Salinas, and Toro (along the Route 68 corridor) Area Plans. The Bradley and Lockwood Rural Centers would be considered third tier development priority areas. They would not be developed until the transit system is funded and built to King City. Otherwise, this alternative would share the same policies as the 2007 General Plan.

For this alternative, the County would develop a Transfer of Development Rights (TDR) program, expanding on that described in Policy LU-1.8. The TDR program would specifically provide for the transfer of development credits from , North County, Greater Monterey Peninsula (along the Route 68 corridor only) Greater Salinas, and Toro (Route 68 corridor) Area Plans to the TODs as receiving areas. This would include TODs in any of the Community Areas and Rural Centers (with the aforementioned limitation on the Bradley and Lockwood Rural Centers).

TOD is defined as "moderate to high-density development, located within an easy walk of a major transit stop (typically up to ½-mile), generally with a mix of residential, employment, and shopping opportunities designed for pedestrians without excluding the auto. TOD can be new construction or the redevelopment of one or more buildings whose design and orientation facilitate transit use," according to the Statewide Transit-Oriented Development Study – Factors for Success in California (California Department of Transportation, 2002). Studies have demonstrated that TOD increases transit ridership and reduces Vehicle Miles of Travel (VMT) when compared to similar intensities of development in areas that are poorly served by transit.

The public transportation serving the TODs would be a combination of fixed-route bus systems, express bus, and BRT systems connecting major activity centers, and regional and intercity rail systems connecting major activity centers within the region and adjacent regions. The TOD Alternative envisions a tiered public transportation system, as follows:

- Tier 1 – local-serving public transportation comprised of fixed-route bus systems primarily serving intra-city and inter-city travel, and rural communities. This tier forms the finest grained public transportation network and is similar to the existing Monterey-Salinas Transit (MST) system. This tier also includes demand responsive service (e.g., paratransit), and local shuttles operated by private or public employers.
- Tier 2 – sub-regional and regional-serving public transportation comprised of express bus and BRT serving key corridors within cities that will connect cities, community areas, and rural communities to major activity and employment centers. This tier of public transportation travels longer distances and relies on high frequency and high quality (e.g., newer comfortable coaches, stations with amenities) of service resulting in a system that is competitive with the automobile. Express buses and BRT lines would operate within High-Occupancy Vehicle (HOV) lanes or exclusive transitways within the public right-of-way. Stops and stations are more widely spaced than in Tier 1 in order to minimize delay. This tier would tie into a system of Park and Ride facilities throughout the County.
- Tier 3 – inter-regional-serving public transportation comprised of express bus, BRT, regional commuter rail, and intercity light rail transit connecting major activity centers in Monterey County to centers in adjacent counties including Santa Cruz, San Benito and Santa Clara Counties. Express bus and BRT lines would operate within High-Occupancy Vehicle (HOV) lanes or exclusive transitways. Rail service would include the following projects

currently being planned or studied by the Transit Agency of Monterey County (TAMC):

- Extension of Caltrain service from Gilroy to Monterey County, including stops in Pajaro, Castroville, and Salinas.
- The Monterey Branch line between Castroville and Monterey connecting the planned Caltrain service in Castroville to the Monterey Peninsula, with stations in Monterey, Seaside, Sand City, Marina/CSUMB, and Castroville. The right-of-way may accommodate express bus service, BRT, or light rail.
- Passenger rail service on the Santa Cruz Branch line extending from Pajaro/Watsonville to Davenport (Santa Cruz County), which would connect to the Monterey County intercity rail service described above.

The three tiers would be linked with inter-modal transit centers at key public transportation junctions. The areas adjoining the inter-modal transit centers would be developed as nodes of transit-oriented development containing a mix of housing types, commercial uses providing everyday services, and jobs.

Primary transit corridors include:

- Route 101 from King City to Salinas (fixed-route and express bus service to the Salinas inter-modal transit center with connection to a series of Park and Ride transit centers along the Route 101 corridor)
- Route 101 from Salinas to San Jose (express bus service with connection to a series of Park and Ride transit centers along the Route 101 corridor)
- Route 68 from Salinas to Monterey (fixed-route, express bus, and BRT service between the Salinas inter-modal transit center and Monterey inter-modal transit center)
- Route 156 from Prunedale to Castroville and Monterey (fixed-route and express bus service with connections to CalTrain and inter-city rail in Castroville)
- Route 1 from Marina to Monterey (express bus and BRT with connections to CalTrain and inter-city rail in Castroville, Marina, and Monterey)
- Route 1 between Watsonville/Pajaro and Monterey (express bus and BRT with connections to Caltrain and inter-city rail along the Route 1 corridor)

This alternative includes transit corridors on County and city roads and streets served by fixed-route bus service, express buses, and limited BRT.

Nodes of TOD would be located along primary transit corridors and centered around inter-modal transit centers and other stops and stations. A target of 30% of growth in unincorporated Monterey County would occur in these nodes (approximately ½-mile radii around transit stops). This target would require higher densities and intensities of land use than currently allowed under the 2007 General Plan. Residential densities would range from a minimum of 15-30 dwelling units per acre in urbanized areas, with at least 50 percent and not more

than 75 percent of the development within the TOD being residential. Commercial uses would require Floor Area Ratios (FARs) ranging from 1.0 to 3.0. Horizontal multi-use (e.g., multiple uses on a floor) and vertical mixed-use (e.g., different types of uses on different floors) development would be encouraged.

Primary TOD nodes would be located in the following areas, but no specific sites have been identified:

- Castroville
- Pajaro
- Former Fort Ord
- Route 68 Corridor

5.7.2 Development Comparison

A comparison of development potential between the TOD Alternative and the 2007 General Plan during the 2030 planning horizon is provided in Table 5-5. The table also identifies the target amount of residential and non-residential development that would occur within transit nodes and corridors. Implementation of the TOD Alternative is equal to the 2007 General Plan, with a shift of development intensity to transit nodes and corridors.

Table 5-5. Comparison: TOD Alternative and Proposed Project (2030)

Category	TOD Alternative	2007 General Plan	Difference (TOD vs. 2007 General Plan)
Residential	21,666 dwelling units	21,666 dwelling units	0 dwelling units
Target housing in Transit Nodes and Corridors (30%)	6,500 dwelling units		

5.7.3 Environmental Effects

5.7.3.1 Land Use

The TOD Alternative would increase densities at the selected nodes. This would decrease intensity elsewhere in the County. While the development would be consistent with the proposed 2007 General Plan, it may conflict with the existing lower-intensity land uses surrounding the nodes. The conflicts would result from increased activity, noise, and light and glare, as discussed below. Unless the TODs are located in existing urbanized areas, this would be a significant and unavoidable impact. Therefore, the TOD alternative would have greater potential impacts with respect to land use than the 2007 General Plan.

5.7.3.2 Agriculture Resources

The TOD alternative would limit future subdivision of land and development to the first single-family resident on existing lots of record within the North County, Greater Monterey Peninsula (along the Route 68 corridor only) Greater Salinas, and Toro (Route 68 corridor) Area Plans. The TDR component would focus development into the TODs. This would reduce development pressures in the unincorporated area. As a result, this alternative would have a lesser impact on agricultural resources than the 2007 General Plan.

5.7.3.3 Water Resources

The TOD Alternative would not reduce the number of potential water users since it would allow the same number of residences as the 2007 General Plan. However, it would substitute medium- to high-density development for low-density development. The higher densities would result in less area for landscaping and a corresponding reduction in water demand.

The TOD Alternative would reduce the intensity of development on existing lots of record throughout the county. That would result in a marginal reduction in water quality impacts from development, since those impacts are already well regulated by the County grading ordinance and the Central Coast RWQCB's regulations.

In sum, this alternative would have a lesser impact on water resources than the 2007 General Plan.

5.7.3.4 Geology, Soils, and Seismicity

The TOD Alternative would reduce the intensity of development on existing lots of record throughout the county. That would result in a marginal reduction in erosion impacts from development, in comparison to the 2007 General Plan, since those impacts are already well regulated by the County grading ordinance and the Central Coast RWQCB's regulations. The impacts of this alternative on geology and seismicity would be the same as the 2007 General Plan since it would result in the same level of development (although covering a smaller geographical area) and the same level of risk.

5.7.3.5 Mineral Resources

There are no differences with respect to development of mineral resources between the TOD and the 2007 General Plan, Therefore, the TOD Alternative would have the same level of impact as the 2007 General Plan.

5.7.3.6 Transportation

A primary objective of the TOD Alternative is to shift people from single occupant vehicles to alternate modes of travel or, by creating walkable mixed-use nodes, to eliminate the need to travel long distances for some trip purposes. Research indicates that TOD can generate about 50 to 75% of the traffic generated by the same amount of land use in typical suburban development patterns poorly served by transit. Conservatively using the lower end of the range, implementation of the TOD Alternative in 2030 could generate fewer daily trips than the 2007 General Plan, and an associated reduction of about 110,000 vehicles miles of travel (VMT) per day.

The TOD Alternative would result in level of service impacts to county roadways, regional roadways and the state highway system. These impacts would be the result of two conditions:

1. Traffic generated by development of allowed land uses in the TOD Alternative, including traffic generated by the TOD itself, would cause county and regional roadways to exceed the LOS D standard, but to a lesser extent than the 2007 General Plan. In addition, although a TOD generates less traffic than the same amount of conventional development, the higher intensity and density of TOD within a relatively small area can create localized traffic impacts.

2. The TOD Alternative calls for the designation of exclusive transitways and HOV lanes on county, city, and regional roadways in order to make public transportation an attractive and competitive option to the automobile. Exclusive transit facilities and HOV facilities on these roadways would utilize travel lanes normally used by automobiles, thereby, while increasing the person capacity of the facility, the transit facilities reduce their automobile capacity. This reduction in capacity would cause some roadways to exceed the LOS D standard.

The TOD Alternative would create impacts related to transportation infrastructure funding. The public transportation system envisioned in this alternative requires a substantial capital investment in transit infrastructure and fleet vehicles, as well as ongoing operations and maintenance costs. The initial capital costs may exceed the capital costs of adding conventional vehicle capacity (i.e., roadway widening), but the investments are more sustainable over a longer period of time than conventional capacity improvements. This alternative, therefore, may create a transportation funding shortfall that is greater than the shortfall associated with conventional transportation funding.

In conclusion, however, the TOD alternative would reduce traffic generation by design and therefore have significantly less impacts with respect to transportation than the 2007 General Plan or any of the other alternatives.

5.7.3.7 Air Quality

The TOD Alternative would reduce VMT throughout the county by reducing the need for short auto trips by locating residences in proximity to day to day services, and by substituting transit trips for auto trips. Where congestion is increased locally, there may be additional emissions of carbon monoxide in comparison to the 2007 General Plan. However, that impact is dependent upon levels of traffic and time at idle. Because the locations and development intensities of the TODs are not known at this time, whether these localized emissions would exceed the air district standards cannot be determined. Overall, by reducing VMT, the TOD Alternative would result in a reduction in the severity of air quality impacts from traffic in comparison to the 2007 General Plan.

5.7.3.8 Noise

This alternative would have a greater noise impact than the 2007 General Plan as a result of improved train service. Sensitive land uses located along the train corridors would be subjected to higher levels of noise as the frequency of passenger trains increases. Some mitigation of this type of transit noise is typically possible, but without information about the types of trains, their frequency, and routes, it is not possible to quantify or qualify the level of mitigation that might be possible. Similarly, without specific information about these noise generators, it would be speculative to attempt to design effective mitigation at this time.

More frequent bus service and BRT along transit corridors would produce noise impacts, particularly as buses accelerate and decelerate at stops. But, increases in bus noise would be intermittent and limited to corridors that already generate vehicle noise. Further, the TODs themselves would be high-density development nodes that would be expected to have urban levels of ambient noise. The reduction in traffic along these roads would tend to reduce the level of noise being produced by individual passenger vehicles, but that change is unlikely to be noticeable. Vehicle noise impacts would be essentially the same as those of the 2007 General Plan.

However, the combination of increased noise in compact TOD areas, and noise from transit would result in potentially greater noise impacts than the 2007 General Plan.

5.7.3.9 Biological Resources

The TOD Alternative would reduce the intensity of development on existing lots of record throughout the county. That would result in a marginal reduction in impacts on biological resources from development in comparison to the 2007 General Plan.

5.7.3.10 Cultural Resources

The TOD Alternative would concentrate development within a smaller area than would the 2007 General Plan. As a result, the potential to disturb cultural resources and result in a significant impact would be less under this alternative.

5.7.3.11 Public Services and Utilities

The TOD Alternative would concentrate most new development occurring outside of the Community Areas, Rural Centers, and AHOs around transit stations. This would make the provision of public services and utilities easier under the General Plan policies requiring services and utilities for new development, the preparation of financing plans for that development, and concurrent installation of services and utilities as development proceeds. The Pajaro Community Area is subject to flood hazard, which would be increased if densities were increased to accommodate a TOD. However, Safety Element Policy S-3.4 would require compliance with Federal Emergency Management Agency floodplain restrictions. This would ensure that development would not increase flood hazards.

The TOD Alternative would result in few impacts from the construction of public facilities. Potentially, there would also be less construction impacts from expansion of roads. There would be impacts from construction of transit hub facilities, but on balance the impacts from the TOD Alternative with respect to public services and utilities would be less than for the 2007 General Plan.

5.7.3.12 Parks and Recreation

The TOD Alternative would result in the same growth in population, demand for parks recreation facilities, and pressure on existing parks and recreation facilities as the 2007 General Plan. Assuming that the mitigation measure including a parks ratio is included in the TOD Alternative, its impacts would be the same as the 2007 General Plan.

5.7.3.12 Hazards and Hazardous Materials

The TOD Alternative would result in the same growth in population as the 2007 General Plan. The potential for exposure to hazards and hazardous materials, with the exception of wildfire hazard, would be essentially the same as the 2007 General Plan, so its impacts would also be the same.

By reducing the potential level of growth on existing rural lots of record within some areas of the county and transferring that potential to the TODs, this alternative would reduce the number of future residences that might be endangered by wildfire. By placing more dwelling units in development nodes,

the alternative would simplify the delivery of fire protection services. This would be a lesser impact than under the 2007 General Plan.

5.7.3.13 Aesthetics, Light, and Glare

The TOD Alternative would result in the same growth in population as the 2007 General Plan, but would increase the number of development nodes beyond the Community Areas, Rural Centers, and AHOs identified in the proposed General Plan. The higher density of development would result in a greater aesthetic impact where TODs are located near rural areas, and a similar increase in light and glare. Policy LU-1.13 of the 2007 General Plan requiring lighting to be unobtrusive would be more effectively applied under the TOD Alternative because it would act to limit light from a limited number of discrete locations, rather than from more intensive development across existing lots of record under the 2007 General Plan. The overall impact would be the same as the 2007 General Plan.

5.7.3.14 Population and Housing

The TOD Alternative would result in the same net growth in population as the 2007 General Plan, but would decrease the number of development nodes by delaying development in the most southern Rural Centers. . Expanded bus and train service, as well as the introduction of BRT, would occur on existing road or rail rights of way and are not expected to result in the displacement of substantial numbers of existing residences. The protections for displaced residents that are discussed above for the 2007 General Plan would similarly apply to the alternative. Therefore, its impacts would be the same as the 2007 General Plan.

5.7.4 Conclusion

The TOD Alternative would further concentrate future development in the unincorporated area into discrete, higher density nodes. While some TODs may overlap the Community Areas and Rural Centers; others may be located in the cities where transit centers would be logically located. This alternative would refocus growth that might have occurred on lots of record by making TODs more attractive to future residents because of the transit improvements, further restricting subdivision in the Greater Monterey Peninsula Area and delaying development of the southernmost Rural Centers in unincorporated County.

The TOD Alternative would reduce impacts on, agricultural resources, water resources, biological resources, air quality, cultural resources, public services and utilities and wildfire hazard relative to the levels described for the 2007 General Plan. It would significantly reduce impacts with respect to traffic as compared to the 2007 General Plan and all of the other alternatives. The impacts on geology, soils and seismicity; mineral resources, parks and recreation; aesthetics, light,

and glare; and population and housing would be essentially the same as the 2007 General Plan. The TOD Alternative would result in greater impacts than the 2007 General Plan in the areas of potential land use conflicts and noise.

The TOD alternative meets all of the objectives of the 2007 General Plan.

5.8 Environmentally Superior Alternative

The qualitative environmental effects of each alternative in relation to the 2007 General Plan are summarized in Table 5-6. The TOD alternative would be the environmentally superior based on the number of reductions to 2007 General Plan impacts.

Table 5-6. Summary of 2007 General Plan Alternatives. .

Topical Area	2007 General Plan	No Project	GPU3	GPI	GPU4	TOD Alternative
Land Use	Significant	Greater	Greater	Less	Same	Greater
Agriculture Resources	Significant	Greater	Greater	Greater	Greater	Less
Water Resources	Significant	Greater	Same	Greater	Same	Less
Geology, Soils, and Seismicity	Less Than Significant	Greater	Greater	Less	Greater	Same
Mineral Resources	Less Than Significant	Same	Same	Same	Same	Same
Transportation	Significant	Greater	Greater	Less	Greater	Less
Air Quality	Significant	Greater	Greater	Less	Greater	Less
Noise	Significant	Greater	Greater	Same	Greater	Greater
Biological Resources	Significant	Greater	Same	Greater	Greater	Less
Cultural Resources	Less Than Significant	Greater	Same	Greater	Same	Less
Public Services and Utilities	Less Than Significant	Greater	Same	Same	Greater	Less
Parks and Recreation	Significant	Greater	Same	Less	Greater	Same
Hazards and Hazardous Materials	Less Than Significant	Greater	Greater	Greater	Same	Less
Aesthetics, Light, and Glare	Significant	Greater	Greater	Less	Greater	Same
Population and Housing	Significant	Same	Greater	Same	Greater	Same

Section 6
Other CEQA Required Sections

6.1 Significant Environmental Effects That Cannot Be Avoided

According to Section 15126.2(a) (b) of the State CEQA Guidelines, an EIR shall identify and focus on the significant environmental effects of the proposed project, including effects that cannot be avoided if the proposed project were implemented. Each of the preceding impact sections has identified those significant impacts that cannot be reduced below a level of significance. The significant, unavoidable impacts are summarized in Table 6-2 at the end of this chapter.

The reader is directed to the various impact sections of this EIR for a more detailed discussion of each of these significant, unavoidable impacts.

6.2 Significant Irreversible Environmental Effects

The environmental effects of the 2007 General Plan are summarized in Section 1.0 (Executive Summary) and are analyzed in detail in Section 4.0 (Impacts and Mitigation Measures) of this EIR.

As mandated by the State CEQA Guidelines Section 15127, an EIR for a general plan must address any significant irreversible environmental change that would result from implementation of that plan. Specifically, per the Guidelines (Section 15126.2[c]), such an impact would occur if:

- the project would involve a large commitment of nonrenewable resources;
- irreversible damage can result from environmental accidents associated with the project; and
- The proposed consumption of resources is not justified (e.g., the project results in the wasteful use of energy.)

Approval and implementation of actions related to the 2007 General Plan would result in an irretrievable commitment of nonrenewable resources such as energy supplies and construction-related materials. The energy resource demands would be used for construction, heating and cooling of buildings, transportation of

people and goods, heating and refrigeration, lighting, and other associated energy needs.

Environmental changes with implementation of the 2007 General Plan would occur as the physical environment is altered through continued commitments of land and construction materials to urban and rural development. There would be an irretrievable commitment of labor, capital, and materials used in construction and a permanent loss of open space. Nonrenewable resources would be committed primarily in the form of fossil fuels and would include oil, natural gas, and gasoline used to support the additional development associated with implementation of the 2007 General Plan.

The consumption of other nonrenewable or slowly renewable resources would result from the development of the 2007 General Plan. These resources would include, but not be limited to, lumber and other forest products, sand and gravel, asphalt, steel, copper, lead, and water. Because alternative energy sources such as solar, geothermal, or wind energy are not currently in widespread local use, it is unlikely that real savings in nonrenewable energy supplies (e.g., oil and gas) could be realized in the immediate future.

Development in unincorporated Monterey County as envisioned by the 2007 General Plan would result in the construction of structures, facilities, or infrastructure on lands that are currently undeveloped. Development of lands generally would result in their future and permanent commitment to urban uses.

6.3 Growth Inducement

CEQA requires a discussion of the ways in which the 2007 General Plan could be growth-inducing. State CEQA Guidelines Section 15126.2(d) identifies a project as growth-inducing if it fosters economic or population growth, or the construction of additional housing, either directly or indirectly, in the surrounding environment. New employees from commercial and industrial development and new population from residential development represent direct forms of growth. These direct forms of growth have a secondary effect of expanding the size of local markets and inducing additional economic activity in the area. Examples of development that would indirectly facilitate growth are the installation of new roadways and the construction or expansion of water delivery or treatment facilities.

A project could indirectly induce growth by removing barriers to growth, by creating a condition that attracts additional population or new economic activity, or by providing a catalyst for future unrelated growth in the area. While a project may have a potential to induce growth, it does not automatically result in growth. Growth can happen only through capital investment in new economic opportunities by the public or private sectors.

Typically, the growth-inducing potential of a project is considered significant if it fosters growth or a concentration of population in excess of the existing setting or

baseline. Growth may be induced through the provision of infrastructure or service capacity that would accommodate new development.

By law, Monterey County is required to adopt "a comprehensive, long-term general plan for the physical development of the county" (Government Code Section 65300). The general plan's housing element is required to include

> An identification and analysis of existing and projected housing needs and a statement of goals, policies, quantified objectives, financial resources, and scheduled programs for the preservation, improvement, and development of housing. The housing element shall identify adequate sites for housing, including rental housing, factory-built housing, mobile homes, and emergency shelters, and shall make adequate provision for the existing and projected needs of all economic segments of the community. (Government Code Section 65583)

On a regular basis (generally every 5 to 7 years), the Association of Monterey Bay Area Governments (AMBAG) is responsible for adopting the Regional Housing Needs Assessment or RHNA that establishes the share of projected future housing growth that the County must accommodate in its general plan. Unincorporated Monterey County's current RHNA housing share is 1,554 dwelling units for the current 2007 - 2014 housing element cycle. The current housing element is based on the prior 2000-2007 share and will be amended as necessary to account for the new allocations. A county that does not amend its housing element to reflect the RHNA share is subject to litigation (Government Code Section 65587).

6.3.1 Conclusion

In order to comply with state general plan law, in particular the housing element statute, the 2007 General Plan must provide sufficient opportunities for new residential growth to accommodate its RHNA share. Based on the definition of growth inducement, a general plan is inherently growth-inducing because it must accommodate at least projected housing demand. The 2007 General Plan and related comprehensive land use plans will provide the framework by which public officials will be guided in making decisions relative to development in Monterey County. However, it is the implementation of land use policies that will incrementally increase demands for public services, utilities, and infrastructure.

6.4 Cumulative Impacts

6.4.1 In General

Cumulative impacts result from individually minor, but collectively significant, impacts occurring over a period of time. State CEQA Guidelines Section 15130 requires that an EIR include a discussion of the potential cumulative impacts of a proposed project. Cumulative impacts are defined as two or more individual effects that, when considered together, are significant. The cumulative impact

from several projects is the change in the environment that results from the incremental impact of the development when added to other closely related past, present, and reasonably foreseeable or probable future developments.

As defined in State CEQA Guidelines Section 15355,

> …a cumulative impact consists of an impact which is created as a result of the combination of the project evaluated in the EIR together with other projects causing related impacts. An EIR may determine that a project's contribution to a significant cumulative impact will be rendered less than cumulatively considerable and thus is not significant. A project's contribution is less than cumulatively considerable if the project is required to implement or fund its fair share of a mitigation measure or measures designed to alleviate the cumulative impact.
>
> The following elements are necessary to an adequate discussion of significant cumulative impacts:
>
> Either:
>
> 1. A list of past, present, and probable future projects producing related or cumulative impacts, including, if necessary, those projects outside the control of the agency, or
> 2. A summary of projections contained in an adopted general plan or related planning document, or in a prior environmental document, which has been adopted or certified, which described or evaluated regional or area wide conditions contributing to the cumulative impact. Any such planning document shall be referenced and made available to the public at a location specified by the lead agency.

The determination of a project's cumulative effects involves the identification of the following:

- direct and indirect effects of the proposed action and other projects causing related impacts;
- which resources, ecosystems, and human communities are affected; and
- Whether these effects are cumulatively significant.

State CEQA Guidelines Section 15065(c) states that a mandatory finding of significance is required if the project will make a cumulatively considerable contribution to a cumulative impact. The importance of a project's contribution must be viewed in the context of the cumulative effect. Case law has held that even a small contribution may be cumulatively considerable if the cumulative effect is particularly acute (*Communities for a Better Environment* v. *California Resources Agency* (2002) 103 Cal.App.4th 98)

Because of the broad project objectives associated with the implementation of the 2007 General Plan, the cumulative analysis presented in this EIR does not

evaluate the site-specific impacts of individual projects. Project-level analyses will be prepared by implementing agencies on a project-by-project basis.

6.4.2 Approach to this Analysis

The cumulative impact analysis in this EIR relies upon the projections approach. Unless so stated, it considers the potential for cumulative contributions at both the horizon year of the general plan in 2030 and buildout of the 2007 General Plan estimated to be in 2092. There are numerous uncertainties about the state of the environment in 2030 and 2092, as well as the protective laws and regulations that may be in effect at that time. Accordingly, the following assessment of cumulative impacts is strictly qualitative because of the infeasibility of predicting the timing, design features, and density of future projects. Many future projects will be the subject of separate environmental studies.

For the most part, the area addressed in the cumulative impact analysis is Monterey County, including its incorporated cities. There are a few notable exceptions to this general statement. The air quality analysis is based on the Monterey Bay air basin. The three-county AMBAG region is the area of analysis for transportation and population/housing since those issues have regional effects. Because biological resources analysis in general assesses cumulative impacts that naturally occur over a larger area than a single county, it is also based on a larger geographic area.

The cumulative impact analysis is based on population growth figures published by AMBAG in its 2004 regional forecast of population, housing, and employment (refer to Chapter 3, Project Description). The 2004 forecast is somewhat higher than AMBAG's recently released 2008 regional forecast. Using the 2004 forecast offers a more conservative view of growth potential. Therefore, using the 2004 AMBAG figures in this analysis would not result in understating the 2007 General Plan's potential for cumulatively considerable contributions.

Population growth and the development associated with it are the major factors contributing to direct impacts on land use, agriculture resources, water resources, transportation, air quality, noise, public services and utilities, and population and housing. In addition, growth can cause secondary impacts on these and other areas, such as biological resources. Therefore, using forecast population growth as a basis for analyzing cumulative impacts is the preferred approach when examining a large project area such as a county general plan.

The interpretation of cumulative impacts is such that, in the presence of a severe cumulative impact, a project's contribution may be considerable even if it is only more than one molecule (*Communities for a Better Environment* v. *California Resources Agency* (2002) 103 Cal.App.4th 98). This analysis errs on the side of considerable contributions. Where there is a severe cumulative impact, the conclusion is that the 2007 General Plan would make a considerable contribution if it contributes at all.

The magnitude of the 2007 General Plan's contributions to cumulative impacts is different in 2030 than at buildout in 2092. However, the 2007 General Plan would contribute to the same cumulative effects under the both the 2030 planning horizon and 2092 buildout. The following discussion notes any situations where this general rule is not the case.

6.4.2.1 Non-cumulative Impacts

In each of the following instances the 2007 General Plan's contribution does not rise to the level of being considerable.

Geology, Soils, and Seismicity

This is a site specific impact that affects individual development projects and that is adequately mitigated on an individual basis. As discussed in Chapter 4.4, Geology, Soils, and Seismicity, there are numerous state and local regulations that act to reduce geologic and seismic risks to acceptable levels. Project design and building standards avoid the aggregation of individual effects into a significant combined impact. Therefore, there would be no cumulative impact. Soil erosion is the exception to this and is discussed under water quality.

Mineral Resources

By virtue of their location along rivers and in lightly settled portions of the county, the county's mineral resources are not being impacted by overall development and will not have an impact on development.

Cultural Resources

These resources are site-specific and generally of individual value. The exception is where the resource is part of a designated historic district or landscape. In that situation, the cumulative loss of key or contributing resources would lead to eventual loss of the district's or landscape's defining characteristics. There is only one historic districts or landscapes within the lands under county jurisdiction – the town of Spreckles. Otherwise, where such districts exist within Monterey County, they are within cities. City, not county, actions would be the driving force of any potential erosion of those districts.

Spreckles is subject to the county's HR (Historic Review) overlay zone (Monterey County Code Section 21.54.010). This zoning ordinance requires a discretionary conditional use permit prior to structural alterations within the district. The conditional use permit is subject to review by the County's Historic Resources Review Board, as well as the approving authority, in order to ensure that historic integrity is preserved. Therefore, implementation of the 2007 General Plan would not contribute to the loss of those resources.

In addition, the 2007 General Plan has a number of specific policies that will avoid the loss of individual cultural resources. They include the following:

- Policy OS-6.1 provides that important representative and unique archaeological sites and features shall be identified and protected for all parcels with undisturbed natural conditions (i.e., ungraded properties) consistent with State Historic Preservation Office guidelines and definitions employed on a state-wide basis including Phase I, II, and III studies.
- Policy OS-6.2 requires that information on the location and significance of the County's archaeological resources shall be compiled and used in the environment and development review process. The County shall rely on and participate in the state-wide inventory work of the Native American Heritage Commission and the State Office of Historic Preservation. All Phase I, II, and III studies and records of Native Californian consultation shall be filed with appropriate state agencies and local tribes as well as local data source compilations maintained by the County. The County shall work with local tribes to update County GIS maps showing high, moderate and low archaeological sensitivity areas.
- Policy OS-6.3 provides that mew development proposed within moderate or high sensitivity zones, or within 150 feet of a known recorded archaeological and/or cultural site, shall complete a Phase I survey including use of the regional State Office of Historic Preservation Clearinghouse or the Native American Heritage Commission's list of sacred and traditional sites.
- Policy OS-6.5 requires the county to establish policies and procedures that encourage development to avoid impacts to sensitive archaeological sites including:
  - designing or clustering development to avoid archaeological site deposits, historic sites and resources, and Native Californian cultural sites;
  - dedicating permanent conservation easements shall be required where subdivisions and other developments can be planned to provide for such protective easements.
- Policy OS-6.6 requires the county to adopt a uniform set of guidelines to define Phase I, II, and III significance assessment and data recovery programs. Similar guidelines will be created to set standards for requirements for consultation with Native Californian descendents to determine procedures for determining the presence or absence of sacred or traditional sites. These guidelines will address monitoring requirements and participation in cultural resource data recovery programs.

In addition, Monterey County Code Section 21.66.050 establishes Standards for Archeological Resource Areas that require preparation of an archeological resource report prior to development, avoidance of known resources when feasible, and implementation of a mitigation plan when avoidance is not feasible. The mitigation plan must include preservation measures. Further, the existing provisions of CEQA protect sites from adverse impacts.

Public Services and Utilities

With the exception of solid waste capacity, these facilities serve particular areas and impacts to one are individual, not cumulative. The provisions of the 2007 General Plan requiring concurrent provision of services to new development (Policies PS-1.1 [Adequate Public Facility and Services (APFS) requirements] through PS-1.6 [Only those developments that have or can provide adequate concurrent public services and facilities shall be approved]) avoid the potential for cumulative impacts. As discussed in Chapter 4.11, Public Services and Utilities, these facilities will have individual construction and operational impacts. They are not, however, expected to be significant. School impacts are not considered significant provided that school impact fees are paid in accordance with Government Code Section 65995. Solid waste is discussed in the following section.

Parks and Recreation

As discussed in Chapter 4.12, Parks and Recreation, the county's supply of parks and recreation facilities far exceeds its target ratio of 3 acres per 1,000 residents. Development under the 2007 General Plan would not exceed that ratio and therefore, would not result in a cumulative effect on parks and recreation.

Hazards and Hazardous Materials

These impacts, with the exception of wildfire hazard, are project- and site-specific and generally of individual concern. The existing provisions of CEQA protect developments from adverse impacts. In addition, as discussed in Chapter 4.13, Hazards and Hazardous Materials, federal, state, and local laws and regulations protect against accidental exposure. Where exposure occasionally occurs, it is individual, not cumulative. Wildfire hazard is discussed in the following section,

6.4.3 2007 General Plan Cumulative Impacts

6.4.3.1 Land Use

There is no cumulative impact on land use, based on the thresholds identified in Chapter 4.1, Land Use. The 2007 General Plan is written to accommodate existing development trends and would not physically divide communities. As discussed in Chapter 4.1, Land Use, instead the 2007 General Plan would center future urban development in existing cities and in Community Areas, Rural Centers, and AHOs where some level of urbanization already exists. Nor would the 2007 General Plan conflict with land use plans. The 2007 General Plan accommodates the existing HCPs in the county. HCPs and NCCPs operate separately from the general plan and future resource conservation plans would be project specific and not conflict with the 2007 General Plan's land uses. Policies BIO-1.2 (Salinas Valley Conservation Plan for kit fox) and BIO-1.5 (Prepare Comprehensive County Natural Communities Conservation Plan by 2030) will

ensure that HCP and NCCP activities are coordinated with land use planning in the future.

Therefore, the project would not make a considerable contribution to a cumulative land use impact.

6.4.3.2 Agriculture Resources

Impact CUM-1 Agricultural Resources.
As discussed in Section 4.2, Agricultural Resources, the Department of Conservation's Farmland Mapping and Monitoring Program has documented a steady trend of loss of prime farmland to other uses statewide. Therefore, loss of farmland is a significant cumulative impact in California. In Monterey County, farmland will be converted to urban uses over time, particularly with the expansion of cities in the Salinas Valley. County land use regulations will limit the loss of farmland on the coastal plain, with the exception of lands within the Castroville Community Area. Development and land use activities under the 2007 General Plan would contribute to the cumulative conversion of Important Farmland to nonagricultural uses illustrated by the Farmland Mapping and Monitoring Program's data.

Implementation of 2007 General Plan goals and policies would partially reduce the impacts resulting from conversion of agricultural lands to urban uses by fostering continued agricultural production through policies such as the AWCP, and through specific policies including the following:

- Policy AG-1.1: prohibits activities that would conflict with on-going agricultural activities.
- Policy AG-1.2: requires buffers adjoining new non-agricultural uses.
- Policy AG-1.3: limits subdivisions in agricultural areas to those that would not conflict with agricultural uses.
- Policy AG-1.12: requires the county to develop a mitigation program with the cities.
- Policies AG-3.1- 3.3: authorize the partial exemption of routine and ongoing agricultural use from county regulations.

Further, the identified Community Areas and Rural Centers to which growth is channeled are mostly located on less productive lands. As discussed under the GPI Alternative in Chapter 5, Alternatives, the housing element mandates under California Planning Law require cities and counties to accommodate future housing need based on growth projections and make infeasible any mitigation or alternative that would prohibit all farmland conversion.

Past trends in Monterey County agriculture indicate that agricultural acreage will remain the same as current conditions or decrease slightly over time. Nonetheless, future conversion of Important Farmland, particularly in the Salinas Valley as its cities grow onto adjoining farmland, remains a significant

unavoidable cumulative impact. While the policies of the 2007 General Plan reduce the potential for additional contributions to this impact from county actions, they will not eliminate losses. Accordingly, the 2007 General Plan will make a considerable contribution to this impact.

6.4.3.3 Water Resources

Water Quality

Impact CUM-2. Surface Water Quality
Activities within the county and cities can affect surface water quality by releasing contaminants through point sources or through stormwater runoff. As discussed in the Project Description, AMBAG has projected continued growth throughout the region, including Monterey County, its cities, and those parts of Santa Cruz County that drain into the Pajaro River and its groundwater basin. The growth of the cities and those county areas identified for urbanization would increase the potential for new point sources, expanded point sources (such as wastewater treatment plants), and urban runoff. Rural and agricultural activities can similarly contribute contaminants from runoff. As discussed in Section 4.3, Water Resources, the SWRCB has listed numerous waterways within the county as "impaired waterways" under Section 303(d) of the Clean Water Act. Discharges to impaired waterways are regulated under the Central Coast RWQCB's Basin Plan, which includes TMDLs for the impaired waterways. Over time, the Central Coast RWQCB will adopt TMDLs for all impaired waterways in the County. In turn, county and city regulations will be required to limit discharges to the limits set by the TMDLs.

The RWQCB's conditional agricultural waiver program is preventing sediment-laced runoff from agricultural lands. These regulations are or will be in addition to the County's existing grading, slope development, and erosion control ordinances. Further, the 2007 General Plan will impose additional requirements on development that will reduce the release of contaminants to surface waters, including the following:

- Policies OS-3.5 and -3.6: require slope development regulations to be adopted.
- Policy S-3.8: requires the county to provide public education/outreach and technical assistance programs on erosion and sediment control.
- Policy OS-3.9: will establish a program that will address the potential cumulative hydrologic impacts of the conversion of hillside rangeland areas to cultivated croplands.
- Policy OS-5.7, as well as state and County regulation of timber harvesting will also limit potential discharges to streams from forestry activities.

These state and local regulations will mitigate the 2007 General Plan's impact to surface water quality and therefore, the 2007 General Plan's contribution will not be cumulatively considerable.

Impact CUM-3. Groundwater Quality

Most groundwater supplies and demand originate and exist within the county. The major exception is the Pajaro groundwater basin, which Santa Cruz County and the city of Watsonville share with portions of northern Monterey County. The analysis in Chapter 4.3, Water Resources, considers groundwater supplies in each of the county's groundwater basins (including the Pajaro basin, taking into account the influence of the Santa Cruz county jurisdictions) taking into account the demands of incorporated areas as well as the unincorporated county. Accordingly, this cumulative analysis reflects the entire groundwater basin.

As discussed in Chapter 4.3, Water Resources, a number of Monterey County's groundwater basins have high levels of salt (from seawater intrusion into the aquifer) and other contaminants. Chapter 4.3, Water Resources, describes the numerous projects currently underway or planned (i.e., SVWP, CSIP, Watsonville Water Recycling Project, etc.) that are addressing the issue of seawater intrusion. In addition, the following 2007 General Plan policies would limit groundwater overdraft and minimize resultant seawater intrusion:

- Policy PS-2.6: would establish a Hydrologic Resources Constraints and Hazards Database that would help the county track problem areas.
- Policy PS-3.3: will require the county to develop and apply specific criteria for proof of a long term sustainable water supply for new residential or commercial subdivisions, including water quality, effects on wells in the immediate vicinity, existing groundwater conditions, cumulative impacts and planned growth in the area, and other factors.
- Policy PS-3.6: would restrict the drilling or operation of any new wells in known areas of saltwater intrusion as identified by Monterey County Water Resource Agency until such time as a program has been approved and funded which will minimize or avoid expansion of salt water intrusion into useable groundwater supplies in that area.

Nitrates and other groundwater contaminants enter the aquifers from septic systems, municipal wastewater treatment systems, urban runoff, and routine agricultural practices. Regulations promulgated by the Central Coast RWQCB under the NPDES program limit contamination from the first three sources. The RWQCB's conditional agricultural waiver program limits agricultural runoff as a source. Routine fertilizer use, however, remains a contributor. As discussed earlier, agricultural use is expected to remain the same or decline slightly from existing conditions. As a result, routine fertilizer use is not expected to increase with implementation of the 2007 General Plan. The 2007 General Plan does not contain any explicit policies on the topic of groundwater contaminants other than those identified above for water quality.

While existing regulations and the implementation of the 2007 General Plan policies would reduce impacts to groundwater quality, they would not completely eliminate contributions from new development under the Plan. Therefore, implementation of the 2007 General Plan would result in a cumulatively considerable contribution to the existing cumulative impact of groundwater quality.

The following proposed mitigation measures will also reduce impacts on groundwater quality:

> **Mitigation Measure WR-1: Support a Regional Solution for the Monterey Peninsula in addition to the Coastal Water Project. This will require cooperation on a long-term, regional solution to groundwater overdraft and other issues. That, in turn, will reduce seawater intrusion.**
>
> **Mitigation Measure WR-2: Initiate Planning for additional Supplies to the Salinas Valley. This will begin the task of bringing long-term water supplies to the Salinas Valley over the buildout 2092 time frame. This would have reducing seawater intrusion and groundwater overdraft among its objectives.**

Mitigation Measures WR-1 and WR-2 hold promise for a long-term solution to the related problems of overdraft and seawater intrusion. Their implementation would reduce, but not eliminate the contribution of 2007 General Plan implementation.

Water Supply

Impact CUM-4. Water Supply
This examines the impacts of the 2007 General Plan on water demand and supply, and the potential to adversely affect groundwater levels. Chapter 4.3, Water Resources, describes the various agency plans that lay out the available water storage, ongoing and future water demand, and existing overdraft conditions within Monterey County, its cities, and the adjoining jurisdictions in the Pajaro Valley. The discussion in Chapter 4.3 considers water supplies by groundwater basin and sub-basin, thereby including affected contributing cities and counties. In the Pajaro basin, this includes Watsonville and a portion of Santa Cruz County.

Cumulative impacts would occur through the existing and projected gaps between water supplies and demand. As discussed in Chapter 4.3, a number of projects are underway or planned that would expand water supplies and reduce overdraft (i.e., Coastal Water Project, CSIP, Watsonville Water Recycling Project, SVWP, etc.). Nonetheless, there will be insufficient supply to support development to the 2030 planning horizon and beyond on the Monterey Peninsula and in the Pajaro Valley. Long term supply in the Salinas Valley will depend upon a future phase of the SVWP to secure additional water from the Salinas River. Mitigation measures WR-1 and WR-2 described above would bring the county together with other agencies to pursue long-term solutions to water supply and maintenance of groundwater levels.

In addition, the 2007 General Plan contains the following policies that would help match water demand to supply and reduce overdraft.

- Policy OS-10.10 would require consideration of sustainable land use strategies (including water conservation and greywater reuse) in the design of future development within Community Areas and Rural Centers.
- Policy PS-2.6 would establish a Hydrologic Resources Constraints and Hazards Database that would help the county to track problem areas.
- Policies PS-3.1 to -3.3 would require proof of availability of a sustainable water supply before new development is allowed. This would slow the growth of demand in the county.
- Policy PS-3.9 would require a program to eliminate overdraft of water basins be developed as part of the Capital Implementation and Financing Plan (CIFP).
- Policies PS-3.13 and -3.14 would establish an ordinance identifying conservation measures to reduce potable water demand and would maximize the use of recycled water as a potable water offset and in agricultural areas where allowed by state regulations.

Nonetheless, future growth planned in the cities (including Watsonville in Santa Cruz County), Community Areas, Rural Centers, Affordable Housing Overlay zones, and wineries will exacerbate the existing water supply and overdraft problems. By 2092 and full buildout, the constraints on the water supply will be even more acute. These policies and mitigation measures WR-1 and WR-2 described above will reduce, but cannot be certain of solving the long-term water supply shortage. Buildout of the 2007 General Plan would make a cumulatively considerable contribution to this cumulative impact.

Impact CUM-5. Indirect Impacts of Water Supply Projects
There are a number of existing and planned projects that are intended to increase water supplies and/or reduce overdraft conditions. These projects would reasonably be expected to have significant environmental impacts. Reasonably foreseeable water supply projects include the desalination plants of the Coastal Water Project and Pajaro/Sunny Mesa Community Services District proposed at Moss Landing. Both of these projects are in the planning stage and no draft EIR has been released for either of them. The SVWP is partially in operation and its impacts are disclosed in and being mitigated under the EIR/EIS prepared for that project by the MCWRA. The CSIP is in operation, as is the Watsonville Water Recycling Plant. Water distribution systems are being installed for both the SVWP and the water from the Watsonville plant. The water distribution pipelines will be installed in agricultural areas and are not expected to have significant effects.

Project impacts would include construction-related air quality emissions, traffic increases, and sediment release; brine disposal during operation (desalination plants); biological impacts (desalination plants); and increased electrical demand (desalination plants). A number of safeguards exist that will act to reduce most of these indirect impacts below the level of significance. For example:

- The Monterey Bay Unified APCD requires construction to follow BMPs to reduce dust. If the construction would exceed the APCD's threshold,

additional measures will be required to ensure that dust does not exceed the threshold. This will avoid contributing to the cumulative impact.

- The EIRs prepared for the desalination plants are expected to require that construction equipment use alternative fuels or other means to reduce their emissions of ozone precursors. Although, depending upon the intensity of construction, there is the potential for a significant impact on air quality from ozone precursors.
- County erosion control regulations and the requirements of the Central Coast RWQCB will prohibit the release of sediment beyond project boundaries. This would avoid contributing to surface water quality impacts.
- Brine from the desalination process is expected to be diluted with cooling water from the Moss Landing power plant and discharged into Monterey Bay. The Central Coast RWQCB will require that brine disposal meet regulatory limits to avoid conflict with the CWA. Therefore, this is not expected to make a considerable contribution to water quality impacts.

Biological impacts, particularly from the release of brine into the Monterey Bay National Marine Sanctuary, are unknown at this point, but would potentially be cumulatively considerable. The effectiveness of any future mitigation measures developed in the EIRs to be prepared for the desalination projects is unknown.

Desalination plants typically are large consumers of electrical energy. The power consumption of the proposed plants would potentially result in a significant effect on electrical supply. This would be analyzed in the EIRs to be prepared for the plants.

Taking a conservative view, the indirect impacts of the water supply projects to be built would potentially make considerable contributions to air quality, biological, and electrical energy use.

6.4.3.4 Transportation

Impact CUM-6. Transportation
Development anticipated by the 2007 General Plan and city growth cumulatively would generate additional traffic volumes that would worsen existing deficient performance conditions on Monterey County roadways. The cumulative contribution of the 2007 General Plan to traffic conditions is analyzed and disclosed in Chapter 4.6, Transportation, and therefore is not repeated here.

6.4.3.5 Air Quality

Impact CUM-7. Air Quality
The Monterey Bay Unified APCD's Air Quality Management Plan (AQMP) establishes the projections of air quality that would result from development within this air basin. The North Central Coast Air Basin is in attainment for all criteria pollutants except ozone (state standard). The significance thresholds set out in the Monterey Bay Unified APCD's CEQA guide are based on the AQMP

and what would be the limits of allowable emissions that would stay within state and federal attainment requirements. The thresholds are essentially indicators of a project's individual and cumulative impacts.

The 2007 General Plan is generally consistent with the objectives of the North Central Coast Air Basin 2008 AQMP. However, vehicle traffic associated with growth under the 2007 General Plan and winery development under the General Plan's AWCP would exceed thresholds for ozone precursors. Policy C-1.2 of the 2007 General Plan requires adoption of a comprehensive Capital Improvement and Facilities Plan that will identify road improvements needed to reduce congestion and supports use of County traffic impact fee to fund related transportation projects. This ultimately would reduce idling and have a corresponding reduction in mobile-source air quality emissions. However, this will not avoid contributions of ozone precursors along roads that will suffer increased congestion as a result of the 2007 General Plan and city growth, nor would it reduce vehicle miles travelled. Further mitigation is infeasible, as discussed in Chapter 4.6, Transportation.

The 50 wineries proposed under the AWCP component of the 2007 General Plan would together emit VOCs in excess of the individual daily limit of 137 pounds established by the AQMP. As discussed in Chapter 4.7, Air Quality, there is no feasible mitigation for winery VOCs.

Therefore, implementation to the 2030 horizon and buildout of the 2007 General Plan in 2092 would make a considerable contribution to the cumulative impact on air quality.

There is also the reasonable possibility that, at the project level, there may be future individual developments whose construction emissions will exceed the APCD's standards. Such cases are rare in that large projects are practically always subject to discretionary permits that require CEQA review. As part of the CEQA process, future mitigation measures would be developed in cooperation with the Monterey Bay Unified APCD to bring construction emissions below the APCD's standards. This is unlikely to contribute to the cumulative effect on air quality.

Further, odiferous future projects such as composting yards or confined animal facilities that are not proposed as part of the 2007 General Plan, but that would be allowable under its provisions, could be installed. If these are clustered in one or more areas of the county, they will have cumulative effects on local air quality. That these uses might occur under the General Plan establish the possibility of additional considerable contributions at buildout of the 2007 General Plan.

6.4.3.6 Noise

Impact CUM-8. Noise
The EIR does not identify any significant direct noise impacts that would result from implementation of the 2007 General Plan at either the 2030 planning horizon or 2092 buildout. A cumulative noise impact exists when the applicable

noise standard is exceeded by 1 dbA or more. Although a 1 dbA change is unnoticeable, it contributes measurably to a significant effect.

Overall traffic volumes across the county are forecast to be about 45% greater than volumes under 2030 conditions. This generally corresponds to a 1 to 2 dB increase in traffic noise. Table 4.8-3 (Traffic Noise Modeling Results) in Chapter 4.8, Noise, illustrates that there will be cumulative significant noise impacts along a number of road segments. The column entitled "2030 Cumulative with Project minus No Project" and "Buildout minus 2030 Cumulative with Project"reflect those places where the county noise standard is forecast to be exceeded by 1 dbA or more. Keep in mind that because traffic is not limited to residents of the unincorporated county, not all of the cumulative impacts along these roads are attributable to the 2007 General Plan. These results are summarized in Table 6-1 below.

Table 6-1. Cumulative Noise Impacts

Segment	Existing Ldn	2030 Cumulative (with Project) Ldn	2030 Cumulative with Project minus No Project	Buildout minus 2030 Cumulative with Project
Espinosa Rd to E Boronda Rd	74	76	1	0
Chualar Rd to Old Stage Rd	72	75	0	2
SR-183 to SR-156	69	71	2	0
Del Monte Blvd to Imjin Pkwy	75	75	0	2
17 Mile Dr to Skyline Forest Dr	67	67	0	1
Canyon del Rey Blvd to Bit Rd	63	64	0	1
Spreckels Blvd to E Blanco Rd	67	68	-1	3
County Road G-15 to Stonewall Canyon Rd	53	54	0	3
Castroville Blvd to US-101	70	70	0	1
Cooper Rd to S Davis Rd	67	70	0	1
US-101 to Cattlemen Rd	45	48	-1	2
Carlton Dr to SR-68	61	62	0	1
Salinas Rd to San Miguel Canyon Rd	54	58	0	1
Strawberry Rd to Castroville Blvd	63	67	2	0
US-101 to San Lucas Rd	52	55	0	2
Carmel Rancho Blvd to Rio Rd	64	65	0	1
Robinson Canyon Rd to Miramonte Rd	61	62	0	2
Las Palmas Rd to Las Palmas Pkwy	60	61	1	3
Drake Ave to Lighthouse Ave	62	65	0	2
Pacific Ave to Forest Ave	56	57	0	2
Forest Ave to David Ave	56	54	0	1
Washington St to Camino Aguajito	66	67	0	2
Abrego St to Camino Aguajito	64	65	0	1
Soledad Dr to Via Zaragoza	64	65	1	2
Playa Ave to Fremont Blvd	61	62	-1	3
N Del Monte Blvd to SR-1	59	59	-1	3
Reindollar Ave to Reservation Rd	67	68	0	2
Casa Verde Wy to SR-218	65	66	0	3
US-101 to Abbott St	65	65	0	2
San Juan Grade Rd to W Laurel Dr	65	66	0	2

Segment	Existing Ldn	2030 Cumulative (with Project) Ldn	2030 Cumulative with Project minus No Project	Buildout minus 2030 Cumulative with Project
US-101 to N Main St	60	63	0	2
Romie Ln to E Blanco Rd	62	62	0	2
Abbott St to US-101	65	65	-1	2
Davis Rd to N Main St	62	62	0	2
W Laurel Dr to SR-183	62	62	0	1
W Alisal St to SR-68	57	57	0	3
SH 101 to Salinas City Line	67	68	0	2
SR-183 to Commercial Pkwy E	60	61	0	0
Reservation Rd to Cooper Rd	68	69	0	1
Carmel Rancho Ln to Rio Rd	53	53	-1	2
Serra Ave to SR-1	58	58	0	3
Blanco Rd to Reservation Rd	65	68	-1	0
Spreckels Blvd to Abbott St	61	63	0	2
Carmel City Line to SR-1	57	57	0	2
San Juan Rd to Santa Cruz County Line	65	67	0	1
Carmel City Line to SR-1	57	58	0	2
SR-1 to Fruitland Ave	60	63	1	1
Salinas City Line to Russell Rd	57	62	0	3
SR-68 to Harkins Rd	57	60	0	1

As discussed in Chapter 4.8, Noise, there are a number of measures that can be taken to attenuate noise impacts to meet county standards. These measures would be equally useful in attenuating cumulative impacts. Noise attenuation is very specific to the circumstances of the area where noise levels are being exceeded, so identifying specific measures to avoid cumulative impacts is neither practical nor effective. The 2007 General Plan includes a number of policies that will act to reduce these increases when applied to individual projects and avoid contribution to the impact. They include, but are not limited to, the following:

- Policy S-7.1: New noise-sensitive land uses may only be allowed in areas where existing and projected noise levels (*Figures 22 A-H and 23 A-E*) are "acceptable" according to *Table S-2* ("Land Use Compatibility for Community Noise"). A Community Noise Ordinance shall be established that addresses, but is not limited to the following: (1) capacity-related roadway improvement projects; (2) construction-related noise impacts on adjacent land uses; (3) new residential land uses exposed to aircraft

operations at any airport or air base; (4) site planning and project design techniques to achieve acceptable noise levels such as: building orientation, setbacks, earthen berms, and building construction practices; (5) design elements necessary to mitigate significant adverse noise impacts on surrounding land uses; and (6) impulse noise. The use of masonry sound walls for noise control in rural areas shall be discouraged.

- S-7.2: Proposed development shall incorporate design elements necessary to minimize noise impacts on surrounding land uses and to reduce noise in indoor spaces to an acceptable level.
- S-7.4: New noise generators may be allowed in areas where projected noise levels (*Figures 22 and 23*) are "conditionally acceptable" only after a detailed analysis of the noise reduction requirements is made and needed noise mitigation features are included in project design.
- S-7.5: New noise generators should generally be discouraged in areas identified as "normally unacceptable." Where such new noise generators are permitted, mitigation to reduce both the indoor and outdoor noise levels will be required.
- S-7.6: Acoustical analysis shall be part of the environmental review process for projects when: (a) Noise sensitive receptors are proposed in areas exposed to existing or projected noise levels that are "normally unacceptable" or higher according to *Table S-2* ("Land Use Compatibility for Community Noise") or (b) Proposed noise generators are likely to produce noise levels exceeding the levels shown in the adopted Community Noise Ordinance when received at existing or planned noise-sensitive receptors.
- S-7.7: All discretionary projects which propose to use heavy construction equipment that has the potential to create vibrations that could cause structural damage to adjacent structures within 100 feet would be required to submit a pre-construction vibration study prior to the approval of a building permit. Specified measures and monitoring identified to reduce impacts would be incorporated into construction contracts. Pile driving or blasting are illustrative of the type of equipment that could be subject to this policy.

With implementation of these policies at the project level, the 2007 General Plan will not make a cumulatively considerable contribution to cumulative noise impacts.

6.4.3.7 Biological Resources

Impact CUM-9. Biological Resources
Development of natural lands, whether by urbanization, construction of single-family residences in sensitive habitats, or conversion of woodlands or grazing land to intensive agricultural use results in the loss of natural habitats and associated biological resources. Seawater intrusion may also affect special status species through change in habitat. Implementation of the 2007 General Plan will be one of the factors affecting biological resources. In addition, development of

the cities will impact these resources directly through loss of habitat, and indirectly through increased water demand and its relationship to seawater intrusion.

The state and federal Endangered Species Acts (ESAs), as well as related listings of special status species by the Department of Fish and Game and its federal counterparts, provide a projection of those species that are adversely affected by loss of habitat and other impacts resulting from development throughout their local, state or federal range. These species are identified in Chapter 4.9, Biological Resources. Resources subject to cumulative impact are: special status species; sensitive natural communities, riparian habitat and wetlands; wildlife movement corridors; and potential loss or disturbance of nesting migratory birds and raptors. The 2007 General Plan provides a projection of the cumulative impact of future development on these species, habitats, and resources.

There are a number of current laws and regulations that reduce the impacts of development on biological resources. These include the state and federal ESAs, additional regulations such as streambed alteration agreements (DFG) and wetland permitting (Corps of Engineers, Central Coast RWQCB), the county tree protection ordinance, and CEQA as it applies to individual discretionary projects. The 2007 General Plan proposes a number of policies that would reduce the impact of its implementation. These include the following:

- Policy PS-3.6 provides that the County and all applicable water management agencies will not allow the drilling or operation of any new wells in known areas of saltwater intrusion as identified by Monterey County Water Resource Agency until such time as a program has been approved and funded which will minimize or avoid expansion of salt water intrusion into useable groundwater supplies in that area.
- Policy OS-4.3 requires the protection of estuaries, salt and fresh water marshes, tide pools, wetlands, sloughs, river and stream mouth areas in accordance with state and federal laws. This would avoid impacts to special status species dependent on those habitats.
- Policy OS-5.1 promotes the conservation of critical habitat. This would reduce impacts to special status species (as otherwise defined in Section 15380 of the CEQA Guidelines) to the extent that they are covered under the Federal Endangered Species Act and critical habitat has been identified.
- Policies OS-5.3 and 5.4 encourage careful design of new development and the avoidance of State and federally listed plant and animal species and designated critical habitat for federally listed species. This would similarly reduce impacts to state and federally listed species, but not those special status species (as otherwise defined in Section 15380 of the CEQA Guidelines) that are not included on the state or federal endangered species lists.
- Policy OS-5.16 requires biological surveys and mitigation as part of project consideration. These would implement the above policies.

- Policy OS-5.17 requires the county to mitigate los of critical habitat in consultation with state and federal agencies. This would reduce impacts to special status species (as otherwise defined in Section 15380 of the CEQA Guidelines) to the extent that they are covered under the state and federal Endangered Species Acts and critical habitat has been identified.

As discussed in Chapter 4.9, Biological Resources these policies would not avoid significant effects and, by implication, cumulatively considerable contributions.

In addition, this EIR recommends the adoption of a number of mitigation measures to address the impacts of the 2007 General Plan. These include:

- BIO-1.1: Baseline Inventory of Landcover, CEQA-Defined Special Status Species Habitat, Sensitive Natural Communities, Riparian Habitat, and Wetlands in Monterey County. This would identify areas of concern so that they could be avoided in project design. That would reduce the potential for significant effects.
- BIO-1.2: Salinas Valley Conservation Plan to preserve habitat for the San Joaquin kit fox in the Salinas Valley. This would provide long-term protection for the species while authorizing development in particular areas. It would avoid cumulative contributions to impacts on this species before the 2030 planning horizon.
- BIO-1.3: Project Level Biological Survey and Avoidance, Minimization, and Compensation for Impacts to CEQA-defined Special-Status Species and Sensitive Natural communities. This would expand considerations of species beyond those formally listed under the state and federal Endangered Species Acts to approximate the list in Section 15380 of the CEQA Guidelines. This would minimize impacts, including cumulative contributions, before the 2030 planning horizon.
- BIO-1.4: By 2030, prepare an Update to the General Plan to identify expansion of existing focused growth areas and/or to identify new focused growth areas to reduce loss of natural habitat in Monterey County. This would provide similar protections to those of mitigation measure BIO-1.4.
- BIO-1.5: By 2030, prepare a Comprehensive County Natural Communities Conservation Plan (NCCP). This would provide similar protections to those of mitigation measure BIO-1.2, but for multiple species. Depending on the species included in the NCCP, this has the potential to avoid cumulative contributions for all special status species (as otherwise defined in Section 15380 of the CEQA Guidelines) in the county.
- BIO-2.1: Stream Setback Ordinance. This will protect riparian habitats and the species that depend on them.
- BIO-2.2 – Oak Woodlands Mitigation Program. This will protect this habitat and the species that depend upon it.
- BIO-2.3 – Add Considerations Regarding Riparian Habitat and Stream Flows to Criteria for Long-Term Water Supply and Well Assessment. This would

expand the types of permits requiring consideration of habitat and stream flows. This would benefit riparian-dependent and fish species.

- BIO-3.1: Project-Level Wildlife Movement Considerations. This would expand protections to species that are not listed, such as deer, but that would otherwise be affected by development by loss of movement corridors.
- BIO-3.2: Remove Vegetation During the Nonbreeding Season and Avoid Disturbance of Nesting Migratory Birds, Including Raptors, as Appropriate (generally September 16 to January 31). This would expand protections for non-listed, special status birds in keeping with the definition in Section 15380 of the CEQA Guidelines. That would avoid a cumulative contribution.

Together, these would reduce the 2007 General Plan's contribution to cumulative impacts, but in some cases these impacts would still remain considerable. As development continues toward buildout, particularly development of existing lots of record, low-intensity development will cover larger expanses of the county's jurisdiction (federal lands such as Fort Hunter Liggett and Los Padres National Forest and state parks, which provide substantial areas of habitat within the county would not be affected). Similarly, expansion of the cities, which is outside the control of Monterey County, will impact habitats adjoining urban areas. Non-discretionary activities, such as the conversion of grassland to intensive agriculture, will also continue to contribute to the larger impact on these resources. Because the extent and species coverage of the future NCCP is unknown, there is a potential for cumulative impacts on special status species not covered by the NCCP. As a result, there would be a considerable contribution to cumulatively significant biological impacts.

6.4.3.8 Public Services and Utilities

Impact Cum-10. Solid Waste
As discussed in Section 4.11, Public Services and Utilities, future growth anticipated with build out of the 2007 General Plan would exceed landfill capacity, as tracked by the California Integrated Waste Management Board, by buildout in 2092. Landfills serve both city and county dwellers and businesses.

The Integrated Waste Management Act will continue to require reduction, recycling, and reuse to reduce the amount of waste sent to landfills. Future efforts to reduce greenhouse gas emissions are likely to include regulations requiring the further reduction and recycling of solid waste, including building materials. This should reduce the wastestream requiring disposal in landfills. Nonetheless, existing landfill capacity will be exceeded by 2092. To be conservative, the long-term contribution of 2007 General Plan buildout is expected to be considerable.

Assuming that landfills will be constructed between 2008 and buildout, development of a new or expanded landfill typically results in numerous environmental impacts. Construction impacts typically include air quality emissions from dust and machinery, temporary increases in traffic, and effect on

surrounding biological resources. Landfills are typically located away from sensitive receptors, so noise impacts would be minimal during construction and operations. Operational impacts can include air quality impacts resulting from odors and the release of landfill gases, biological impacts on the area of the expansion or location, traffic impacts from trucks going to and from the landfill, water quality impacts from storm runoff or leaching, and aesthetics impacts resulting from removal of existing vegetation and landfill cover.

Existing air quality regulations and standard traffic control measures would reduce construction impacts. However, depending upon the intensity of construction, there is the potential for significant effects. Similarly, existing regulations of the Monterey Bay Unified APCD would regulate odors and the release of landfill gas such that air quality standards would not be exceeded. Similarly, the Central Coast RWQCB and the California Integrated Waste Management Board would regulate landfill operations so that no runoff escapes the site and landfill design and monitoring wells ensure that no leachate is released to either surface or groundwater. These sets of regulations would reasonably be expected to avoid a contribution to cumulative air and water quality impacts.

Biological impacts, although dependent upon the sensitivity of the area chosen for the expansion or new landfill would potentially be significant and would contribute to cumulative impacts on biological resources. Aesthetics impacts, again dependent upon the visibility of the landfill site, would potentially be significant and contributors to visual impacts.

6.4.3.9 Wildfire Hazard

Impact CUM-11. Wildfire Hazard
Portions of Monterey County, particularly west of the Salinas Valley, are highly susceptible to wildfire. The risk of wildfires is acute in areas of high fuel loading; somewhat less so in moderate fuel loaded areas. As described in Chapter 4.13, Hazards and Hazardous Materials, the 2007 General Plan and the Fort Ord Master Plan contain detailed requirements for and limitations on future development to avoid contributing to fire risk, limiting damage through provision of defensible space, and funding fire suppression services.

In the recent past, the Basin Fire and Indian Fire devastated areas around Big Sur and inland southern portions of the Salinas Valley. These are only the latest of many catastrophic wildfires originating in rugged terrain along the coast. The state parks and National Forest have suffered the brunt of the damage from these fires, primarily because populations are low and communities in the area are small. The 2007 General Plan would encourage development within several Rural Centers that would place additional residents in areas that have the potential for wildfires. In addition, development to 2092 buildout would include existing rural lots of record, some in areas of high or moderate fire hazard; placing new residents in the literal line of fire.

Chapter 4.13, Hazards and Hazardous Materials, describes the voluminous policies and requirements that will be applied to new development under the 2007 General Plan. In the interest of space, the reader is referred to that chapter. These policies, implemented well before 2030 and in place long before 2092, would greatly reduce the potential contribution of the 2007 General Plan to the risk of wildfires. However, the 2007 General Plan cannot eliminate the risk of catastrophic wildfires originating on public lands sweeping across Rural Communities and, more particularly, individual lots of record, despite the best efforts of fire fighters to slow or halt their approach. The 2007 General Plan would make a cumulatively considerable contribution to this risk.

6.4.3.10 Aesthetics, Light and Glare

Impact CUM-12. Aesthetics, Light, and Glare
Future growth in Monterey County and development in surrounding areas would result in the intensification of existing urban uses as well as conversion of open space into urban land uses and the introduction of new sources of light and glare. City growth also would have a cumulatively considerable contribution in this regard. Aesthetics impacts occur as a result of substantial changes in pleasant views. Light and glare are impacts where undeveloped or rural lands adjoin urbanized development or where new sources of light and glare are introduced into a dark environment. The county General Plan and city general plans essentially describe the factors that will change the existing landscape and result in aesthetics, light, and glare impacts. Individual projects under these county and city plans that result in the urbanization of open lands, development on ridgelines, and expansion of urban areas all contribute to the incremental loss of aesthetically pleasing views or the introduction of incompatible light and glare.

Development under the 2007 General Plan would be primarily centered on the existing cities, and the county's designated Community Areas, Rural Centers, and AHOs. For the most part, these would minimize aesthetics impacts caused by the conversion of open lands to urban development by building adjacent to existing development. Nonetheless, particularly in cities in the Salinas Valley where the surrounding land use is agricultural fields, there will be an incremental change in the visual character of the area. Also, buildout of the county's individual lots of record will result in a more expansive distribution of low-intensity development than exists today.

The 2007 General Plan has a number of policies to reduce its contribution to visual impacts. They include the following:

- Policy LU-1.10 will discourage new off-site advertising to enhance public safety and to avoid visual clutter and scenic intrusion. Off site advertising may only be considered in heavy commercial and industrial zoning districts and not abutting residential districts.
- Policy LU-1.13 provides that all exterior lighting is to be unobtrusive and constructed or located so that only the intended area is illuminated, long

range visibility is reduced of the lighting source, and off-site glare is fully controlled (based on design criteria to be developed by the county).

- Policy OS-1.3 restricts new development on ridgelines.
- Policy OS-1.7 will lead to a transfer of development rights program to direct development away from areas with unique visual or natural features.
- Policies OS-1.9 and -1.11 require the establishment of an inventory of viewsheds and encourage project design that protects those views.

Nonetheless, the slow transition of areas away from agriculture and open lands, and the expansion of the urban edge, where light and glare intrude on nearby less-developed lands; will result in a considerable contribution to the cumulative loss of landscape aesthetic quality. Because of California Planning Law requires counties and cities to provide for projected housing needs and the associated urban growth, this contribution cannot be fully avoided.

6.4.3.11 Population and Housing

Impact CUM-13. Population and Housing
The cumulative contribution of population and housing growth in Monterey County will be examined to the year 2030 planning horizon since "buildout" numbers are not available for Santa Cruz and San Benito Counties, the other counties in the AMBAG region. However, the type of contribution at buildout is not expected to differ greatly from the type of contribution in 2030 because these contributions are common to long-term growth, whether the term is 20 years or 80 years.

The AMBAG 2004 regional forecast estimates that by 2030 the total population of Monterey County (including the cities) will total 602,731 persons residing in 187,001 dwelling units. Of this, the unincorporated county would accommodate 135,375 persons (about 22% of the total) and the cities would accommodate 467,356 persons (about 78% of the total). Region-wide (Santa Cruz, Monterey, and San Benito Counties), the population is expected to grow to 991,370 persons by 2030. This would represent a 39% increase between 2000 and 2030, for an annual growth rate of 1.3 %, By comparison, the California Department of Finance currently projects that the State's annual growth rate between 2000 and 2030 will be about 1.5% (State of California, Department of Finance 2007). Growth in Monterey County and its neighboring counties is cumulatively significant. Although the 30-year annual rate of growth is projected to be less than the statewide average, the adverse changes inherent in growth here (e.g., aesthetics, water supply, traffic congestion) and the controversy over Monterey County growth indicate that it is a significant cumulative impact.

As discussed previously in Chapter 4.15, Population and Housing, the 2007 General Plan is growth-inducing by nature of its role in accommodating new housing opportunities under California Planning Law. Because California Planning Law mandates that each city and county plan for its fair share of the regional housing need and that need is based on projections of population growth, there is no feasible mitigation for the resultant increase in population and

dwelling units. Therefore, the 2007 General Plan would make a considerable contribution to this cumulative effect.

There is no cumulative impact with regard to residential displacement or housing replacement. As discussed in Chapter 4.15, Population and Housing, the 2007 General Plan would not result in substantial displacement, nor would it require substantial replacement housing as a result of displacement.

6.4.3.12 Climate Change

Impact CUM-14. Climate Change
Climate change is a global phenomenon driven by myriad individual actions, large and small, in every country. As explained in Chapter 4.16, Climate Change, no individual project within Monterey County is large enough in itself to trigger global climate change. However, most individual projects contribute to the greenhouse gas emissions that fuel climate change. Climate change is a cumulative impact. Accordingly, the climate change analysis in Chapter 4.16 is an analysis of the project's contribution to this cumulative impact. The reader is directed to that chapter and no additional discussion is needed here.

Table 6-2. Significant and Unavoidable Impact Table

Issues/Impacts	Mitigation Measures	Level of Significant after Mitigation
4.2 Agriculture Resources		
Impact AG-1: Implementation of the 2007 General Plan would result in the conversion of Important Farmland to non-agricultural use. **[Also cumulative impact]**	No feasible mitigation beyond the 2007 General Plan goals and policies is available.	2030 - Significant Unavoidable Impact. Buildout – Significant Unavoidable Impact.
Implementation of the 2007 General Plan would involve other changes in the existing environment which, due to their location or nature, would result in conversion of farmland to non-agricultural use. **[Also cumulative impact]**	No feasible mitigation beyond the 2007 General Plan goals and policies is available.	2030 - Significant Unavoidable Impact. Buildout – Significant Unavoidable Impact.
4.3 Water Resources		
Impact WR-4: Land uses and development consistent with the 2007 General Plan would exceed the capacity of existing water supplies and necessitate the acquisition of new supplies to meet expected demands. **[Also cumulative impact]**	**2030 Mitigation** **WR-1:** Support a Regional Solution for the Monterey Peninsula In Addition to the Coastal Water Project **2092 Mitigation** **WR-1:** Support a Regional Solution for the Monterey Peninsula In Addition to the Coastal Water Project **WR-2:** Initiate Planning for Additional Supplies to the Salinas Valley **BIO-2.3:** Add Considerations Regarding Riparian Habitat and Stream Flows to Criteria for Long-Term Water Supply and Well Assessment. (see Section 4.9 Biological Resources, below).	2030 - Significant Unavoidable Impact (In some portions of the County). Buildout – Significant Unavoidable Impact (In some portions of the County).
Impact WR-5: Land uses and development consistent with the 2007 General Plan would increase the demand for water storage, treatment, and conveyance facilities that could have significant secondary impacts on the environment.	The General Plan and Area Plan goals and policies will apply. Future projects will be subject to CEQA and have specific mitigation measures. As the experience with existing large-scale water supply projects shows, impacts cannot always be mitigated to a less than significant level.	2030 –Significant Unavoidable Impact. Buildout – Significant Unavoidable Impact.

Issues/Impacts	Mitigation Measures	Level of Significant after Mitigation
Impact WR-6: Land uses and development consistent with the 2007 General Plan would increase demand on groundwater supplies in some areas; the associated increased well pumping would result in the continued decline of groundwater levels and accelerated overdraft in portions of the county. **[Also cumulative impact]**	**2030 Mitigation** **WR-1:** Support a Regional Solution for the Monterey Peninsula In Addition to the Coastal Water Project **2092 Mitigation** **WR-1:** Support a Regional Solution for the Monterey Peninsula In Addition to the Coastal Water Project **WR-2:** Initiate Planning for Additional Supplies to the Salinas Valley	2030 - Significant Unavoidable Impact (In some portions of the County). Buildout – Significant Unavoidable Impact.
Impact WR-7: Land uses and development consistent with the 2007 General Plan would increase demand on groundwater supplies in areas currently experiencing or susceptible to saltwater intrusion. Increased groundwater pumping in certain coastal areas would result in increased saltwater intrusion in some areas of the county. **[Also cumulative impact]**	**2030 Mitigation** **WR-1:** Support a Regional Solution for the Monterey Peninsula In Addition to the Coastal Water Project **2092 Mitigation** **WR-1:** Support a Regional Solution for the Monterey Peninsula In Addition to the Coastal Water Project **WR-2:** Initiate Planning for Additional Supplies to the Salinas Valley	2030 - Significant Unavoidable Impact (In some portions of the County). Buildout – Significant Unavoidable Impact (In all of the County).
Impact WR-12: Land uses and development consistent with the 2007 General Plan would allow continued development in 100-year flood hazard areas.	**2092** Extent and locations of future impact are unknown; no mitigation is feasible.	Buildout – Significant Unavoidable Impact.
Impact WR-13: The placement of land uses and structures within Special Flood Hazard Areas would impede or redirect flood flows, resulting in secondary downstream flood damage, including bank failure.	**2092** Extent and locations of future impact are unknown; no mitigation is feasible.	Buildout – Significant Unavoidable Impact.
Impact WR-14: Potential failure of levees or dams would expose people and structures to inundation and result in the loss of property, increased risk, injury, or death.	**2092** Extent and locations of future impact are unknown; no mitigation is feasible.	Buildout – Significant Unavoidable Impact.
4.6 Transportation		
Impact TRAN-1B: Development of the land uses allowed under the 2007 General Plan would create traffic increases on County and Regional roadways which would cause the LOS to exceed the LOS		Less Than Significant Impact.

Issues/Impacts	Mitigation Measures	Level of Significant after Mitigation
standard, or contribute traffic to County and Regional roads that exceed the LOS standard without development.		
	TRAN-1B-a: Circulation Element Policy C-1.2 shall be amended to state: C-1.2 The standard for the acceptable level of service (LOS) is to be achieved by 2026. That LOS standard is to be achieved through the development and adoption of Capital Improvement and Financing Plans (CIFP) and implementing ordinances that: a. Define benefit areas to be included in the CIFP. Benefit areas could include Planning Areas, Community Areas, or the County as a whole. b. Identify and prioritize the improvements to be completed in the benefit areas over the life of the General Plan. c. Estimate the cost of the improvements over the life of the General Plan. d. Identify the funding sources and mechanisms for the CIFP to include, but not limited to, a Traffic Impact Fee (TIF). e. Provide an anticipated schedule for completion of the improvements. f. Coordinate with TAMC regional fee program. g. A TIF shall be implemented to ensure a funding mechanism for transportation improvements to county facilities. The TIF shall be imposed on development in cities for the improvement of major County roads in accordance with the Monterey County 2007 General Plan. The CIFP shall be reviewed every five (5) years in order to evaluate the effectiveness of meeting the LOS standard for County roads. Road segments or intersections identified to be approaching or below LOS D shall be a high priority for	Significant Unavoidable Impact.

Issues/Impacts	Mitigation Measures	Level of Significant after Mitigation
	funding. **TRAN-1B-b:** Circulation Element Policy C-1.8 shall be amended to state: C-1.8 "Development proposed in cities and surrounding jurisdictions shall be carefully reviewed to assess the proposed development's impact on the County's circulation system. The County, in consultation with TAMC and Monterey County cities, shall develop a Traffic Impact Fee that addresses impacts of development in cities and unincorporated areas on major County roads."	
Impact TRAN-1B: Development of the land uses allowed under the 2007 General Plan would create traffic increases on County and Regional roadways which would cause the LOS to exceed the LOS standard, or contribute traffic to County and Regional roads that exceed the LOS standard without development.	No mitigation is feasible.	2030 -- Significant Unavoidable Impact.
Impact TRAN 1-E: Growth in land uses allowed under the 2007 General Plan would result in inadequate emergency access.	**TRAN-1E:** Revise Safety Element S-4.27 on increasing roadway connectivity to enhance emergency access. S-4.27 The County shall continue to review the procedure for proposed development, including minor and major subdivisions, and provide for an optional pre-submittal meeting between the project applicant, planning staff, and fire officials. In addition, the County shall review Community Area and Rural Center Plans, and new development proposals for roadway connectivity that provides multiple routes for emergency response vehicles. At the time of their update, Community Area and Rural Center Plans shall identify primary and secondary response routes. Secondary response routes shall be required to accommodate through traffic and may be existing roads, or may be new roads required as part of development proposals. The emergency route and connectivity plans shall be coordinated with the appropriate Fire District.	2030 – Significant Unavoidable Impact.
Impact TRAN-2B: Development of the land uses allowed under the 2007 General Plan cumulatively with development in incorporated	No mitigation is feasible for County and Regional roadways	2030 – Cumulatively

Issues/Impacts	Mitigation Measures	Level of Significant after Mitigation
cities and in adjacent counties would create traffic increases on County and Regional roadways which would cause the LOS to exceed the LOS D standard, or contribute traffic to County and Regional roads that exceed the LOS standard without development.	outside of the CVMP. **TRAN-2B:** Revise policies in the Carmel Valley Master Plan as follows: Policy CV-2.10. The following are policies regarding improvements to specific portions of Carmel Valley Road: a) Via Petra to Robinson Canyon Road. Every effort should be made to preserve its rural character by maintaining it as a 2-lane road with paved shoulders, passing lanes and left turn channelizations at intersections where warranted. b) Robinson Canyon Road to Laureles Grade. Every effort should be made to preserve its rural character by maintaining it as a 2-lane road with paved shoulders, passing lanes and left turn channelizations at intersections where warranted. c) Carmel Valley Road/Laureles Grade. A grade separation should be constructed at this location instead of a traffic signal. The grade separation needs to be constructed in a manner that minimizes impacts to the rural character of the road. An interim improvement of an all-way stop or stop signal is allowable during the period necessary to secure funding for the grade separation. d) Laureles Grade to Ford Road. Shoulder improvements and widening should be undertaken here and extended to Pilot Road, and include left turn channelization at intersections as warranted. e) East of Esquiline Road. Shoulder improvements should be undertaken at the sharper curves. Curves should be examined for spot realignment needs. f) Laureles Grade improvements. Improvements to Laureles Grade should consist of the construction of shoulder widening, spot realignments, passing lanes and/or paved turn-outs. Heavy vehicles should be	Considerable Impact (most of county).

Issues/Impacts	Mitigation Measures	Level of Significant after Mitigation
	discouraged from using this route. Policy CV-2.12: To accommodate existing and future traffic, the following road improvements are recommended: a) Add a northbound climbing lane between Rio Road and Carmel Valley Road; b) Laureles Grade - undertake shoulder improvements, widening and spot realignment; c) Carmel Valley Road, Robinson Canyon Road to Ford Road - add left turn channelization at all intersections. Shoulder improvements should be undertaken. Policy CV-2.18 : To implement traffic standards to provide adequate streets and highways in Carmel Valley, the County shall conduct and implement the following: a) Twice yearly monitoring by Public Works (in June and October) of peak hour traffic at the following 12 locations: ▪ Carmel Valley Road - ▪ East of Holman Road ▪ Holman Road to Esquiline Road ▪ Esquiline Road to Ford Road ▪ Ford Road to Laureles Grade ▪ Laureles Grade to Robinson Canyon Road ▪ Robinson Canyon Road to Schulte Road ▪ Schulte Road to Rancho San Carlos Road ▪ Rancho San Carlos Road to Rio Road ▪ Rio Road to Carmel Rancho Boulevard ▪ Carmel Rancho Boulevard to SR1 Other Locations - ▪ Carmel Rancho Boulevard between Carmel Valley Road and Rio Road	

Issues/Impacts	Mitigation Measures	Level of Significant after Mitigation

- Rio Road between its eastern terminus and SR1

b) A yearly evaluation report (December) shall be prepared jointly by the Public Works and Planning Departments and shall evaluate the peak-hour level of service (LOS) for these 12 locations to indicate segments approaching a traffic volume which would lower levels of service below the LOS standards established below under CV 2-18(d).

c) Public hearings shall be held in January immediately following a December report in (b) above in which only 100 or less peak hour trips remain before an unacceptable level of service (as defined by CV 2-18(d)) would be reached for any of the 12 segments described above.

d) The traffic LOS standards (measured for peak hour conditions) for the CVMP Area shall be as follows:

- Signalized Intersections – LOS of "C" is the acceptable condition.
- Unsignalized Intersections – LOS of "F" or meeting of any traffic signal warrant are defined as unacceptable conditions
- Carmel Valley Road Segment Operations:
  - LOS of "C" for Segments 1, 2, 8, 9, and 10 is an acceptable condition;
  - LOS of "D" for Segments 3, 4, 5, 6, and 7 is an acceptable condition.

During review of development applications which require a discretionary permit, if traffic analysis of the proposed project indicates that the project would result in traffic conditions that would exceed the standards described above in CV 2-18(d) after the analysis takes into consideration the Carmel Valley Traffic Improvement Program to be funded by the Carmel Valley Road Traffic Mitigation Fee, then approval of the

Issues/Impacts	Mitigation Measures	Level of Significant after Mitigation
	project shall be conditioned on the prior (e.g. prior to project-generated traffic) construction of additional roadway improvements OR an Environmental Impact Report shall be prepared for the project. Such additional roadway improvements must be sufficient, when combined with the projects programmed in the Carmel Valley Traffic Improvement Program, to allow County to find that the affected roadway segments or intersections would meet the acceptable standard upon completion of the programmed plus additional improvements. This policy does not apply to the first single-family residence on a legal lot of record. Policy CV-2.19: Carmel Valley Traffic Improvement Program (CVTIP) a) The CVTIP shall include the following projects (unless a subsequent traffic analysis identifies that different projects are necessary to maintain the LOS standards in Policy CV-2.18(d): ▪ Left-turn channelization on Carmel Valley Road west of Ford Road; ▪ Shoulder widening on Carmel Valley Road between Laureles Grade and Ford Road; ▪ Paved turnouts, new signage, shoulder improvements, and spot realignments on Laureles Grade; ▪ Grade separation at Laureles Grade and Carmel Valley Road (an interim improvement of an all-way stop or stop signal is allowable during the period necessary to secure funding for the grade separation); ▪ Sight Distance Improvement at Dorris Road; ▪ Passing lanes in front of the proposed September Ranch development; ▪ Passing lanes opposite Garland Park;	

Issues/Impacts	Mitigation Measures	Level of Significant after Mitigation
	▪ Climbing Lane on Laureles Grade; ▪ Upgrade all new road improvements within Carmel Valley Road Corridor to Class 2 bike lanes; ▪ Passing lane (1/4 mile) between Schulte Road and Robinson Canyon Road; and ▪ Passing lane (1/4 mile) between Rancho San Carlos Rd and Schulte Road. b) The County shall adopt an updated fee program to fund the CVTIP. c) All projects within the CVMP area and within the "Expanded Area" that contribute to traffic within the CVMP area shall contribute fair-share traffic impact fees to fund necessary improvements identified in the CVTIP, as updated at the time of building permit issuance. d) Where conditions are projected to approach unacceptable conditions (as defined by the monitoring and standards described above under CV 2-18(d)), the CVTIP shall be updated to plan for and fund adequate improvements to maintain acceptable conditions.	
Impact TRAN-2E: Growth in land uses allowed under the 2007 General Plan, cumulatively with development in incorporated cities and adjacent counties, would result in inadequate emergency access.	No additional mitigation beyond 2007 General Plan policies and Mitigation Measure TRAN-1E (described above) is available.	2030 – Cumulatively Considerable Impact
Impact TRAN-3B: Buildout of the 2007 General Plan would increase traffic on County and Regional roadways which would cause the LOS to exceed the LOS D standard, or contribute traffic to County and Regional roads that exceed the LOS standard without development.	No additional mitigation beyond 2007 General Plan policies and Mitigation Measure TRAN-2B (described above) is feasible.	Buildout – Significant Unavoidable Impact.
Impact TRAN-3E: Buildout of the 2007 General Plan would result in inadequate emergency access.	No additional mitigation beyond 2007 General Plan policies and Mitigation Measure TRAN-1E (described above) is available.	Buildout – Significant Unavoidable Impact.

Issues/Impacts	Mitigation Measures	Level of Significant after Mitigation
Impact TRAN-4B: Buildout of the 2007 General Plan cumulatively with development in incorporated cities and in adjacent counties would create traffic increases on County and Regional roadways which would cause the LOS to exceed the LOS D standard, or contribute traffic to County and Regional roads that exceed the LOS standard without development.	No additional mitigation beyond 2007 General Plan policies and Mitigation Measure TRAN-2B (described above) is feasible.	Buildout – Significant Unavoidable Impact.
Impact TRAN-4E: Buildout of the 2007 General Plan, cumulatively with development in incorporated cities and adjacent counties, would result in inadequate emergency access.	No additional mitigation beyond 2007 General Plan policies and Mitigation Measure TRAN-1E (described above) is available.	Buildout – Significant Unavoidable Impact.
4.7 Air Quality		
Impact AQ-1: Buildout of the 2007 General Plan would conflict with applicable Air Quality Management Plans and Standards.		
Impact AQ-3: Net Change in Ozone Precursor (ROG and NOx) and Particulate Matter.	**2030 and 2092 Mitigation** **CC-2 and CC-3.** See these measures under Climate Change, below. **AQ-3:** Implement MBUAPCD Mitigation Measures for Commercial, Industrial, and Institutional Land Uses **AQ-4:** Implement MBUAPCD Mitigation Measures for Residential Land Uses **AQ-5:** Implement MBUAPCD Mitigation Measures for Alternative Fuels	2030 –Significant Unavoidable Impact. Buildout – Significant Unavoidable Impact.
4.8 Noise		
	N-1: A new policy shall be added to the Noise Hazards section of the Safety Element that states the following: S-7.x All proposed discretionary residential projects that are within roadway noise contours of 60 CNEL or greater shall include a finding of consistency with the provisions of the Noise Hazards section of the Safety Element and, where appropriate, a project-specific noise impact analysis conducted before final approval. If impacts are identified, a "reasonable and	Less Than Significant Impact.

Issues/Impacts	Mitigation Measures	Level of Significant after Mitigation
	feasible" mitigation analysis shall be conducted using published Caltrans/Federal Highway Administration guidelines. Any mitigation measures meeting these tests shall be concurrently funded and constructed as part of the roadway improvement.	
	N-2: A new policy shall be added to the Noise Hazards section of the Safety Element that states the following: S-7.x All discretionary projects which propose to use heavy construction equipment within 50 feet of a residence, or pile drivers or blasting within 100 feet of a residence (or similar sensitive use) shall be required to submit a pre-construction vibration study prior to project approval. Any specified mitigation and monitoring shall be incorporated into construction contracts.	Less Than Significant Impact.
	N-3A: A new policy shall be added to the Noise Hazards section of the Safety Element that states the following: S-7.x No construction activities 500 feet of a noise sensitive land use during the evening hours of Monday through Saturday, or anytime on Sunday or holidays shall be allowed prior to completion of a noise mitigation study. Noise protection measures, in the event of any identified impact, may include: ▪ Constructing temporary barriers, ▪ Using quieter equipment than normal, or, ▪ Temporarily relocating affected persons (hotel vouchers). **N-3B:** A new policy shall be added to the Noise Hazards section of the Safety Element that states the following: S-7.x Standard noise protection measures shall be incorporated into all construction contracts. These measures shall include: ▪ Construction shall occur only during times allowed	Less Than Significant Impact.

Issues/Impacts	Mitigation Measures	Level of Significant after Mitigation
	by ordinance/code unless such limits are waived for public convenience; ▪ All equipment shall have properly operating mufflers; and ▪ Lay-down yards and semi-stationary equipment such as pumps or generators shall be located as far from noise-sensitive land uses as practical.	
	No mitigation beyond the 2007 General Plan policies is required.	Less Than Significant Impact.
4.9 Biological Resources		
Impact BIO-1: Potential Adverse Impact on Special-Status Species. **[Also Cumulative Impact]**	*All Special Status Species – Program Level* **Mitigation Measure BIO-1.1:** Baseline Inventory of Landcover, Special Status Species Habitat, Sensitive Natural Communities, Riparian Habitat, and Wetlands in Monterey County **Mitigation Measure BIO-1.2:** Salinas Valley Conservation Plan to preserve habitat for the San Joaquin kit fox in the Salinas Valley *All Special Status Species – Project Level* **Mitigation Measure BIO-1.3:** Project Level Biological Survey and Avoidance, Minimization, and Compensation for Impacts to Non-Listed Special-Status Species and Sensitive Natural Communities. **Mitigation Measure BIO-1.4:** By 2030, prepare an Update to the General Plan to identify expansion of existing focused growth areas and/or to identify new focused growth areas to reduce loss of natural habitat in Monterey County. **Mitigation Measure BIO-1.5**: By 2030, prepare a Comprehensive County Natural Communities Conservation Plan.	2092 -- Significant Unavoidable Impact.
Impact BIO-2: Potential Adverse Effects on Sensitive Riparian Habitat, Other Sensitive Natural Communities and on Federal and State	**Mitigation Measure BIO-1.1, 1.2, 1.3, 1.4, and 1.5** as described above under Impacts to Special Status Species.	2092 - Significant

Issues/Impacts	Mitigation Measures	Level of Significant after Mitigation
Jurisdictional Waters and Wetlands **[Also Cumulative Impact]**	**Mitigation Measures BIO-2.1, 2.2 and 2.3** as described above.	Unavoidable Impact.
4.11 Public Services and Utilities		
Impact PSU-8: Development and land use activities contemplated in the 2007 General Plan may result in a need for new solid waste facilities or non-compliance with waste diversion requirements. Future solid waste facilities would have a significant effect on the environment.	**2092** The County will add the following policy to the 2007 General Plan: Policy PS-5.5 The County will review its Solid Waste Management Plan on a 5-year basis and institute policies and programs as necessary to exceed the wastestream reduction requirements of the California Integrated Waste Management Act. The County will adopt requirements for wineries to undertake individual or joint composting programs to reduce the volume of their wastestream. Specific mitigation measures to reduce the impacts of future solid waste facilities are infeasible because the characteristics of those future facilities are unknown.	Buildout - Significant Unavoidable Impact.
4.12 Parks and Recreation		
	No mitigation beyond the 2007 General Plan policies is necessary.	Less Than Significant Impact.
	No mitigation beyond the 2007 General Plan policies is necessary.	Less Than Significant Impact.
4.13 Hazards and Hazardous Materials		
	No mitigation beyond the 2007 General Plan policies is necessary.	Less Than Significant Impact.
	No mitigation beyond the 2007 General Plan policies is necessary.	Less Than Significant Impact.
	No mitigation beyond the 2007 General Plan policies is necessary.	Less Than Significant Impact.
.	No mitigation beyond the 2007 General Plan policies is	Less Than

Issues/Impacts	Mitigation Measures	Level of Significant after Mitigation
	necessary.	Significant Impact.
4.14 Aesthetics, Light, and Glare		
Impact AES-1: Implementation of the 2007 General Plan would result in a substantial adverse effects on scenic vistas. **[Significant Cumulative Impact]**	No mitigation beyond the 2007 General Plan policies is available.	Significant Unavoidable Impact.
Impact AES-2: Implementation of the 2007 General Plan could result in the degradation of scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway. **[Significant Cumulative Impact]**	No mitigation beyond the 2007 General Plan policies is available.	Significant Unavoidable Impact.
Impact AES-3: Implementation of the 2007 General Plan would substantially degrade the existing visual character or quality of Monterey County. **[Also Cumulative Impact]**	No mitigation beyond the 2007 General Plan policies is available.	2030 - Significant Unavoidable Impact. Buildout - Significant Unavoidable Impact.
Impact AES-4: Implementation of the 2007 General Plan could create substantial new sources of light and glare that would adversely affect day or nighttime views in the area.	No mitigation beyond the 2007 General Plan policies is available.	2030 - Significant Unavoidable Impact. Buildout - Significant Unavoidable Impact.
4.15 Population and Housing		
Impact POP-1: Implementation of the 2007 General Plan would induce population growth in unincorporated Monterey County.	No feasible mitigation beyond the 2007 General Plan goals and policies is available.	2030 - Significant Unavoidable Impact. Buildout - Significant Unavoidable Impact.
4.16 Climate Change		
Impact CC-1: Development of the 2007 General Plan would contribute considerably to cumulative GHG emissions and global climate change as the County in 2020 would have GHG emissions greater than 72 percent of business as usual conditions. **(Cumulative Impact in 2092)**	**CC-11 (Same as BIO-1.9):** By 2030, prepare an Update to the General Plan to identify expansion of existing focused growth areas and/or to identify new focused growth areas to reduce loss of natural habitat in Monterey County and vehicle miles	Buildout - Cumulatively Considerable Impact.

Issues/Impacts	Mitigation Measures	Level of Significant after Mitigation
	traveled The County shall update the County General Plan by no later than January 1, 2030 and shall consider the potential to expand focused growth areas established by the 2007 General Plan and/or the designation of new focused growth areas. The purpose of such expanded/new focused growth areas would be to reduce the loss of natural habitat due to continued urban growth after 2030. The new/expanded growth areas shall be designed to accommodate at least 80% of the projected residential and commercial growth in the unincorporated County from 2030 to buildout. **CC-12**: Greenhouse Gas Reduction Plan Requirements Beyond 2030 In parallel with the development and adoption **of** the 2030 General Plan, Monterey County will develop and adopt a Greenhouse Gas Reduction Plan with a target to reduce 2050 GHG emissions by 80 percent relative to 1990 emissions. At a minimum, the Plan shall establish an inventory of current (2030) GHG emissions in the County of Monterey; forecast GHG emissions for 2050 for County operations and areas within the jurisdictional control of the County; identify methods to reduce GHG emissions; quantify the reductions in GHG emissions from the identified methods; identify requirements for monitoring and reporting of GHG emissions; establish a schedule of actions for implementation; and identify funding sources for implementation.	

Chapter 7

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Section 9

List of Acronyms and Abbreviations

9.1 List of Acronyms

AB	Agricultural Buffer
ADA	(Federal) Americans with Disabilities Act
ADT	Average Daily Traffic Volumes
AFY	Acre Feet per Year
AHO	Affordable Housing Overlay
ALUC	Airport Land Use Commission
AMBAG	Association of Monterey Bay Area Governments
APFS	Adequate Public Facilities and Services
ASBS	Areas of Special Biological Significance
ASR	Aquifer Storage and Recovery
AWCP	Agricultural Winery Corridor Plan
AWQA	Agriculture Water Quality Alliance
BLM	Bureau of Land Management
BACT	Best Available Control Technology
BCT	Base Closure Team
BMP	Basin Management Plan
BMP	Best Management Practices
CAA	(Federal) Clean Air Act
CAPP	Collaborative Aquifer Protection Program
CAWD	Carmel Area Wastewater District
CCC	California Coastal Commission
CC&Rs	Covenants, Conditions, and Restrictions
CCR	California Code of Regulations
CCRWQCB	Central Coast Regional Water Quality Control Board
CDFFP	California Department of Forestry and Fire Protection
CDFG	California Department of Fish and Game
CERCLA	Comprehensive Environmental Response, Compensation, and Liability Act
CEQA	California Environmental Quality Act
CESA	California Endangered Species Act
CGS	California Geologic Survey
CIFP	Capital Improvement and Financing Plans
CIP	Capital Improvement Program
CLUP	Comprehensive Land Use Plans
CNDDB	California Natural Diversity Database
CNPS	California Native Plant Society
CRDRP	Carmel River Dam and Reservoir Project
CRMP	Coordinated Resource Management and Planning
CSA	Community Service Area

CSIP	Castroville Seawater Intrusion Project
CWA	(Federal) Clean Water Act
DES	Development Evaluation System
DHS	(State) Department of Health Services
DMA	(Federal) Disaster Mitigation Act
DOGGR	California Division of Oil, Gas and Geothermal Resources
DWR	(State) Department of Water Resources
DWSAP	Drinking Water Source Assessment and Protection
EFH	Essential Fish Habitat
EFZ	Earthquake Fault Zone
EIR	Environmental Impact Report
EPA	Environmental Protection Agency
ESA	(Federal) Endangered Species Act
FAA	Federal Aviation Administration
FAR	Federal Aviation Regulations
FAR	Floor Area Ratio
FEMA	Federal Emergency Management Agency
FMMP	Farmland Mapping and Monitoring Program
FIRM	Flood Insurance Rate Map
FORA	Fort Ord Reuse Authority
GIS	Geographical Information Systems
GPU	General Plan Update
GPU1	Monterey County General Plan draft, January 2002
GPU2	Monterey County General Plan draft, February 2003
GPU3	Monterey County General Plan Public Review Draft, January 2004
GPU4	Monterey County General Plan draft, 2006
GPU5	Monterey County General Plan 2007 General Plan
HCP	Habitat Conservation Plan
HMP	habitat management plan
HOV	High Occupancy Vehicle
HWCL	(State) Hazardous Waste Control Law
ITE	Institute of Transportation Engineers
LAFCO	Local Agency Formation Commission
LCP	Local Coastal Program
LOS	Level of Service
LUFT	Leaking Underground Fuel Tank
LUP	Land Use Plan
MBA	Michael Brandman Associates
MBNMS	Monterey Bay National Marine Sanctuary
MBTA	(Federal) Migratory Bird Treaty Act
MBUAPCD	Monterey Bay Unified Air Pollution Control District
MCL	Maximum Contaminant Level
MCOAEOP	Monterey County Operational Area Emergency Operations Plan
MCRMA	Monterey County Resource Management Agency

MCWD	Marina Coast Water District
MCWRA	Monterey County Water Resource Agency
Mg/l	Milligrams per liter
MMI	Modified Mercalli Intensity
MOU	Memorandum of Understanding
MPWMD	Monterey Peninsula Water Management District
MRWMD	Monterey Regional Waste Management District
MRZ	Mineral Resources Zone
MRZ-1	Areas of No Mineral Resource Significance
MRZ-2	Areas of Identified Mineral Resource Significance
MRZ-3	Areas of Undetermined Mineral Resource Significance
MRZ-4	Areas of Unknown Mineral Resources Significance
MSR	Municipal Service Review
MST	Monterey-Salinas Transit
MURP	Model Urban Runoff Program
NCCP	Natural Communities Conservation Plan
NFIP	National Flood Insurance Program
NLP	New Los Padres
NMFS	National Marine Fisheries Service
NOI	Notice of Intent
NOP	Notice of Preparation
NPDES	National Pollutant Discharge Elimination System
NPS	Non-Point Source
NRCS	Natural Resources Conservation Service
OES	(Monterey County) Office of Emergency Services
OMR	California Department of Conservation Office of Mine Reclamation
OWTS	Onsite Wastewater Treatment Systems
PBCSD	Pebble Beach Community Services District
PCBs	polychlorinated biphenyls(
PRC	Public Resources Code
PVWMA	Pajaro Valley Water Management Agency
RCD	Resource Conservation District
RCRA	(Federal) Resource Conservation and Recovery Act
RPF	Registered Professional Forester
RWQCB	Regional Water Quality Control Board
SA	Study Area
SARA	Superfund Amendments and Reauthorization Act
SMARA	Surface Mining and Reclamation Act
SMGB	State Mining and Geology Board
STA	Special Treatment Area
SVSWA	Salinas Valley Solid Waste Authority
SVWP	Salinas Valley Water Project
SWMP	Stormwater Management Program
SWPPP	Stormwater Pollution Prevention Plan
SWRCB	State Water Resources Control Board
TAMC	Transportation Agency of Monterey County
TDM	Transportation Demand Management
TDR	transfer of development rights

THP	Timber Harvest Plan
TMDL	Total Maximum Daily Load
UCCE	University of California Cooperative Extension
USACE	United States Army Corps of Engineers
USDA	United States Department of Agriculture
USFS	United States Forest Service
USFWS	United States Fish and Wildlife Service
USGS	United States Geological Survey
UST	Underground Storage Tank
VMT	Vehicle Miles of Travel
WAVE	Waterfront Area Visitor Express
WDR	Waste Discharge Requirement
WMI	Watershed Management Initiative
WQPP	Water Quality Protection Program

9.2 List of Abbreviations

A-P Act	(State) Alquist-Priolo Earthquake Fault Zoning Act
CA	California
CalAm	California-American Water Company
Cal-Water	California Water Service Company
Class I facility	Bicycle Path
Class II facility	Bicycle Lane
Class III facility	Bicycle Route
CO	Carbon Monoxide
dB	Decibel
dBA	The “A-weighted” scale for measuring sound in decibels
General Plan	Monterey County General Plan
Ld	Day-Night Average Sound Level
L_{eq}	The energy equivalent level
MST RIDES	Monterey County’s paratransit program
NO_X	Nitrogen Oxide(s)
O_3	Ozone
PM2.5	Particulate matter of 2.5 microns in diameter or less
PM10	Particulate matter of 10 microns in diameter or less
SO_2	Sulfur Dioxide
UC	University of California

Section 10
Glossary

10.1 Glossary

Acres, Gross - A measure of total land area of any lot including streets, parks and other land dedications.

Acres, Net - The gross area of a site excluding:

- All public and private streets, and streets which provide primary and direct access to a public street.
- Land within any existing or planned drainage easement.
- Schools and parks or other facilities dedicated for public use.

Affordable Housing: Housing that can be purchased or rented by a household with very low, low, or moderate income and based on a household's ability to make monthly payments necessary to obtain housing. Housing is considered affordable when a household pays less than 30% of its gross monthly income (GMI) for housing, including utilities.

Agency - The governmental entity, department, office, or administrative unit responsible for carrying out regulations.

Agricultural Preserve - Land designated for agriculture or conservation. (See "Williamson Act.")

Agriculture - Use of land for the production of food and fiber, on natural prime or improved pasture land.

Air Pollution - Concentrations of substances found in the atmosphere which exceed naturally occurring quantities and are undesirable or harmful in some way.

Alquist-Priolo Earthquake Fault Zoning Act, Earthquake Fault Zone - A seismic hazard zone designated by the State of California within which specialized geologic investigations must be prepared prior to approval of certain new development.

Ambient - Surrounding on all sides; used to describe measurements of existing conditions with respect to traffic, noise, air, and other environments.

Aquifer - An underground, water-bearing layer of earth, porous rock, sand, or gravel, through which water can seep or be held in natural storage. Aquifers generally hold sufficient water to be used as a water supply.

Aquifer Storage and Recovery (ASR) - Method of making use of existing natural aquifers to store excess water to be available or recovered at a time when water is scarce.

Archaeological - Relating to the material remains of past human life, culture, or activities.

Architectural Review - Regulations and procedures requiring the placement and exterior design of structures to be suitable, harmonious, and in keeping with the general appearance, historical character, and/or style of surrounding areas.

Area Plan - A component of the Proposed General Plan Update that establishes specific planning policies for a defined geographical area.

Arterial - A major street carrying volumes of relatively high speed traffic from local and collector streets to and from freeways and other major streets. These streets have controlled intersections and generally provide limited direct access to abutting properties.

Assessment District; Benefit Assessment District - An area within a public agency's boundaries which receives a special benefit from the construction of one or more public facilities. A Benefit Assessment District has no legal life of its own and cannot act by itself. It is strictly a financing mechanism for providing public infrastructure as allowed under the Streets and Highways Code. Bonds may be issued to finance the improvements, subject to repayment by assessments charged against the benefiting properties. Creation of a Benefit Assessment District enables property owners in a specific area to cause the construction of public facilities or to maintain them (for example, a downtown, or the grounds and landscaping of a specific area) by contributing their fair share of the construction and/or installation and operating costs.

Base Flood - A 100-year flood that has a 1% likelihood of occurring in any given year.

Basic Routes - All local roads not designated as Routes of Regional Significance.

Below-Market-Rate (BMR) Housing Unit - Any housing unit specifically priced to be sold or rented to low- or moderate income households for an amount less than the fair-market value of the unit. The U.S. Department of Housing and

Urban Development sets standards for determining which households qualify as "low income" or "moderate income."

Best Available Control Technology (BACT) - The most stringent emission limit or control technique that has been achieved in practice that is applicable to a particular emission source.

Best Management Practices (BMP) - The combination of conservation measures, structure, or management practices that reduces or avoids adverse impacts of development on adjoining site's land, water, or waterways, and waterbodies.

Bicycle Path (Class I facility) - A paved route not on a street or roadway and expressly reserved for bicycles traversing an otherwise unpaved area. Bicycle paths may parallel roads but typically are separated from them by landscaping.

Bicycle Lane (Class II facility) - A corridor expressly reserved for bicycles, existing on a street or roadway in addition to any lanes for use by motorized vehicles.

Bicycle Route (Class III facility) - A facility shared with pedestrians and motorists, identified only by signs, and having no pavement markings or lane stripes.

Bikeways - A term that encompasses bicycle lanes, bicycle paths and bicycle routes.

Blue Line Stream - A water body depicted on a United States Geological Survey 7.5-minute quadrangle. Blue line streams are considered navigable water bodies and are therefore subject to the provisions of the Clean Water Act.

Buffer Zone - An area of land separating two distinct land uses which acts to soften or mitigate the effects of one land use on the other.

Building - Any structure having a roof supported by columns or walls for the housing or enclosure of persons, animals, or property of any kind.

Building, Maximum Height - Shall be measured as the vertical distance to the highest point of the roof top of a flat roof or a mansard roof, or to the average height of a pitched or hipped roof measured from that plane connecting the highest and lowest portion of the lot abutting and outside the perimeter of the building footprint. Any fill of any depth or composition beneath or abutting the exterior perimeter of any building shall be included in the calculation of height.

California Environmental Quality Act (CEQA) - A State law that requires state and local agencies to perform environmental review for discretionary actions. CEQA requires that potential environmental impacts be analyzed, disclosed, and mitigated where feasible. (See "Environmental Impact Report")

Capital Costs - The cost of public improvements or facilities and major pieces of equipment (e.g. utility systems, major roads, communication facilities, and public buildings) that have a useful life of more than three years.

Carbon Dioxide (CO_2) - A colorless, odorless, non-poison gas that is a normal part of the atmosphere.

Carbon Monoxide (CO) - A colorless, odorless, highly poisonous gas produced by automobiles and other machines with internal combustion engines that imperfectly burn fossil fuels such as oil and gas.

Channelization - (1) The straightening and/or deepening of a watercourse for purposes of storm-runoff control or ease of navigation. Channelization often includes lining of stream banks with a retaining material such as concrete. (2) At the intersection of roadways, the directional separation of traffic lanes through the use of curbs or raised islands which limit the paths that vehicles may take through the intersection.

Circulation Element - One of seven State-mandated elements of a local general plan, it contains adopted goals, policies, and implementation programs for the planning and management of existing and proposed thoroughfares and transportation routes correlated with the Land Use Element of the Proposed General Plan Update.

Clean Water Act - A Federal law that regulates discharge into or modification of water bodies. Dischargers and modifiers must comply with the law's permitting requirements.

Clustered Development - Development in which a number of dwelling units are placed in closer proximity than typically permitted, or are attached, with the purpose of minimizing grading and retaining open space areas.

Collector Street - A street serving traffic movements between arterial and local streets, generally providing direct access to abutting properties.

Colluviums - Loose and incoherent deposits, usually at the foot of a slope or cliff and brought there chiefly by gravity.

Combined Sewer/Combination Sewer - A sewer system that carries both sanitary sewage and storm water runoff.

Commercial - A land use classification which permits facilities for the buying and selling of commodities and services.

Community Area - An area designated by the proposed General Plan Update for future development at an urban intensity. Community areas are planned support a mix of land uses and would be served by a full range of urban services such as

emergency services, potable water, wastewater, flood control, parks, schools, and public transit.

Community Facilities District - Under the Mello-Roos Community Facilities Act of 1982 (Government Code Section 53311, et. seq.), a legislative body may create within its jurisdiction a special district that can issue tax-exempt bonds for the planning, design, acquisition, construction, and/or operation of public facilities, as well as provide public services to district residents. Special tax assessments levied by the district are used to repay the bonds.

Community Noise Equivalent Level (CNEL) - A 24-hour energy equivalent level derived from a variety of single-noise events with weighing factors of 5 and 10 dBA applied to the evening (7:00 p.m. to 10:00 p.m.) and nighttime (10:00 p.m. to 7:00 a.m.) periods, respectively, to allow for the greater sensitivity to noise during these hours. (See "Ldn.")

Community Redevelopment Agency - A local agency created under California Redevelopment Law, or a local legislative body which has elected to exercise the powers granted to such an agency, for the purpose of planning, developing, re-planning, redesigning, clearing, reconstructing, and/or rehabilitating all or part of a specified area with residential, commercial, industrial, and/or public (including recreational) structures and facilities. The redevelopment agency's plans must be compatible with adopted community general plans.

Conservation - The management of natural resources to prevent waste, destruction or neglect.

Consistent - Free from variation or contradiction. Programs in the Proposed General Plan Update are to be consistent, not contradictory or preferential. State law requires consistency between a General Plan and implementation measures such as the Zoning Ordinance.

Covenants, Conditions, and Restrictions (CC&Rs) - A term used to describe restrictive limitations which may be placed on property and its use and which usually are made a condition of holding title or lease.

Cul-de-sac - A short street or alley with only a single means of ingress and egress at one end and with a large turnaround at its other end.

Cumulative Impact - As used in CEQA, the total impact resulting from the accumulated impacts of individual projects or programs over time.

dB - Decibel; a unit used to express the relative intensity of a sound as it is heard by the human ear.

dBA - The "A-weighted" scale for measuring sound in decibels; weighs or reduces the effects of low and high frequencies in order to simulate human hearing.

Dedication - The turning over by an owner or developer of private land for public use, and the acceptance of land for such use by the governmental agency having jurisdiction over the public function for which it will be used.

Dedication, In lieu of - Cash payments which may be required of an owner or developer as a substitute for a dedication of land, usually calculated in dollars per lot, and referred to as in lieu fees or in lieu contributions.

Density - The number of residential dwelling units per acre of land. Densities specified in the General Plan are expressed in units per net developable acre. (See "Acres, Gross," and "Acres, Net.")

Density Bonus - The allocation of development rights that allow a parcel to accommodate additional square footage or additional residential units beyond the maximum for which the parcel is zoned, usually in exchange for the provision or preservation of an amenity at the same site or at another location.

Desalination - The process of removing salts (and other chemicals) from saline water, most commonly, sea or ocean water.

Design Review - The comprehensive evaluation of a development and its impact on neighboring properties and the community as a whole, from the standpoint of site and landscape design, architecture, materials, colors, lighting, and signs, in accordance with a set of adopted criteria and standards.

Detention Dam/Basin/Pond - Facilities classified according to the broad function they serve, such as storage, diversion, or detention. Detention dams are constructed to retard flood runoff and minimize the effect of sudden floods.

Development Fee - See "Impact Fee."

Development Rights - The right to develop land by a landowner who maintains fee-simple ownership over the land or by a party other than the owner who has obtained the rights to develop. Such rights usually are expressed in terms of density allowed under existing zoning. For example, one development right may equal one unit of housing or may equal a specific number of square feet of gross floor area in one or more specified zone districts.

Dwelling Unit - One or more rooms with a single kitchen, designed for occupancy by one family for living and sleeping purposes.

Easement - The right to use property owned by another for specific purposes or to gain access to another property.

Emission Standard - The maximum amount of pollutant legally permitted to be discharged from a single source, either mobile or stationary.

Endangered Species - A species of animal or plant whose prospects for survival and reproduction are in immediate jeopardy from one or more causes. Habitats for endangered species are protected under the Federal Endangered Species Act and the California Endangered Species Act.

Environmental Impact Report (EIR) - A report prepared in accordance with the California Environmental Quality Act that assesses all the environmental characteristics of an area and determines what effects or impacts will result if the area is altered or disturbed by a proposed action. (See "California Environmental Quality Act")

Erosion - The loosening and transportation of rock and soil debris by wind, rain, or running water.

Exaction - A contribution or payment required as an authorized precondition for receiving a development permit; usually refers to mandatory dedication (or fee in lieu of dedication) requirements found in many subdivision regulations.

Expansive Soils - Soils which swell when they absorb water and shrink as they dry.

Fault - A fracture in the earth's crust forming a boundary between rock masses that have shifted. An "active" fault is one that has had surface displacement within Holocene time (about the last 11,000 years). A "potentially active" fault is one that shows evidence of surface displacement during Quaternary time (the last 2 million years).

Finding(s) - The result(s) of an investigation and the basis upon which decisions are made. Findings are used by government agencies and bodies to justify action taken by the entity.

Fire-resistive - Able to withstand specified temperatures for a certain period of time, such as a one-hour fire wall; not fireproof.

Flood, 100-Year - The magnitude of a flood expected to occur on the average every 100 years, based on historical data. The 100-year flood has a 1/100, or 1%, chance of occurring in any given year.

Flood Insurance Rate Map (FIRM) - For each community, the official map on which the Federal Insurance Administration has delineated areas of special flood hazard and the premium risk zones applicable to that community.

Flood Plain - The relatively level land area on either side of the banks of a stream regularly subject to flooding. That part of the flood plain subject to a one percent chance of flooding in any given year is designated as an area of special flood hazard by the Federal Insurance Administration.

Floor Area Ratio (FAR) - The net floor area of a building or buildings on a lot divided by the lot area or site area.

Geological - Pertaining to rock or solid matter.

Groundwater - Water under the earth's surface, often confined to aquifers capable of supplying wells and springs.

Groundwater Recharge - The natural process of infiltration and percolation of rainwater from land areas or streams through permeable soils into water-holding rocks which provide underground storage ("aquifers").

Guidelines - General statements of policy direction for which specific details may be later established.

Habitat - The physical location or type of environment in which an organism or biological population lives or occurs.

Habitat Conservation Plan (HCP) - A program prepared in accordance with the Federal Endangered Species Act that is designed to extend protection provided for endangered species to all sensitive habitat in a prescribed area.

Hazardous Material - Any material that, because of its quantity, concentration, or physical or chemical characteristics, poses a significant present or potential hazard to human health and safety or to the environment if released into the workplace or the environment. The term includes, but is not limited to, hazardous substances and hazardous wastes.

High Occupancy Vehicle (HOV) - Any vehicle other than a driver-only automobile (e.g., a vanpool, a bus, or two or more persons to a car).

Hillside - Land which is part of a hill between the summit and the foot with slopes of 10% or more.

Housing Element - One of the seven State-mandated elements of a local general plan, it assesses the existing and projected housing needs of all economic segments of the community, identifies potential sites adequate to provide the amount and kind of housing needed, and contains adopted goals, policies, and implementation programs for the preservation, improvement, and development of housing. Under State law, Housing Elements must be updated every five years.

Housing Unit The place of permanent or customary abode of a person or family. A housing unit may be a single-family dwelling, a multi-family dwelling, a condominium, a modular home, a mobile home, a cooperative, or any other residential unit considered real property under State law.

Impact - The effect of any man-made actions or indirect repercussions of man-made actions on existing physical, social, or economic conditions.

Impact Fee - A fee, also called a development fee, levied on the developer of a project by a city, county, or other public agency as compensation for otherwise-unmitigated impacts the project will produce. California Government Code § 54990 specifies that development fees shall not exceed the estimated reasonable cost of providing the service for which the fee is charged. To lawfully impose a development fee, the public agency must verify its method of calculation and document proper restrictions on use of the fund.

Impervious Surface - Surface through which water cannot penetrate, such as roof, road, sidewalk, and paved parking lot. The amount of impervious surface increases with development and establishes the need for drainage facilities to carry the increased runoff.

Implementation - Actions, procedures, programs, or techniques that carry out policies.

Improvement - The addition of one or more structures or utilities on a vacant parcel of land.

Industrial - The manufacture, production, and processing of consumer goods. Industrial is often divided into "heavy industrial" uses, such as construction yards, quarrying, and factories and "light industrial" uses, such as research and development and less intensive warehousing and manufacturing.

Infill Development - Development of vacant land (usually individual lots or left-over properties) within areas which are already largely developed.

Infrastructure - Public services and facilities, such as sewage disposal systems, water-supply systems, other utility systems, and roads.

In Lieu Fee - (See "Dedication, in lieu of.")

Landmark - A building, site, object, structure, or significant tree, having historical, architectural, social, or cultural significance and marked for preservation by the local, State, or federal government. A visually prominent or outstanding structure or natural feature that functions as a point of orientation or identification.

Landscaping - Planting, including trees, shrubs, and ground covers, suitably designed, selected, installed, and maintained permanently to enhance a site or roadway.

Landslide - A general term for a falling mass of soil or rocks.

Land Use - The occupation or utilization of land or water area for any human activity or any purpose defined in the Proposed General Plan Update.

Ldn - Day-Night Average Sound Level. The A-weighted average sound level for a given area (measured in decibels) during a 24-hour period with a 10 dB weighing applied to night-time sound levels. The Ldn is approximately numerically equal to the CNEL for most environmental settings.

Leq - The energy equivalent level, defined as the average sound level on the basis of sound energy (or sound pressure squared). The Leq is a "dosage" type measure and is the basis for the descriptions used in current standards, such as the 24-hour CNEL used by the State of California.

Level of Service (LOS) - A qualitative measure describing operational conditions within a traffic stream, as perceived by motorists. The conditions are generally described in terms of factors such as speed, delay, freedom to maneuver, comfort, convenience, and safety. Six levels of service are defined with letter designations from A to F, with A representing the optimal condition and F representing the worst.

Liquefaction - The transformation of loose, water-saturated, granular materials (such as sand or silt) from a solid into a liquid state. A type of ground failure that can occur during an earthquake.

Local Agency Formation Commission (LAFCO) - A commission within each county that reviews and evaluates all proposals for formation of special districts, incorporation of cities, annexation to special districts or cities, consolidation of districts, and the merger of districts with cities. Each county's LAFCO is empowered to approve, disapprove, or conditionally approve such proposals. LAFCO members generally include two county supervisors, two city council members, and one member representing the general public.

Local Street - A street which primarily serves as access to abutting properties characterized by traffic with low speeds, low volumes and relatively short trip lengths.

Mitigation - A specific action taken to reduce environmental impacts. Mitigation measures are required as a component of an environmental impact report (EIR) if significant measures are identified.

Mitigation Measures - Action taken to avoid, minimize, or eliminate environmental impacts. Mitigation includes: avoiding the impact altogether by not taking a certain action or parts of an action; minimizing impacts by limiting the degree or magnitude of the action and its implementation; rectifying the impact by repairing, rehabilitating, or restoring the affected environment; reducing or eliminating the impact over time by preservation and maintenance during the life of the action; and compensating for the impact by repairing or providing substitute resources or environments.

Mixed-use - Properties on which various uses, such as office, commercial, institutional, and residential, are combined in a single building or on a single site

in an integrated development project with significant functional interrelationships and a coherent physical design.

National Ambient Air Quality Standards - The prescribed level of pollutants in the outside air that cannot be exceeded legally during a specified time in a specified geographical area. National Flood Insurance Program: A federal program which authorizes the sale of federally subsidized flood insurance in communities where such flood insurance is not available privately.

National Historic Preservation Act - A 1966 federal law that established a National Register of Historic Places and the Advisory Council on Historic Preservation, and which authorized grants-in-aid for preserving historic properties.

National Register of Historic Places - The official list, established by the National Historic Preservation Act, of sites, districts, buildings, structures, and objects significant in the nation's history or whose artistic or architectural value is unique.

Natural Communities Conservation Plan (NCCP) - A plan that identifies sensitive habitats within a rural development area and directs the preparation of a program to mitigate the impacts of rural development on the habitats.

Nitrogen Oxide(s) (NO_X) - A reddish brown gas that is a byproduct of combustion and ozone formation processes. Often referred to as NO_X, this gas gives smog its "dirty air" appearance.

Noise - Any sound which is undesirable because it interferes with speech and hearing, is intense enough to damage hearing, or is otherwise annoying. Noise is simply "unwanted sound."

Noise Attenuation - Reduction of the level of a noise source using a substance, material, or surface, such as earth berms and/or solid concrete walls.

Noise Contour - A line connecting points of equal noise level as measured on the same scale. Noise levels greater than the 60 Ldn contour (measured in dBA) require noise attenuation in residential development.

Non-attainment - The condition of not achieving a desired or required level of performance and frequently used in reference to air quality.

Non-conforming Use - A use of a structure of land that was lawfully established and maintained, but which does not conform with the use regulations or required conditions for the district in which it is located by reason of adoption or amendment of local ordinance.

Open Space - Any parcel or area of land or water which is essentially unimproved and devoted to an open space use for the purposes of (1) the

preservation of natural resources, (2) the managed production of resources, (3) outdoor recreation, or (4) public health and safety.

Overlay --A land use designation on the Land Use Map or a zoning designation on a zoning map, which modifies the basic underlying designation in some specific manner.

Ozone (O_3) - A tri-atomic form of oxygen (O_3) created naturally in the upper atmosphere by a photochemical reaction with solar ultraviolet radiation. In the lower atmosphere, ozone is a recognized air pollutant that is not emitted directly into the environment, but is formed by complex chemical reactions between oxides of nitrogen and reactive organic compounds in the presence of sunlight, and becomes a major agent in the formation of smog.

Parcel - A lot, or contiguous group of lots, in single ownership or under single control, usually considered a unit for purposes of development.

Peak Hour/Peak Period - For any given roadway, a daily period during which traffic volume is highest, usually occurring in the morning and evening commute periods. Where "F" Levels of Service are encountered, the "peak hour" may stretch into a "peak period" of several hours duration.

Performance Standards - Zoning regulations that permit uses based on a particular set of standards of operation rather than on particular type of use. Performance standards provide specific criteria limiting noise, air pollution, emissions, odors, vibration, dust, dirt, heat, fire hazards, wastes, traffic impacts, and visual impact of a use.

Planning Area - The land area addressed by the Proposed General Plan Update, which is all the unincorporated land within the Monterey County limits.

Policy - A specific statement of principle or of guiding or implementing actions which implies clear commitment.

Pollutant - Any introduced gas, liquid, or solid that makes a resource unfit for its normal or usual purpose.

Pollution - The presence of matter or energy whose nature, location, or quantity produces undesired environmental effects.

Recreation, Active - A type of recreation or activity which requires the use of organized play areas including, but not limited to, softball, baseball, football, and soccer fields, tennis and basketball courts and various forms of children's play equipment.

Recreation, Passive - Type of recreation or activity which does not require the use of organized play areas.

Redevelopment - New or replacement development undertaken to reduce or eliminate blighted conditions and to encourage private investment in designated "redevelopment project areas." In California, public redevelopment is funded largely through the sale of bonds, with the retirement of the bonded debt paid for by the increases in real property taxes on project area lands resulting from improvements prompted by the combination of public and private reinvestment in the area. Redevelopment can be financed completely independently of a local agency's General Fund operating revenues, but cities may allocate some operating revenues to assist redevelopment and/or target operating revenues to focus on redevelopment areas. Redevelopment may also be spurred by grants from Federal and State governments and sometimes private sources.

Residential - Land designated in the Proposed General Plan Update and Zoning Ordinance for buildings consisting of dwelling units. May be vacant or unimproved. (See "Dwelling Unit.")

Residential, Multiple-Family - Usually three or more dwelling units on a single site, which may be in the same or separate buildings.

Residential, Single-Family - A single dwelling unit on a building site.

Richter Scale - A measure of the size or energy release of an earthquake at its source. The scale is logarithmic, meaning that the wave amplitude of each number on the scale is 10 times greater than that of the previous whole number.

Rideshare - A travel mode other than driving alone, such as buses, rail transit, carpools, and vanpools.

Ridge - An elongated crest or series of crests of a hill.

Ridgeline - A ground line located at the highest elevation of and running parallel to the long axis of the ridge.

Right-of-way - The strip of land over which certain transportation and public use facilities are built, such as roadways, railroads, and utility lines.

Riparian Lands - Lands which are comprised of the vegetative and wildlife areas adjacent to perennial and intermittent streams. Riparian areas are delineated by the existence of plant species normally found near fresh water.

Riparian Vegetation - Vegetation associated with any watercourse which requires or tolerates moisture in excess of that available in adjacent uplands.

Runoff - That portion of rain or snow which does not percolate into the ground and is discharged into streams instead.

Rural Center - An existing rural or semi-rural area identified by the proposed General Plan Update that can support additional residential and neighborhood

commercial development. The proposed General Plan Update establishes land use policies designed to allow rural centers to develop over the life of the plan, but in a manner that preserves the existing character of these areas.

Sanitary Sewer - A system of subterranean conduits which carries refuse liquids or waste matter to a plant where the sewage is treated, as contrasted with storm drainage systems (which carry surface water) and septic tanks or leech fields (which hold refuse liquids and waste matter on-site). (See "Combined Sewer" and "Septic System".)

Scenic Highway Corridor - The visible area outside of a highway's right-of-way, generally described as "the view from the road."

Scenic Highway/Scenic Route - A highway, road, or street which, in addition to its transportation function, provides opportunities for the enjoyment of natural and man-made scenic resources and access or direct views to areas or scenes of exceptional beauty or historic or cultural interest. The aesthetic values of scenic routes often are protected and enhanced by regulations governing the development of property or the placement of outdoor advertising.

Seismic - Caused by or subject to earthquakes or earth vibrations.

Septic System - A sewage-treatment system that includes a settling tank through which liquid sewage flows and in which solid sewage settles and is decomposed by bacteria in the absence of oxygen. Septic systems are often used for individual-home waste disposal where an urban sewer system is not available. (See "Sanitary Sewer.")

Setback Line - A line within a lot parallel to a corresponding lot line, which is the boundary of any specified front, side, corner side or rear yard, or the boundary of any public right-of-way whether acquired in fee, easement or otherwise, or a line otherwise established to govern the location of buildings, structures or uses. Where no minimum front, side, corner side, or rear yards are specified, the setback line shall be coterminous with the corresponding lot line. The line is a horizontal distance measured from the respective property line.

Settlement - The drop in elevation of a ground surface caused by settling or compacting. Differential settlement is uneven settlement.

Significant Effect - A beneficial or detrimental impact on the environment. May include, but is not limited to, significant changes in an area's air, water, and land resources.

Siltation - (1) The accumulating deposition of eroded material, or (2) the gradual filling in of streams and other bodies of water with sand, silt, and clay.

Single-family Dwelling, Attached - A building containing two dwelling units with each unit having its own foundation on grade.

Single-family Dwelling, Detached - A building containing one dwelling unit on one lot.

Slope - Land gradient described as the vertical rise divided by the horizontal run, and expressed in percent.

Soil - The unconsolidated material on the immediate surface of the earth created by natural forces that serves as the natural medium for growing land plants.

Solid Waste - Any unwanted or discarded material that is not a liquid or gas. Includes organic wastes, paper products, metals, glass, plastics, cloth, brick, rock, soil, leather, rubber, yard wastes, and wood. Organic wastes and paper products comprise about 75 percent of typical urban solid waste.

Special Treatment Area - A specific location identified in an area plan for focused development because of its unique location, site constrains, or surrounding land uses. The area plan policy establishes detailed policies to guide future land use activities at that location.

Specific Plan - A plan that provides detailed design and implementation tools for a specific portion of the area covered by a general plan. A specific plan may include all regulations, conditions, programs, or proposed legislation which may be necessary or convenient for the systematic implementation of any general plan element(s).

Storm Water Runoff - Surplus surface water generated by rainfall that does not seep into the earth but flows overland to flowing or stagnant bodies of water. Also referred to as "urban runoff."

Structure - Anything constructed or erected which requires a location on the ground, including a building or a swimming pool, but not including a fence or a wall used as a fence, if the height does not exceed six feet, or access drives or walks.

Subdivision - The division of a tract of land into defined lots, either improved or unimproved, which can be separately conveyed by sale or lease, and which can be altered or developed. Subdivision includes a condominium project as defined in Section 1350 of the California Civil Code.

Subsidence - The gradual sinking of land as a result of natural or artificial causes. (See "Settlement.")

Sulfur Dioxide (SO_2) - A heavy, pungent, colorless air pollutant formed primarily by the combustion of fossil fuels. It is a respiratory irritant, especially for asthmatics and is the major precursor to the formation of acid rain.

Transit - The conveyance of persons or goods from one place to another by means of a local, public transportation system. (See "Transit, Public.")

Transit, Public - A system of regularly-scheduled buses and/or trains available to the public on a fee-per-ride basis. Also called "Mass Transit."

Transportation Demand Management (TDM) - A strategy for reducing demand on the road system by reducing the number of vehicles using the roadways and/or increasing the number of persons per vehicle. TDM attempts to: (1) reduce the number of persons per vehicle; (2) reduce the number of persons who drive alone on the roadway during the commute period; and (3) increase the use of carpools, vanpools, buses and trains, and walking and biking. TDM can be an element of TSM (see below).

Trip Generation - The dynamics that account for people making trips in automobiles or by means of public transportation. Trip generation is the basis for estimating the level of use of a transportation system and the impact of additional development or transportation facilities on an existing, local transportation system. Trip generations of households are correlated with destinations that attract household members for specific purposes.

Uniform Building Code - A national, standard building code which sets forth minimum standards for construction.

United States Army Corps of Engineers - A federal agency responsible for the design and implementation of publicly supported engineering projects. Any construction activity that involves filling a watercourse, pond, lake (natural or man-made), or wetlands (including seasonal wetlands and vernal pools), may require an ACOE permit.

Use - The purpose for which a lot or structure is or may be leased, occupied, maintained, arranged, designed, intended, constructed, erected, moved, altered, and/or enlarged as per the County's Zoning Ordinance and Proposed General Plan Update land use designation.

Use Permit - The discretionary and conditional review of an activity or function or operation on a site or in a building or facility.

Variance - A departure from any provision of the zoning requirements for a specific parcel, except use, without changing the Zoning Ordinance or the underlying zoning of the parcel. A variance usually is granted only upon demonstration of hardship based on the peculiarity of the property in relation to other properties in the same zoning district.

View Corridor - The line of sight (identified as to height, width, and distance) of an observer looking toward an object that is significant to the community (e.g., ridgeline, river, historic building, etc.); the route that directs the viewer's attention.

Viewshed - The area within view from a defined observation point.

Volume-to-Capacity Ratio - A measure of the operating capacity of a roadway or intersection, in terms of the number of vehicles that theoretically could pass through when the roadway or intersection is operating at its designed capacity. Abbreviated as v/c. At a v/c ratio of 1.0, the roadway or intersection is operating at capacity. If the ratio is less than 1.0, the traffic facility has additional capacity. Although ratios slightly greater than 1.0 are possible, it is more likely that the peak hour will elongate into a "peak period." (See "Peak Hour" and "Level of Service.")

Watercourse - Natural or once natural flowing (perennially or intermittently) water including rivers, streams, and creeks. Includes natural waterways that have been canalized, but does not include manmade channels, ditches, and underground drainage and sewer systems.

Watershed - The total area above a given point on a watercourse that contributes water to its flow; the entire region drained by a waterway or watercourse which drains into a lake, reservoir, bay or ocean.

Wetlands - Either transitional areas between terrestrial and aquatic systems where the water table is usually at or near the surface, or land that is covered by shallow water.

Williamson Act - Officially titled the California Land Conservation Act of 1965, the Williamson Act was designed as an incentive to retain prime agricultural land and open space in agricultural use, thereby slowing its conversion to urban uses. The program entails a ten-year contract between an owner of land and (usually) a county whereby the land is taxed on the basis of its agricultural use rather than the market value. The land becomes subject to certain enforceable restrictions, and certain conditions need to be met prior to approval of an agreement.

Zoning - The division of a jurisdiction by legislative regulations into areas, or zones, which specify allowable uses for real property and size restrictions for buildings within these areas; a program that implements policies of the proposed General Plan Update.

Zoning District - A designated section of the jurisdiction for which prescribed land use requirements and building and development standards are uniform.

Section 11

Documents, Plans, and Reports Cited (updated 12/05/08)

The following documents listed below can be accessed in one or more of the following ways (the specific availability of each document is noted in the citations below):

a. In hard copy at the Front Counter of the Monterey County Planning Department, Salinas Permit Center, 168 W. Alisal St. 2nd Floor Salinas, CA 93901, (831) 755-5025;

b. On CDROM at the Front Counter.

c. At the California State University – Monterey Bay Library (1 document only).

d. On the Internet at the specified internet address noted for the citation below.

The Salinas Permit Center is open Monday through Friday, from 7:30 a.m. to 5:00 p.m.

For questions regarding these citations, or for assistance, please contact Carl Holm, Deputy Director, RMA-Planning at holmcp@co.monterey.ca.us or 831-755-5103.

1. Abell, R. A., D. M. Olson, E. Dinerstein, P. T. Hurley, J. T Diggs, W. Eichbaum, S. Walters, W. Wettengel, T. Allnut, C. J. Loucks, and P. Hedao. 2000. *Freshwater ecoregions of North America: A conservation assessment.* Washington D.C.: World Wildlife Fund and Island Press. Excerpts. Hard copy available at the front counter.

2. AirNav, LLC. 2008. Airport Information. Hard copy available at the front counter or on the web: http://www.airnav.com/airports

3. America's Byways. 2008a. National Scenic Byways Online. 2008a. *Route 1- Big Sur Coast Highway.* Last revised: 2007. Hard copy available at the front counter or on the web: http://www.byways.org/explore/byways/2301/

4. ———. 2008b. National Scenic Byways Online. 2008b. *Route 1- Big Sur Coast Highway- Maps & Directions.* Last revised: 2007. Hard copy available at the front counter or on the web: http://www.byways.org/explore/byways/2301/travel.html?map=571

5. Anderson, M. 2006. "Climate Change Impacts on Flood Management:, Chapter 6 in Progress on Incorporating Climate Change into Management of California's Water Resources 1st Progress Report. Contributors: Norman Miller, Ph.D., Lawrence Berkeley National Lab; Jim Goodridge, Brian Heiland, P.E., John King, P.E., Boone Lek, P.E., Steve Nemeth, P.E., Tawnly Pranger, P.E., Maurice Roos, P.E., and Matt Winston, California Department of Water Resources. California Department of Water Resources, Division of Flood Management, Hydrology Branch, Sacramento. July. Hard copy (Chapter 6 only) available at the front counter or on the web (Go to Chapter 6) : http://baydeltaoffice.water.ca.gov/climatechange/DWRClimateChangeJuly06.pdf

6. Applied Survey Research. 2001. Farmworker Housing and Health Assessment Study of the Salinas and Pajaro Valleys. June. CD ROM available at the front counter.

7. Association of Monterey Bay Area Governments (AMBAG). 1997. 1995 Monterey Peninsula Airport Passenger Survey. January 8. Hard copy available at the front counter.

8. ———. 1999. Pajaro Watershed Water Quality Management Plan. June 1999. Marina, CA. CD ROM available at the front counter.

9. ———. 2004. 2004 AMBAG Population, Housing Unit, and Employment Forecasts. Adopted April 14. Hard copy and CD Rom available at the front counter, and on the web at: http://www.ambag.org/publications/reports/housingforecast.htm

10. ———. 2006. AMBAG Travel Demand Forecasting Model. (Proprietary Model. Requires use agreement from AMBAG).

11. ———. 2008a. Monterey Bay Area 2008 Regional Forecast Population, Housing Unit and Employment Projections for Monterey, San Benito and Santa Cruz Counties to the Year 2035. Adopted by the AMBAG Board of Directors June 11. Hard copy available at the front counter or on the web: http://www.ambag.org/publications/reports/Transportation/2008Forecast.pdf

12. ———. 2008b. Monterey Bay Area 2008 Regional Forecast. Draft April 12, 2008. Hard copy available at the front counter.

13. ———. 2008c. Draft Revision 2—Regional Housing Needs Allocation Plan. January 17, 2008. Hard copy available at the front counter.

14. Bay Area Economics (BAE). 2006. Analysis of Monterey County General Plans & Quality of Life Initiative. February. Hard copy available at the front counter.

15. Behl, R. 1998. Monterey Formation. Hard copy available at the front counter or on the web: http://sies.natsci.csulb.edu/rbehl/Mont.htm

16. Brennan, Janet. 2003. Supervising Air Quality Planner. Monterey Bay Unified Air Pollution Control District. Telephone conversation with Shannon Hatcher. April 4, 2003. Hard copy available at the front counter.

17. Breschini, G. S., T. Haversat, and R. P. Hampson. 1983. *A Cultural Resources Overview of the Coast and Coast-Valley Study Areas.* Salinas, CA. Excerpts. Hard copy available at the front counter.

18. Bryan Mori Biological Consulting Services. 2000. San Joaquin Kit Fox Early Evaluation. Tavernetti Subdivision, Monterey County. Prepared for Denise Duffy & Associates in Draft Environmental Impact Report for the Tavernetti Residential Subdivision, County of Monterey, September 11, 2001. Hard copy available at the front counter.

19. Calflora. 2008. Online search for Monterey County. Hard copy (Summary Page only showing more than 3,000 plant species in Monterey Count.) or on the web: http://www.calflora.org . Originally Accessed: January 2008.

20. California Air Resources Board (CARB). 2007a. Early Actions to Mitigate Climate Change in California, April 20. Hard copy available at the front counter or on the web: http://www.arb.ca.gov/cc/ccea/meetings/042307workshop/early_action_report.pdf

21. ———. 2007b. Expanded List of Early Actions to Reduce Greenhouse Gas Emissions in California, Recommended for Board Consideration. October. Available on the web: http://www.arb.ca.gov/cc/ccea/meetings/ea_final_report.pdf

22. ———. 2007c. Draft California Greenhouse Gas Inventory (millions of metric tonnes of CO_2 equivalent)—By IPCC Category. Last updated November 19, 2007. Hard copy available at the front counter.

23. ———. 2008. Regulation for In-Use Off-Road Diesel Vehicles. Hard copy available at the front counter or on the web: http://www.arb.ca.gov/regact/2007/ordiesl07/frooal.pdf

24. _____. 2008a. Climate Change Draft Scoping Plan: a Framework for Change. Discussion Draft Pursuant to AB 32 California Global Warming Solutions Act of 2006. June 2008. Hard copy available at the front counter or on the web: http://www.arb.ca.gov/cc/scopingplan/meetings/062608/sp_08-6-4pres.pdf

25. ———. 2008b. Addendum to February 25 Technical Assessment: Comparison of Greenhouse Gas Reductions for the United States and Canada Under ARB GHG Regulations and Proposed Federal 2011 – 2015 Model Year fuel Economy Standards, May 8. Hard copy available at the front counter or on the web: www.climatechange.ca.gov/publications/arb/ARB-1000-2008-012/ARB-1000-2008-012-ADD.PDF

26. ———. 2008c. Draft Local Government Operations Protocol. June 19. Hard copy available at the front counter or on the web: http://www.counties.org/images/users/1/Climate%20Change%20-%20Draft_lgo_protocol_2008-06-19%20(2).pdf

27. California American Water. 2005. Proponent's Environmental Assessment for Coastal Water Project—Proceeding A.04-09-019. Monterey, California. July 14, 2005. CD ROM available at the front counter.

28. California Climate Action Registry (CCAR), General Climate Action Registry General Reporting Protocol (GRP): Reporting Entity-Wide Greenhouse Gas Emissions, Version 3.0. April 2008. CD ROM available at the front counter or on the web: http://www.climateregistry.org/resources/docs/protocols/grp/GRP_V3_April2008_FINAL.pdf

29. California Climate Change Center (CCCC). 2006. Scenarios of Climate change in California: an Overview. CEC-500-2005-186-SF. February. CD ROM available at the front counter or on the web: http://www.energy.ca.gov/2005publications/CEC-500-2005-186/CEC-500-2005-186-SF.PDF

30. California Department of Conservation (CDOC). 1984 to 2006a. Farmland Mapping and Monitoring Program. GIS Data for farmland maps from 1984 to 2006. Available on the web: http://redirect.conservation.ca.gov/DLRP/fmmp/product_page.asp. Query for "Monterey County". Open GIS data for 1984 to 2006. Data files for each year are labeled for Monterey and are shapefiles for use in GIS. Methodology for calculation of habitat conversion acreages using FMMP GIS data is explained on page 4.9-47 on the DEIR.

31. ———. 1984 to 2006b. Farmland Mapping and Monitoring Program. Monterey County Historic Land Use Conversion. 1984 to 2006. Hard copy (Summary sheet only) available at the front counter.

32. ———. 1992 to 2006. Farmland Mapping and Monitoring Program. Monterey County Important Farmland Data Availability. Land Use Conversion Tables: 1992–1994, 1994–1996, 1996–1998, 1998–2000, 2000–2002, and 2002–2004, 2004-2006. Hard copy (tables) available at the front counter.

33. _____. 1994. *A Guide to the Farmland Mapping and Monitoring Program.* Hard copy available at the front counter or on the web: http://www.conservation.ca.gov/dlrp/fmmp/Documents/fmmp_guide_2004.pdf

34. ———. 2008. Williamson Act Reports and Statistics. Available under "Total Enrollment: 1991–2007, by County." Hard copy available at the front

counter or on the web:
http://www.conservation.ca.gov/dlrp/lca/stats_reports/Pages/Index.aspx

35. California Department of Conservation, Division of Mines and Geology (CDMG) (now referred to as the California Geological Survey). 1973. The Mineral Economics of the Carbonate Rocks: Limestone and Dolomite Resources of California, Bulletin 194, by O. E. Bowen, C. H. Gray, Jr., and J. R. Evans. CD ROM available at the front counter.

36. ———. 1999. Guidelines for Classification and Designation of Mineral Lands, Special Publication 51. Hard copy available at the front counter.

37. California Department of Conservation, Office of Mine Reclamation (OMR). 2008. AB 3098 Mine Reclamation List. Hard copy available at the front counter or on the web:
http://www.conservation.ca.gov/omr/ab_3098_list/Pages/current_list.aspx

38. California Department of Finance (CDOF). 2007a. E-5 City/County Population and Housing Estimates, 1/1/2005. May 2005. Hard copy available at the front counter.

39. ———. 2007b. Population Projections by Race/Ethnicity for California and its Counties 2000–2050. Hard copy available at the front counter.

40. ———. 2007c. E-2. *California County Population Estimates and Components of Change by Year- July 1 2000-2007*. Last revised: December 2007. Hard copy available at the front counter.

41. California Department of Fish and Game (CDFG). 2005. Habitat Classification Rules. California Wildlife Habitat Relationship System. California Interagency Wildlife Task Group. April. Hard copy available at the front counter.

42. ———. 2006. Species of Special Concern. Hard copy of Face Page available at front counter or on the web at:
http://www.dfg.ca.gov/wildlife/species/ssc/. Click on “Mammal”, “Bird”, “Reptiles”, “Amphibians”, and “Fishes” to access lists of species of special concern. Accessed for EIR in 2006.

43. ———. 2007. Vegetation Classification and Mapping Program. List of California Vegetation Alliances, October 22. Hard copy available at the front counter.

44. California Department of Food and Agriculture (CDFA). *California Agricultural Resource Directory 2007*. Sacramento, CA. Hard copy available at the front counter or on the web: http://www.cdfa.ca.gov/Statistics.html

45. California Department of Toxic Substances Control (DTSC). 2008. EnviroStor Database. Hard copy (based on 08/07/08 search) available at the front counter or on the web: http://www.envirostor.dtsc.ca.gov/public

46. California Department of Parks and Recreation (CDPR). 2006. The California State Park System Statistical Report: 2005/06 Fiscal Year. Memorandum. State of California – The Resources Agency. November. Hard copy available at the front counter, on CD ROM, or on the web: http://www.parks.ca.gov/pages/795/files/05-06%20statistical%20report%20webpage%20final%20adj.pdf

47. California Department of Transportation (Caltrans). 1998. Technical noise supplement. Sacramento, CA. CD ROM available at the front counter or on the web: http://www.dot.ca.gov/hq/env/noise/pub/tens_complete.pdf

48. ———. 2002. Statewide Transit-Oriented Development Study: Factor for Success in California. Executive Summary. Hard copy available at the front counter.

49. ———. 2006. 2006 Annual Average Daily Truck Volumes on California State Highways. Hard copy available at the front counter.

50. ———. 2007. The California Scenic Highway Program. Hard copy available at the front counter.

51. ———. 2008a. Excerpt *From: Historic Resource Evaluation Report on the Rock Retaining Walls, Parapets, Culvert Headwalls and Drinking Fountains along the Carmel to San Simeon Highway*. Robert C. Pavlik. Caltrans. November 1996. Hard copy available at the front counter or on the web: http://www.dot.ca.gov/dist05/projects/bigsur/pdfs/chmp_hist.pdf

52. ———. 2008b. *California Scenic Highway Program. Eligible (E) and Officially Designated (OD) Routes.* Last revised: May 19, 2008. Hard copy available at the front counter. Based on March 11, 2008 list.

53. California Department of Water Resources (DWR). 1994. *California Water Plan Update, Volumes 1 and 2*, Bulletin 160-93, October 1994. Available on the web: http://www.waterplan.water.ca.gov/previous/b160-93/TOC.cfm

54. ———. 2004. California's Groundwater—Bulletin 118. Individual Basin Descriptions, for Salinas Valley Groundwater Basin (180/400 Foot Aquifer, Upper Valley Aquifer Subbasin, Forebay Aquifer Subbasin,East Side Aquifer Subbasin, Corral del Tierra Area Subbasin., Seaside Area Subbasin); Carmel Valley Groundwater Basin. Last Updated: February 27, 2004. Hard copy available at the front counter or on the web: http://www.groundwater.water.ca.gov/bulletin118/basin_desc/basins_m-r.cfm#gwb27htm

55. ———. 2005. California Water Plan Update 2005: A Framework for Action. Bulletin 160-05. December. Available on the web: http://www.waterplan.water.ca.gov/previous/cwpu2005/index.cfm. See Volume 3, Chapter 4 (Central Coast).

56. ———. 2006. Progress on Incorporating Climate Change into Management of California's Water Resources. Technical Memorandum Report. Sacramento, California. July 2006. CD ROM available at the front counter or on the web: http://baydeltaoffice.water.ca.gov/climatechange/DWRClimateChangeJuly06.pdf

57. California Energy Commission (CEC). 2005. Global Climate Change: In Support of the 2005 Integrated Energy Policy Report. (CEC-600-2005-007.) June. Hard copy available at the front counter.

58. ———. 2006. Inventory of California Greenhouse Gas Emissions and Sinks: 1990 to 2004. (Staff Final Report). Publication CEC-600-2006-013-SF. December. Hard copy available at the front counter.

59. California Environmental Protection Agency (CALEPA), State Water Resources Control Board, Water Quality. 2006. National Pollutant Discharge Elimination System (NPDES). Available on the web: http://www.waterboards.ca.gov/npdes

60. California Geological Survey (CGS). 1987. Mineral Land Classification: Aggregate Materials in the Monterey Bay Production-Consumption Region [Monterey, San Benito, San Mateo, Santa Clara, and Santa Cruz Counties, California]. Excerpt. Hard copy available at the front counter.

61. California Integrated Waste Management Board (CIWMB). 2008a. Solid Waste Information System (SWIS). Hard copy available at the front counter or on the web: http://www.ciwmb.ca.gov/SWIS/SearchList/List?COUNTY=Monterey&FA

C=Disposal&OPSTATUS=Active&REGSTATUS=Permitted. Click on each of the three identified landfills to access data.

62. ———. 2008b. California Integrated Waste Management Board. Countywide, Regionwide, and Statewide Jurisdiction Progress Report. Hard copy available at the front counter or on the web: http://www.ciwmb.ca.gov/LGTools/mars/JurDrSta.asp

63. California Native Plant Society (CNPS). 2001. *Inventory of Rare and Endangered Plants in California*. August. Available at CSUMB Library. Location: Reference. Call Number Qk86.U6 I58 2001

64. ———. 2008. Inventory of Rare and Endangered Plants of California online edition records search for Monterey County. Available on web: http://cnps.web.aplus.net/cgi-bin/inv/inventory.cgi/Search?f%3A1=COUNTIES&e%3A1=%3D%7E+m%2Fx%2F&v%3A1=MNT&f%3A2=CNPS_LIST&e%3A2=%3D%7E+m%2Fx%2F&f%3A8=FED_STAT&e%3A8=%3D%7E+m%2Fx%2F&f%3A9=STATE_STAT&e%3A9=%3D%7E+m%2Fx%2F&f%3A3=BLOOMING&e%3A3=%3D%7E+m%2Fx%2F&f%3A4=ELEV_HIGH&e%3A4=%3E%3D+x&v%3A4=&f%3A5=ELEV_LOW&e%3A5=%3C%3D+x&v%3A5=&f%3A6=NATCOMS&e%3A6=%3D%7E+m%2Fx%2F&multi=1&f%3A7=QUADS_123&e%3A7=%3D%7E+m%2Fx%2F&nine_quads=1&whichcode=dwr&v7=&v7a=&grouping=and&sort=DEFAULT&format=DEFAULT&frames=NONE&max=50&cb=1

65. California Natural Diversity Database (CNDDB). 2007/2008. Search for Monterey County conducted January 2008 based on late 2007 CNDDB file. January 2008 list not located but new list run in November 2008 to provide counter copy. Hard copy available at the front counter.

66. California Public Utilities Commission. (SPUC) 2008. CalAm Coastal Water Project EIR information page. Accessed: August 22, 2008. Available on the web: http://www.cwp-eir.com/index.html

67. California State Water Resources Control Board. 2006. 2006 CWA Section 303(d) List of Water Quality Limited Segments. Hard copy available at the front counter.

68. ———. 2008. Notice of Draft Cease and Desist Order Regarding the Continued Unauthorized Diversion of Water from the Carmel River in Monterey County. Accessed: August 13, 2008. Issued: January 25, 2008.

Hard copy available at the front counter or on the web: http://www/waterrights.ca.gov/Hearings/docs/caw/cdofinaldraft.pdf

69. California Wilderness Coalition. 2001. California Missing Linkages Conference. (Excerpts for Central Coast). Hard copy available at the front counter

70. Central Coast Regional Water Quality Control Board. 2007. Regulation of Surface Water Discharges from Abandoned Mines. August 2007. Hard copy available at the front counter. Accessed: July 16, 2008.

71. City of Salinas. 2003. A *Vision Plan for Carr Lake Regional Park.* 606 Studio, Department of Landscape Architecture, California Polytechnic University, Pomona. June 2003. Hard copy available at the front counter.

72. Cypress Environmental and Land Use Planning and Inland Engineers, Inc. 2006. Revised Draft Report, Municipal Services Review for the North County Area of Monterey County. Prepared for LAFCO of Monterey County. October 2005 (February 2006 revisions of Pajaro/Sunny Mesa Community Services District and Pajaro Valley Water Management Agency chapters). CD ROM available at the front counter.

73. Dettinger, Michael. 2007. California Flood Risks in a Changing Climate. U.S. Geological Survey/Scripps Inst Oceanography, La Jolla, CA. Hard copy available at the front counter or on the web: http://www.climatechange.ca.gov/events/2007_conference/presentations/2007-09-11/2007-09-11_DETTINGER_MICHAEL.PDF

74. Dutton. 2007. California adopted legislation on climate change. Hard copy available at the front counter or on the web: http://www.climatechange.ca.gov/publications/legislation/SB_97_bill_20070824_chaptered.pdf

75. Dyer, A. R., H. C. Fossum, and J. W. Menke. 1996. Emergence and survival of *Nassella pulchra* in a California grassland. *Madrono* 43(2): 316–333. (Note: Abstract Only. Hard copy available at the front counter or on the web: http://ecorestoration.montana.edu/rangeland/bibliography/details.asp?offset=840&ID=297

76. Ed-Data. 2008. Website. Available on the web: http://www.ed-data.k12.ca.us/Navigation/fsTwoPanel.asp?bottom=%2Fprofile%2Easp%3Flevel%3D05%26reportNumber%3D16. Then navigate to school district data

to find the data used in Tables 4.11-2 and 4.11-3 on pages 4.11-3 and 4.11-4 in the DEIR.

77. EMC Planning Group (EMC). 2005. Rancho Roberto Subdivision Final Environmental Impact Report. Prepared for the Monterey County Planning and Building Inspection Department. Monterey, California. January 3, 2005. Hard copy (pages relied upon) available at the front counter or on the web: http://www.co.monterey.ca.us/planning/docs/eirs/roberto/rr_DEIR.htm

78. Encarta Online Encyclopedia. 2008. Subject: "Wine." Hard copy available at the front counter or on the web: http://encarta.msn.com/text_761576868__1/Wine.html

79. Federal Aviation Administration (FAA). 2008a–d. Federal Aviation Administration. Airport Data (5010) & Contact Information. Data relied upon available in hard copy at front counter. Data obtained from: http://www.faa.gov/airports_airtraffic/airports/airport_safety/airportdata_5010. Accessed: August 8, 2008. To access the cited page in searchable format, access the website at http://www.faa.gov. Follow the links indicated by the citation (Links: Airports & Air Traffic to Airports to Airport Safety to Airport Data (5010) & Contact Information).

80. Federal Highway Administration (FHWA). 1988. *Visual impact assessment for highway projects.* (FHWA-HI-88-054.) USDOT (US Department of Transportation). CD ROM available at the front counter.

81. ———. 1995. *National Scenic Byways Program, Interim Policy.* (FHWA Docket No. 95-15.) USDOT (US Department of Transportation), May 18. Hard copy available at the front counter.

82. ———. 2002. Traffic Noise Model. Licensed model – only available with purchase of license. Information on model available on the web: http://www.fhwa.dot.gov/environment/noise/tnm/index.htm

83. Federal Transit Administration (FTA). 2006. *Transit noise and vibration impact assessment.* Washington, D.C. CD Rom available at the front counter.

84. Fort Ord Reuse Authority (FORA). 1997. Fort Ord Reuse Plan and Final Environmental Impact Report. CD ROM available at the front counter or on the web: http://www.basereuse.org/reuseplan/ReusePln/RPMain.htm

85. Geosyntec Consultants. 2007. El Toro Groundwater Study. Prepared for: Monterey County Resource Management Agency. Salinas, CA. July. CD ROM available at the front counter or on the web: http://www.mcwra.co.monterey.ca.us/Agency_data/Hydrogeologic%20Reports/El%20Toro%20GW%20Study/El%20Toro%20GW%20Study.htm

86. Geyer, B. 2008. Personal Communication with Bob Geyer, Assistant Director of Public Works and Utilities. City of Watsonville, Watsonville, CA. August 11, 2008—Telephone. "Personal communication" Telephone conversation dated August 11, 2008. Hard copy available at the front counter.

87. Grossman, D. H., D. Faber-Langendoen, A. S. Weakley, M. Anderson, P. Bourgeron, R. Crawford, K. Goodin, S. Landaal, K. Metzler, K. D. Patterson, M. Pyne, M. Reid, and L. Sneddon. 1998. *International classification of ecological communities: terrestrial vegetation of the United States. Volume I. The National Vegetation Classification System: development, status, and applications.* The Nature Conservancy, Arlington, VA. CD ROM available at the front counter or on the web:: http://www.natureserve.org/library/vol1.pdf

88. Hay, K. 1991. Greenways and Biodiversity. Pages 162–175 in W. E. Hudson (ed.), *Landscape linkages and biodiversity.* Washington D.C.: Island Press. Hard copy available at the front counter.

89. Heady, H. F., T. C. Foin, M. M. Hektner and others. 1977. Coastal prairie and northern coastal scrub. Pages 733–760 in M. G. Barbour and J. Major (eds.), *Terrestrial vegetation of California.* New York: John Wiley and Sons. Hard copy available at the front counter.

90. Hester, Thomas R. 1978. Esselen. Pages 486–499, in R. F. Heizer (ed.), *Handbook of North American Indians, Vol. 8: California.* Smithsonian Institute. Excerpts. Hard copy available at the front counter.

91. Hill, P. T. 2006. California Builder and Engineer. Aggregates in California, 2006. Hard copy available at the front counter or on the web: http://www.acppubs.com/article/CA6350000.html

92. Intergovernmental Panel on Climate Change (IPCC). 2007a. Climate Change 2007: The Physical Science Basis, Summary for Policy Makers. (Working Group 1 Fourth Assessment Report.) February. Hard copy available at the front counter or on the web: http://www.ipcc.ch/pdf/assessment-report/ar4/wg1/ar4-wg1-spm.pdf

93. ———. 2007b. Climate Change 2007: Mitigation. Contribution of Working Group III to the Fourth Assessment Report of the Intergovernmental Panel on Climate Change [B. Metz, O. R. Davidson, P. R. Bosch, R. Dave, L. A. Meyer (eds)], Cambridge University Press, Cambridge, United Kingdom and New York, NY, USA. Available on the web: http://www.ipcc.ch/ipccreports/ar4-wg3.htm

94. Jennings, M. R., and M. P. Hayes. 1994. Amphibian and reptile species of special concern in California. Final Report to the California Department of Fish and Game, Inland Fisheries Division, Rancho Cordova, CA. 225 pp. CD ROM available at the front counter or on the web: http://www.dfg.ca.gov/habcon/info/herp_ssc.pdf

95. Jones & Stokes Associates, Inc. 1998. Draft Supplemental Environmental Impact Report for the Carmel River Dam and Reservoir Project. Copies of the two-volume SEIR for the reservoir project are available at area libraries and at the MPWMD office for review during business hours. Copies have also been distributed to regulatory agencies and local public interest groups. Available on the web: http://www.mpwmd.dst.ca.us/seir/

96. Jones & Stokes Associates, Inc. 2006. Executive Summary of the Draft Environmental Impact Report/Environmental Assessment for the Monterey Peninsula Water Management District Phase 1 Aquifer Storage and Recovery Project. Prepared for the Monterey Peninsula Water Management District. Hard copy available at the front counter or on the web: http://www.mpwmd.dst.ca.us/asr/Executive%20Summary%20and%20Table%20ES-1.pdf

97. Jones, G. R., J. Jones, B. A. Gray, B. Parker, J. C. Coe, J. B. Burnham, and N. M. Geitner. 1975. A method for the quantification of aesthetic values for environmental decision making. *Nuclear Technology* 25(4): 682–713. Hard copy available at the front counter.

98. Kimley-Horn & Associates, Inc. 2008a. Traffic Data for the Draft 2007 Monterey County General Plan. Available in Appendix C of the Draft EIR for the Draft 2007 General Plan Draft EIR. Hard Copy also available at the front counter.

99. _____. 2008b. Housing, Population, Employment Assumptions VMT and Daily Hours of Travel for Traffic Scenarios, 2007 Monterey County General Plan. Hard copy available at the front counter.

100. Local Agency Formation Commission (LAFCO) of Monterey County. 2006. Final Municipal Services Review for the North County Area of Monterey County. February 1 Hard copy available at the front counter or on the web: http://www.co.monterey.ca.us/lafco/MSR/North%20County%20MSR/Final_NCMSR_022006.pdf

101. Marina Coast Water District (MCWD). 2005. Urban Water Management Plan. Prepared by Byron Buck and Associates. CD ROM available at the front counter or on the web: www.mcwd.org/docs/engr/uwmp_final_12-27-05.pdf

102. ———. 2008. MCWD Seawater Facility Website. Hard copy available at the front counter or on the web: http://www.mcwd.org/desal.html

103. Mayer K. E. and Laudenslayer W.F. (eds). 1988. A Guide to Wildlife Habitats of California. California Department of Forestry and Fire Protection. Sacramento, CA. Available on the web: http://www.dfg.ca.gov/biogeodata/cwhr/wildlife_habitats.asp

104. Michael Brandman Associates. 2004. Draft Subsequent Environmental Impact Report, East Garrison Specific Plan. State Clearinghouse Number 2003081086. PLN030204. Prepared for Monterey County Planning and Building Inspection Department. September. CD ROM available at the front counter or on the web: http://www.co.monterey.ca.us/planning/major/eastgarrison/eg_main.htm

105. Monterey Airport District. June 2008. A Special Presentation to the Regional Airport Planning Committee. Hard copy available at the front counter or on the web: http://www.co.monterey.ca.us/planning/gpu/2007_GPU_DEIR_Sept_2008/Text/References/n/RAPC_Presentation_6-27-08.pdf

106. Monterey Bay National Marine Sanctuary (MBNMS). 2006. Water Quality Management Program for the MBNMS. Hard copy available at the front counter or on the web: http://www.montereybay.noaa.gov/resourcepro/water-pro.html

107. Monterey Bay Unified Air Pollution Control District (MBUAPCD). 2008a. CEQA Air Quality Guidelines. Prepared by MBUAPCD. Adopted October 1995. Revised Feb 1997, Dec 1999, Sept 2000, Sept 2002, June 2004, and February 2008. Monterey, California. February 2008. CD ROM available at the front counter or on the web: http://www.mbuapcd.org/index.cfm/Cat/66.htm

108. ———. 2008b. 2008 Air Quality Management Plan. Monterey, California. June 2008. Excerpts in hard copy for data used in EIR available at the front counter and on the web: http://www.mbuapcd.org/index.cfm/Cat/3.htm

109. Monterey County. 1982a. Monterey County General Plan. Adopted September 30, 1982. Hard copy available at the front counter or on the web: http://www.co.monterey.ca.us/planning/docs/Plans/landuse.htm

110. ———. 1982b. North County Land Use Plan. Certified June 1982. Hard copy available at the front counter or on the web: http://www.co.monterey.ca.us/planning/docs/plans/NC_LUP_complete.PDF

111. ———. 1983a. Carmel Area Land Use Plan. Certified April 14, 1983. Hard copy available at the front counter or on the web: http://www.co.monterey.ca.us/planning/docs/plans/Carmel_Area_LUP_complete.PDF

112. _____. 1983b. Big Sur River Protected Waterway Management Plan. Available in hard copy at the Front Counter and on the County web site. PDF Accessed: August 13, 2008. Adopted: October 26, 1983. Available on the web: http://www.co.monterey.ca.us/planning/docs/plans/Big_Sur_Waterway_Pln_complete

113. ———. 1984. Del Monte Forest Land Use Plan. Certified September 12, 1984. Hard copy available at the front counter or on the web: http://www.co.monterey.ca.us/planning/docs/plans/Del_Monte_Forest_LUP_complete.pdf

114. ———. 1986. Big Sur Coast Land Use Plan. Certified April 10, 1986. Hard copy available at the front counter or on the web: http://www.co.monterey.ca.us/planning/docs/plans/Big_Sur_LUP_complete.PDF

115. ———. 1996. Carmel Valley Master Plan. November. Hard copy available at the front counter or on the web: http://www.co.monterey.ca.us/gpu/Reports/Existing%20Plans/1cvalley_mp.html

116. ———. 1997. Monterey County Zoning Ordinance Title 21 (Inland Areas). Adopted September 1997. Hard copy available at the front counter or on the web: http://www.co.monterey.ca.us/planning/docs/ordinances/Title21/21_toc.htm

117. ———. 2000. Monterey County Coastal Implementation Plan, Part I Title 20 Zoning Ordinances. Adopted February 2000. Hard copy available at the front counter, on CDROM, or on the web: http://www.co.monterey.ca.us/planning/docs/ordinances/Title20/20_toc.htm

118. ———. 2003a. Brinan Pit. Hard copy available at the front counter or on the web: http://www.co.monterey.ca.us/planning/cca/cca2003/PC/01-08-03/PLN990292PC1.pdf

119. ———. 2003b. Housing Element. Adopted November 4, 2003. In 2007 General Plan. Available on the web: http://www.co.monterey.ca.us/housing/pdfs/Housing/housingelement_02to08.pdf

120. ———. 2004. 21st Century Monterey County General Plan Draft Environmental Impact Report. February 17, 2004. Hard copy available at the front counter. .

121. ———. 2005a. East Garrison Specific Plan. Adopted October 4, 2005. CD ROM available at the front counter or on the web: http://www.co.monterey.ca.us/planning/major/eastgarrison/EGSP_main.htm

122. ———. 2005b. Revised Rancho San Juan Specific Plan/Butterfly Village. Adopted November 2005. Available on the web: http://www.co.monterey.ca.us/planning/major/rsj2/finalSP/rsj2_sp_final.htm

123. ———. 2006a. 2006 Monterey County Draft General Plan. Hard copy available at the front counter or on the web: http://www.co.monterey.ca.us/planning/gpu/draftOct2006/defaultOct.htm

124. _____. 2006b. Draft Program Environmental Impact Report on the Monterey County 2006 General Plan. Salinas, California. August 18, 2006. Hard copy available at the front counter or on the web: http://www.co.monterey.ca.us/planning/docs/eirs/gpu/GPU_DEIR_081806.pdf

125. _____. 2006c. Final Program Environmental Impact Report on the Monterey County 2006 General Plan. Salinas, California. December 20, 2006. CD ROM available at the front counter or on the web: http://www.co.monterey.ca.us/planning/gpu/21370014_FEIR_response_to_comments.pdf

126. ———. 2007a. Draft 2007 Monterey County General Plan. Hard copy and CD Romavailable at the front counter, or on the web: http://www.co.monterey.ca.us/planning/gpu/default.htm

127. ———. 2007b. Carmel Valley Traffic Improvement Program Draft Subsequent Environmental Impact Report. CD ROM available at the front counter or on the web: http://www.co.monterey.ca.us/planning/plan_info/PDFs/SEIS.pdf

128. ———. 2008. Annual Housing Report 2008. March 11, 2008. Hard copy available at the front counter or on the web: http://www.co.monterey.ca.us/housing/pdfs/Housing/2008%20Annual%20Housing%20Report%20Final%2003-11-08.pdf

129. Monterey County Agricultural Commissioner. 2006. Monterey County Crop Report 2005. Hard copy available at the front counter or on the web: http://www.awqa.org/pubs/cropreports/2005mccropreport.pdf

130. _____. 2007. Monterey County Crop Report 2006. Salinas, CA. Hard copy available at the front counter or on the web: http://www.co.monterey.ca.us/ag/pdfs/cropreport2006.pdf

131. ———. 2008. Wine industry acreage 1929–2006 spreadsheet. January. Hard copy available at the front counter.

132. Monterey County Health Department, Environmental Health Division. 2008. Subsurface Disposal System Design Criteria. January 18, 2008. Hard copy available at the front counter or on the web: www.co.monterey.ca.us/health/EnvironmentalHealth/EHReview/pdfs/winerywaste.pdf

133. Monterey County Herald, April 4, 2007. "The price of living in paradise". Hard copy available at the front counter.

134. Monterey County Housing and Redevelopment Office. 2007. Castroville Community Plan, Volume 1. March. Hard copy available at the front counter.

135. _____. 2006. Draft Environmental Impact Report for the Castroville Community Plan. SCH2005061132. Prepared by Pacific Municipal Consultants. May. Hard copy available at the front counter or on the web: http://www.co.monterey/housing/Redevelopment/Castroville/castrov.htm

136. Monterey County Resource Conservation District (MCRCD). 2008. Salinas Valley Watershed Permit Coordination Program. Hard copy available at the front counter or on the web: http://www.rcdmonterey.org/Growers_Ranchers_Landowners/permit_services.html

137. Monterey County Sheriff's Office. 2008. Sheriff's Patrol Division. Hard copy available at the front counter or on the web: http://www.co.monterey.ca.us/SHERIFF/patrol.htm

138. Monterey County Vintners and Growers Association. 2008a. Monterey County Appellations Webpage. Hard copy available at the front counter or on the web: http://www.montereywines.org/wine_country_avamap.html

139. ———. 2008b. Monterey County AVA (Viticultural Area). AVA detailed maps available on the web: http://www.montereywines.org/wine_country_avamap.html

140. Monterey County Water Resources Agency (MCWRA). 2001a. Draft Environmental Impact Report/Environmental Impact Statement for the Salinas Valley Water Project. June 2001. Hard copy available at the front counter or on the web: http://www.mcwra.co.monterey.ca.us/SVWP/DEIR_EIS_2001/index.htm

141. ———. 2001b. Hydrogeologic Investigation of the Salinas Valley Basin in the Vicinity of Fort Ord and Marina, Salinas Valley, California. Final Report. Prepared by Harding ESE. Available on web: www.mcwra.co.monterey.ca.us Pull down menu for "Available Data and Reports", open menu for "Hydrogeologic Reports" and then look for title of Document. The document can also be accessed at the following web address: http://www.mcwra.co.monterey.ca.us/Agency_data/Hydrogeologic%20Reports/Salinas%20Basin%20Ft%20Ord%20Marina/SV_BASIN_FT_ORD_MARIN.HTM

142. ———. 2003. Monterey County Floodplain Management Plan. CD ROM available at the front counter or on the web: http://www.mcwra.co.monterey.ca.us/Floodplain%20Management/Documents/Floodplain%20Management%20Plan%202003.pdf

143. ———. 2007. 2005 Ground Water Summary Report. April. Hard copy available at the front counter or on the web: http://www.mcwra.co.monterey.ca.us/Agency_data/GEMS_Reports/2005%20Summary%20Report.pdf

144. ———. 2008a. SVWP Project Description. January 2001. Hard copy available at the front counter or on the web: http://www/mcwra.co.monterey.ca.us/SVWP/SVWP_Project_Description.pdf

145. ———. 2008b. Groundwater Extraction Summary Reports 1995-2005. Available on the web: http://www.mcwra.co.monterey.ca.us/index.html. Look under "Available Data and Reports." Look under "Groundwater Extraction Summary Reports" and then look by individual year.

146. Monterey Peninsula Airport. 2008. Hard copy available at the front counter or on the web: http://www.montereyairport.com/mry_aboutmry.html

147. Monterey Peninsula Regional Park District (MPRD). 2007. Parks & Preserves. Available on the web: http://www.mprpd.org/parks.htm. Click on each park to see information.

148. Monterey Peninsula Water Management District (MPWMD). 1990. Water Program Allocation Environmental Impact Report. 1990. Hard copy available at the front counter or on the web: http://www.mpwmd.dst.ca.us/ordinances/final/pdf/Ordinance%20053.pdf

149. ———. 2004. Sand City Desalination Project Feasibility Study, Executive Summary. Prepared by Camp, Dresser & McKee, Inc. Hard copy available at the front counter or on the web: http://www.mpwmd.dst.ca.us/asd/board/boardpacket/2004/20040331/04/item4a_revised.pdf

150. ———. 2005a. Seaside Groundwater Basin Aquifer Storage and Recovery (ASR) Phase 1 Project Summary. Monterey, CA. July 14. Hard copy available at the front counter or on the web: http://www.mpwmd.dst.ca.us/Mbay_IRWM/ASR/Proj_Sum_1.pdf

151. ———. 2005b. Seaside Groundwater Basin: Update on Water Resource Conditions. Prepared by Eugene Yates, Martin Feeney, and Lewis Rosenberg. Hard copy (excerpts) available at the front counter or on the web (full copy): http://www.mpwmd.dst.ca.us/seasidebasin

152. ———. 2006. Executive Summary for the Carmel River Dam and Reservoir Project Draft Supplemental Environmental Impact Report. Hard copy available at the front counter or on the web: http://www.mpwmd.dst.ca.us/seir/execsum.htm

153. ——— 2007. Monterey Peninsula, Carmel Bay, and South Monterey Bay Integrated Regional Water Management Plan. Monterey, California. November 2007. Hard Copy (Excerpts used for the EIR) available at the front counter or on the web (full copy): http://www.mpwmd.dst.ca.us/Mbay_IRWM/MontereyPeninsulaIRWMP20071119.pdf

154. Monterey Regional Water Pollution Control Agency (MRWPCA). 2006. Profile of agency on web page. Available on the web: http://www.mrwpca.org

155. Monterey-Salinas Transit (MST). 2006a. Designing for Transit: A Manual for Integrating Public Transit and Land Use in Monterey County. CD ROM available at the front counter or on the web: http://www.mst.org/news/items/DesigningForTransit-web.pdf

156. _____. 2006b. Peninsula Area Service Study Final Report of Findings. CD ROM available at the front counter or on the web: http://www.mst.org/news/items/Final%20PASS%20Report.pdf

157. Moyle, Peter B. 2002. Moyle, P.B., 2002, Inland fishes of California (2d ed.): Berkeley, University of California Press, 502 p. Hard copy (excerpt used for DEIR) available at the front counter.

158. NatureServe. 2008. NatureServe Conservation Standard. Hard copy available at the front counter or on the web: http://www.natureserve.org/explorer/ranking.htm#interpret

159. Pajaro River Watershed Flood Prevention Agency. 2002. Phase 1 Final Report for the Pajaro River Watershed Study. Hard copy available at the front counter or on the web: http://www.pajaroriverwatershed.org/pages/pajaro2002.htm

160. ———. 2008. Pajaro River Watershed Study website. Hard copy available at the front counter or on the web: http://www.pajaroriverwatershed.org/pages/study.htm

161. Pajaro Valley Water Management Agency (PVWMA). 2001. Pajaro Valley Water Management Agency Revised Basin Management Plan EIR SCH# 2000062030. Available on the web: http://www.pvwma.dst.ca.us/basin_management_plan/bmp_documents.shtml

162. ———. 2002. Revised Basin Management Plan. Hard copy (excerpts used for the EIR) available at the front counter or on the web: http://www.pvwma.dst.ca.us/basin_management_plan/bmp_documents.shtml

163. ———. 2008a. Information page for the Watsonville Area Water Recycling Project. Hard copy available at the front counter or on the web: http://www.pvwma.dst.ca.us/project_planning/projects_recycling.shtml

164. ———. 2008b. Import Pipeline and the IRWMP Grant Process website. Hard copy available at the front counter or on the web: http://www.pvwma.dst.ca.us/project_planning/projects_import_pipeline.shtml

165. ———. 2008c. Coastal Distribution System 2006-2007 website. Hard copy available at the front counter or on the web: http://www.pvwma.dst.ca.us/project_planning/projects_cds_06-07.shtml

166. Pajaro Valley Water Management Agency, San Benito County Water District, Santa Clara Valley Water District. 2007. Pajaro River Watershed Integrated Regional Water Management Plan—IRWMP (2007). May 2007. Santa Clara, CA. CD ROM available at the front counter or on the web: http://www.pajaroriverwatershed.org/pages/pajaro2007

167. Perrazo, P R. 2007. Stone Quarries and Beyond: Monterey County. Hard copy available at the front counter or on the web: http://quarriesandbeyond.org/states/ca/quarry_photo/ca-monterey_photos.html#quarries_list

168. RBF Consulting. 2008. Proponent's Environmental Assessment for the Coastal Water Project. Prepared for California Public Utilities Commission. July. CD ROM available at the front counter.

169. Remsen, J. V., Jr. 1978. Bird species of special concern in California. Calif. Dept. Fish & Game, Wildlife Mgt. Branch Admin. Rpt. 78-1. Hard copy available at the front counter.

170. Resource Conservation District of Monterey County. 2008. NOTE: Same as Citation 136). Hard copy available at the front counter or on the web: http://www.rcdmonterey.org/Growers_Ranchers_Landowners/permit_services.html

171. Ricketts, T. H., E. Dinerstein, D. M. Olson, C. J. Loucks, W. M, Eichbaum, D. A Della sala, K. C. Kavanagh, P. Hedao, P. T. Hurley, K. M, Carney, R. A. Abell, and S. Walters. 1999. A Conservation Assessment of the Terrestrial Ecoregions of North America. Volume I—The United States and Canada. Island Press. Washington, D.C. Available on the web: http://books.google.com/books?hl=en&id=DRl_RhheUhQC&dq=A+Conservation+Assessment+of+the+Terrestrial+Ecoregions+of+North+America+Volume+1&printsec=frontcover&source=web&ots=WLWQkl11S5&sig=O-sEJVc9aOwi8cDnNs95SSk3jW8&sa=X&oi=book_result&resnum=5&ct=result

172. RMC. 2008. Monterey Regional Water Supply Program: EIR Project Description Proposed Alternative to a Desalination Facility at Moss Landing. Monterey, California. June 4, 2008. Hard copy available at the front counter or on the web: http://www.waterrights.ca.gov/Hearings/docs/caw/exhibits/pcl_3.pdf

173. San Francisco Baykeeper. 2008a. Saving the Delta Smelt. Hard copy available at the front counter or on the web: www.baykeeper.org/work/deltasmelt.html

174. ———. 2008b. Saving California's Salmon. Hard copy available at the front counter or on the web: www.baykeeper.org/work/salmon.html

175. San Joaquin Valley Air Pollution Control District (SJVUAPCD). 2007. 2007 Ozone Plan, Appendix K. Fresno, California. April 30, 2007. CD ROM available at the front counter or on the web: http://www.valleyair.org/Air_Quality_Plans/AQ_Final_Adopted_Ozone2007.htm

176. ———. 2008. "Rule 4694 Wine Fermentation and Storage Tanks." Hard copy available at the front counter or on the web: http://www.valleyair.org/rules/currntrules/r4694.pdf

177. Santa Barbara County Air Pollution Control District (SBCAPCD). 2008. Annual Winery Emissions Spreadsheet. Hard copy available at the front counter or on the web:: http://www.sbcapcd.org/eng/winery/winery.htm

178. State of California. 2005. Executive Order #S-3-05 by the Governor of the State of California. June. Hard copy available at the front counter or on the web: http://gov.ca.gov/index.php/executive-order/1861

179. State of California. 2006. Assembly Bill 32, The California Climate Solutions Act of 2006 (Health and Safety Code §38500 et seq.). September. Hard copy available at the front counter or on the web: http://www.leginfo.ca.gov/pub/05-06/bill/asm/ab_0001-0050/ab_32_bill_20060927_chaptered.html

180. Steele, Joanne. Employee. Volcanic Legacy Information Center, CA. November 3, 2003—email. Hard copy available at the front counter.

181. The Climate Impacts Group, King County, Washington, and ICLEI – Local Governments for Sustainability. 2007. Preparing for Climate Change: A Guidebook for Local, Regional, and State Governments. Written by Center for Science in the Earth System (The Climate Impacts Group) Joint Institute for the Study of the Atmosphere and Ocean University of Washington and King County, Washington in association with ICLEI – Local Governments for Sustainability. September. Available on the web: http://cses.washington.edu/cig/fpt/guidebook.shtml

182. The Climate Registry. 2008. The Climate Registry General Reporting Protocol. Version 3.0. Same as No. 28. CD ROM available at the front counter or on the web: http://www.climateregistry.org/resources/docs/protocols/grp/GRP_V3_April2008_FINAL.pdf

183. Transportation Agency of Monterey County (TAMC). 2008. Regional Impact Fee Nexus Study Update. March 26, 2008. Hard copy and CD Romavailable at the front counter, or on the web: http://www.tamcmonterey.org/programs/devimpfee/pdf/2008-0326_TAMC_Nexus_Study_Update.pdf

184. _____. 2005a. Monterey County Regional Transportation Plan. CD ROM available at the front counter or on the web: http://www.tamcmonterey.org/programs/rtp/pdf/2005_rtp/Final_Approved_RTP_folder/Final-Approved_RTP_Linked.pdf

185. _____. 2005b. General Bikeways Plan. CD ROM available at the front counter or on the web: http://www.tamcmonterey.org/programs/bikeped/pdf/TAMC_BikewaysPlan2005.pdf

186. Transportation Research Board. 2000. Highway Capacity Manual 2000, National Research Council. TRB Publishing. Hard copy (excerpt used in EIR) at the front counter.

187. U.S. Army Corps of Engineers (USACE) Environmental Laboratory. 1987. Corps of Engineers Wetlands Delineation Manual. Wetlands Research program Technical Report Y-87-1. U.S. Army Corps of Engineers, Washington, D.C. Available on the web: http://el.erdc.usace.army.mil/wetlands/pdfs/wlman87.pdf

188. U.S. Bureau of Land Management (BLM). 1980. Visual resource management program. (Stock No. 024-001-00116-6.) Washington, DC: U.S. Government Printing Office.). CD ROM available at the front counter.

189. U.S. Census Bureau. 1970, 1980, 1990, 2000 Census. Available on the web: http://census.gov. (To access the United States Census Bureau and census data in searchable format, type the web address into the address bar of your web browser. The web address is: http://www.census.gov/. Follow the links from the home page (e.g., Data Tools) to access census data).

190. ———. 2006. 2006 American Community Survey. Table C08301. Means of Transportation to Work – Universe: Workers 16 Years and Over. Hard copy available at the front counter or on the web: http://factfinder.census.gov/servlet/DTTable?_bm=y&-state=dt&-context=dt&-ds_name=ACS_2006_EST_G00_&-_geoSkip=0&-CONTEXT=dt&-mt_name=ACS_2006_EST_G2000_B08301&-tree_id=306&-_skip=0&-redoLog=false&-geo_id=05000US06053&-geo_id=NBSP&-search_results=01000US&-_showChild=Y&-format=&-_lang=en&-_toggle=ACS_2006_EST_G2000_B08301

191. U.S. Department of Agriculture (USDA). 2005. Land Management Plan: Part 2 Los Padres National Forest Strategy. Forest Service, Pacific Southwest Region. R5-MB-078. CD ROM available at the front counter.

192. ———. 1994–2004. Summary of County Agricultural Commissioner's Reports 1994, 1995, 1996, 1997, 1998, 1999, 2000, 2001, 2002, 2003, and 2004. Available on the web: http://www.nass.usda.gov/Statistics_by_State/California/Publications/AgCo

mm/indexcac.asp. Link to individual yearly summary reports is on the web page. Click on the individual years to access reports.

193. U.S. Department of Agriculture Soil Conservation Service. 1978. University of California Agricultural Experiment Station. Soil Survey of Monterey County. Available on the web: http://soildatamart.nrcs.usda.gov/manuscripts/CA053/0/monterey.pdf

194. U.S. Energy Information Administration (USEIA), Office of Oil and Gas. 2006. Table B1. Top 100 U.S. Fields as Ranked by Liquids Proved Reserves. Hard copy available at the front counter or on the web: www.eia.doe.gov/pub/oil_gas/natural_gas/data_publications/crude_oil_natural_gas_reserves/current/xls/appb.xls

195. U.S. Environmental Protection Agency (USEPA). 1995. Compilation of Air Pollutant Emission Factors AP-42, Volume 1, Section 9.12.2 Wines and Brandy. Research Triangle Park, NC. October. Hard copy (excerpts on wine processing emissions) available at the front counter or on the web (full document): http://www.epa.gov/ttn/chief/ap42/

196. ———. 2001. AirCHIEF. Version 9.0. (EPA 454/C-01-003) Research Triangle Park, NC: United States Environmental Protection Agency: Office of Air Quality Planning and Standards: Emissions, Monitoring, and Analysis Group: Emission Factor and Inventory Group. CD ROM available at the front counter. Version 12.0 is on CDROM.

197. 197a. U.S. Fish and Wildlife Service (USFWS). 2008a . Habitat Conservation Plans as of July 30, 2008. As of July 30, 2008, the list showed no HCPs in the Inland area of Monterey County covered by the 2007GP. Available on the web: http://ecos.fws.gov/conserv_plans/servlet/gov.doi.hcp.servlets.PlanReport?region=8&type=HCP&rtype=2&hcpUser=&view=report. One must review to list to see that the three HCPs in Monterey County are in the Coastal Zone.

197b. _____. 2008b. USFWS Species List for Monterey County. Hard copy available at the front counter.

198. _____. 2006. Comment Letter on the Draft 2006 Monterey County General Plan Environmental Impact Report. October 19. CD ROM available at the front counter (Final EIR for the 2006 General Plan, see reference 125).

199. U.S. Forest Service (USFS). 1995. Landscape aesthetics: A handbook for scenery management. (Agriculture Handbook Number 701). Excerpts. Hard copy available at the front counter.

200. ———. 2008a. Los Padres National Forest – Forest Plan. Hard copy (excerpts used in EIR) available at the front counter or on the web (full document) at: http://www.fs.fed.us/r5/lospadres/projects/lmp/

201. ———. 2008b. Los Padres National Forest-Wilderness Areas. Hard copy available at the front counter or on the web: http://www.fs.fed.us/r5/lospadres/recreation/wilderness/

202. U.S. Geological Survey (USGS). 1989. The Severity of an Earthquake, USGS General Interest Publication. Hard copy available at the front counter or on the web: http://pubs.usgs.gov/gip/earthq4/severitygip.html (U.S. Government Printing Office Number 1989-288-913)

203. ———2005. Groundwater Quality Data in the Monterey Bay and Salinas Valley Basins, California, 2005—Results from the California GAMA Program. Data Series 258. Prepared by Justin Kulopngoski and Kenneth Belitz, in cooperation with the State Water Resources Control Board. Available on the web: http://pubs.usgs.gov/ds/2007/258/index.html

204. ———. 2006. Historic United States Earthquakes, California. Hard copy available at the front counter or on the web: http://earthquake.usgs.gov/regional/states/historical_state.php#california

205. Urban Land Institute (ULI). 2008. Growing Cooler: The Evidence on Urban Development and Climate Change. Washington, DC. Hard copy (excerpts used in EIR) available at the front counter

206. West Yost Associates. 2005. Technical Memo No. 3. Prepared for the Napa County 2050 Napa Valley Water Resources Study as part of the Napa County General Plan Update. October 19. 2005. Hard copy available at the front counter or on the web: http://www.napawatersheds.org/docs.php?oid=13166&ogid=10610

207. Westerling, A., and B. Bryant. 2006. Climate change and wildfire in and around California: Fire modeling and loss modeling. Hard copy available at the front counter or on the web: http://www.energy.ca.gov/2005publications/CEC-500-2005-190/CEC-500-2005-190-SD.PDF

208. Williams, D. F. 1986. Mammalian Species of Special Concern in California. California Department of Fish and Game. CD ROM available at the front counter or on the web: http://esrp.csustan.edu/resources/publications/pdf/mammalian_scc_ca_esrp5.pdf

209. Zeiner, D. C., W. F. Laudenslayer, Jr., and K. E. Mayer. 1988. California's wildlife. Volume I. Amphibians and reptiles. California Statewide Wildlife Habitat Relationships System, California Department of Fish and Game, Sacramento, California. Available on the web: http://www.dfg.ca.gov/biogeodata/cwhr/cawildlife.aspx. Type in the particular amphibian or reptile species of interest to access information about that species.

210. Zeiner, D. C., W. F. Laudenslayer, Jr., K. E. Mayer, and M. White (eds). 1990a. California's Wildlife. Volume 2. Birds. State of California, Department of Fish and Game. Sacramento, California. 731pp. CD ROM available at the front counter or on the web: http://www.dfg.ca.gov/biogeodata/cwhr/cawildlife.aspx. Type in the particular bird species of interest to access information about that species.

211. ———. 1990b. California's Wildlife, Volume III Mammals. California Statewide Wildlife Habitat Relationships System. Available on the web: http://www.dfg.ca.gov/biogeodata/cwhr/cawildlife.aspx. Type in the particular mammal species of interest to access information about that species.