

Draft



Tulare County General Plan Update

Environmental Impact Report

Tulare County General Plan



December 2007

TULARE COUNTY GENERAL PLAN UPDATE

Draft Environmental Impact Report

Prepared for
Tulare County

December 2007

8950 Cal Center Drive
Building 3, Suite 300
Sacramento, CA 95826
916.564.4500
www.esassoc.com

Los Angeles

Oakland

Petaluma

Portland

San Diego

San Francisco

Seattle

Tampa

Woodland Hills



TABLE OF CONTENTS

Tulare County General Plan Update Draft Environmental Impact Report

	<u>Page</u>
Executive Summary	ES-1
Introduction	ES-1
Intended use of the EIR/Purpose of this EIR	ES-1
Location	ES-3
Project Description	ES-3
Summary of Draft General Plan Alternatives	ES-8
Reader's Guide to the Draft EIR	ES-10
Summary of Environmental Impacts and Mitigation Measures	ES-14
1. Introduction and Reader's Guide to the EIR	1-1
1.1 Purpose and Use of the EIR	1-1
1.2 Type of EIR	1-2
1.3 EIR Process	1-3
1.4 Reader's Guide to the Draft EIR	1-13
1.5 EIR Preparation	1-21
2. Project Description	2-1
2.1 Introduction	2-1
2.2 Project Setting	2-1
2.3 Project Description	2-2
3. General Plan Framework and Prosperity	3-1
3.1 Planning Framework	3-1
3.2 Economic Development	3-3
3.3 Agriculture	3-4
3.4 Land Use	3-12
3.5 Housing	3-27
4. Environment	4-1
4.1 Introduction	4-1
4.2 Scenic Landscapes	4-2
4.3 Environmental Resource Management	4-10
4.4 Air Quality and Global Climate Change	4-43
4.5 Health and Safety	4-68
4.6 Water Resources	4-103

	<u>Page</u>
5. Infrastructure	5-1
5.1 Introduction	5-1
5.2 Transportation and Circulation	5-2
5.3 Public Facilities and Services	5-22
6. Area and Community and Sub Area Plans	6-1
6.1 Rural Valley Lands Plan	6-1
6.2 Corridors	6-2
6.3 Foothill Growth Management Plan	6-2
6.4 Mountain Framework Plan	6-5
6.5 Community and Sub Area Plans	6-5
7. Alternatives to the General Plan Update	7-1
7.1 Overview	7-1
7.2 Factors Considered in Selection of Alternatives	7-2
7.3 Alternatives Selected for Further Consideration	7-3
7.4 Environmentally Superior Alternative	7-34
8. Additional Statutory Considerations	8-1
8.1 Growth Inducing Effects of the General Plan Update	8-1
8.2 Summary of Cumulative Impacts	8-4
8.3 Significant Unavoidable Adverse Impacts which could not be avoided if the Project was Implemented	8-13
8.4 Significant Irreversible Environmental Changes which would Result from the Proposed Action should it be Implemented	8-19
9. Report Preparation	9-1
10. References	10-1
 Appendices	
A. Notice of Preparation	A-1
B. Background Report	B-1
C. Goals and Policies Report	C-1
D. Air Quality Analysis	D-1
 List of Tables	
ES-1 Components of the Goals and Policies Report, Part 1	ES-4
ES-2 Population Growth and Distribution	ES-5
ES-3 Tulare County General Plan Framework Concepts	ES-6
ES-4 Summary of Impacts and Mitigation Measures	ES-15
1-1 Status of Tulare County General Plan Update EIR	1-3
1-2 Summary of Key Issues from Comments Received During the Public Review Period	1-4
1-3 Formatting of the Goals and Policies Report and EIR	1-15
1-4 Required Environmental Impact Report Contents and Organization	1-17

	<u>Page</u>
1-5 Summary of Environmental Criteria for Aesthetics	1-18
2-1 Tulare County Population and Housing Estimates (2006)	2-2
2-2 Summary of the Mandated Elements of the General Plan	2-3
2-3 Relationships between County's General Plan Part 1 Goals and Policies Report and the State-Mandated Elements	2-4
2-4 Tulare County General Plan Framework Concepts	2-5
2-5 Components of the Goals and Policies Report, Part 1	2-7
2-6 Population Growth and Distribution	2-8
3-1 Capacity Estimates	3-3
4-1 Recommended AB32 Greenhouse Gas Measures to be Initiated by CARB Between 2007 and 2012	4-45
4-2 Tulare County Onroad Vehicle and Dairy/Feedlot Operational Emissions (Tons Per Year)	4-50
4-3 Noise Levels Generated by Typical Construction Equipment	4-95
4-4 General Plan Population Estimates by Unincorporated Community	4-106
4-5 Summary of Domestic Water Supply Conditions for Unincorporated Communities in Tulare County	4-107
5-1 LOS Methodology	5-4
5-2 Summary of Regional Interchange Projects	5-6
5-3 General Plan Update Roadway Segment Analysis	5-8
5-4 Summary of Sanitary Sewer Service for Unincorporated Areas of Tulare County	5-25
5-5 Year 2030 Wastewater Treatment Capacity Needs	5-36
5-6 Advantages and Disadvantages of Regional (Community-Wide) Storm Water Management	5-44
7-1 Summary of Key Components for Each Alternative	7-3
7-2 Summary of the Alternatives Ability to Meet the Project Objectives	7-4
7-3 Summary of Alternatives (Comparison of Impacts with the General Plan Update Level of Significance)	7-5
8-1 TCAG Population Projections 2003 to 2030	8-3

Executive Summary



EXECUTIVE SUMMARY

Introduction

This draft environmental impact report (EIR) is designed to assess the environmental impacts of the proposed Tulare County General Plan 2030 Update (General Plan Update), which includes the Preferred Land Use Alternative. Tulare County will act as the CEQA lead agency. The information contained in this EIR will be used to inform local decision makers and the general public of any significant environmental impacts associated with the General Plan Update, and assist County officials in reviewing and adopting the General Plan Update. As described below, this EIR will also be used as a first-tier environmental document for the subsequent environmental review of a variety of County projects including future specific plans, infrastructure improvements, general plan amendments, and other local development projects.

This chapter presents a summary of the draft EIR. As part of this summary, the chapter provides an overview of the General Plan Update, identifies the impacts and mitigation measures associated with the analysis, and identifies other impact conclusions required by the California Environmental Quality Act (CEQA).

Intended use of the EIR/Purpose of this EIR

CEQA requires that all state and local governmental agencies consider the environmental consequences of programs and projects over which they have discretionary authority before taking action on them. CEQA also requires each public agency to mitigate or avoid significant environmental effects resulting from proposed programs/projects, and to identify alternatives to the proposed program/project that could reduce or avoid those environmental effects.

The CEQA Guidelines provide information on the types of environmental analysis that can be used to analyze a project, and one of these is a Program EIR. According to the CEQA Guidelines (Section 15168[a]), a local agency may prepare a Program-level EIR to address a series of actions that can be characterized as one large project or series of actions, that are linked geographically, logical parts of a chain of contemplated events, rules, regulations, or plans that govern the conduct of a continuing program, or individual activities carried out under the same authorizing statutory or regulatory authority and having generally similar environmental effects that can be mitigated in similar ways.

This EIR has two primary purposes:

- The EIR will assist the County in complying with CEQA requirements for the analysis of environmental impacts by including a complete and comprehensive evaluation of the physical impacts of the General Plan Update and its alternatives.
- The EIR will inform interested stakeholders (including local residents) and members of the Board of Supervisors and Planning Commission of the environmental impacts prior to the County Planning Commission making its recommendations and the Board of Supervisors taking action on the General Plan Update.

Additionally, the EIR is intended to identify ways to minimize significant effects of the General Plan Update and describes reasonable alternatives to the General Plan Update that would avoid or reduce the General Plan Update's significant effects (State CEQA Guidelines Section 15121[a]).

The General Plan Update includes the Goals and Policies Report (see Appendix C) which consists of policies and implementation measures to guide the future growth of the County within its defined planning area (see Chapter 2, Project Description for a discussion of the proposed planning boundaries). This Draft EIR evaluates the potential impacts resulting from adoption and implementation of the General Plan Update. The information contained in this EIR will be used to inform local decision makers and the general public of the potentially significant environmental impacts associated with the General Plan Update and to assist County officials in reviewing and considering adoption of the General Plan Update or one of the alternatives. This EIR will also be used as a first tier (or "program") environmental document for subsequent environmental review of specific plans, infrastructure improvements, general plan and zoning amendments, impact fees, and other local development proposals.

Additionally, Section 15146(b) of the CEQA Guidelines states that an EIR on a project such as the adoption or amendment of a local general plan "should focus on the secondary effects that can be expected to follow from the adoption or amendment, but the EIR need not be as detailed as an EIR on the specific construction projects that might follow." The purpose of this EIR is to provide analysis on the effects that can be expected from implementation of the General Plan Update, but will not provide detail on the impacts of specific construction projects that might follow.

As readers will see in reviewing this document, various chapters refer readers not only to the above-described Goals and Policies Report, which contains numerous policies that function like mitigating measures governing future actions consistent with the General Plan, but also to another General Plan document as well: the "General Plan Background Report". This latter, highly informative document, included in a separately bound volume as Appendix B, includes a great deal of information relevant to the environmental settings for various impact topics, in addition to providing relevant information to the EIR impact discussions. In order to avoid undue repetition and to avoid creating an overwhelming amount of paper for members of the public and decision-makers to sort through, this document frequently incorporates by reference or briefly summarizes information from both the Background and Goals and Policies Reports. Because of the

interrelatedness of the EIR and these two General Plan documents, readers should consider all three documents as contributing to the County's CEQA compliance for the proposed General Plan Update.

Location

The County of Tulare is bordered by Fresno County to the north and Kern County to the south. Kings County is located on the west side of Tulare County while Inyo County borders the County to the east. The crest of the Sierras forms the boundary with Inyo County. The northern border of Tulare County is an irregular line that passes just south of the City of Reedley and State Route 180. The southern border is a consistent east-west trending line, comprising the south standard parallel south of Mount Diablo, located north of the City of Delano. The western border generally trends north-south in a straight-line north and south just east of Corcoran. Along the eastern border is Inyo County.

Tulare County is located in a geographically diverse region with the majestic peaks of the Sierra Nevada framing its eastern region, while its western portion includes the San Joaquin Valley floor, which is very fertile and extensively cultivated. Tulare and Fresno Counties consistently rank as the top leading agricultural-producing counties in the U.S. In addition to its agricultural production, the County's economic base also includes agricultural packing and shipping operations. Small and medium size manufacturing plants are located in the western part of the county and are increasing in number. Tulare County also contains various well known parks and open space areas including portions of Sequoia National Forest, Sequoia National Monument, Inyo National Forest, and Kings Canyon National Park. Sequoia National Park is entirely contained within the County.

Tulare County contains more than 4,935 square miles (3,158,400 acres) within its' borders and can be divided into three general topographical zones: a valley region; a foothill region east of the valley area; and a mountain region just east of the foothills. The eastern half of the County is generally comprised of public lands, which include not only the parks listed above, but also the Mountain Home State Forest, Golden Trout Wilderness area, and portions of the Dome Land and south Sierra Wilderness areas. The County also contains one state park and one wildlife refuge. Colonel Allensworth State Historical Park, located in the southwestern corner of the county, provides picnic and camping areas. The Pixley National Wildlife Refuge provides habitat for the endangered blunt-nosed leopard lizard, the San Joaquin kit fox, the Tipton Kangaroo rat, as well as a wintering area for migratory waterfowl.

Project Description

The General Plan Update consists of a comprehensive update of the County's existing General Plan. Key General Plan documents include the Goals and Policies and the Background Reports. The Goals and Policies Report contains the goals and policies that will guide future decisions within the County. It also identifies implementation measures that will ensure the goals and policies of the General Plan Update are carried out. This section identifies how the Goals and Policies Report is organized and provides a summary of its content.

General Plan Organization

The Goals and Policies Report sets out a hierarchy of goals, policies, and implementation measures designed to guide future development in the county. To provide a comprehensive and easy-to-use format, Part I of the Goals and Policies Report is divided into four components. Each component contains a set of related elements that have been grouped together based on the close relationship of those elements.

Each component will start with an overview of the elements contained in that component and present the guiding principles used in the preparation of these elements. The individual elements will build on these guiding principles, with each element containing a set of goals, policies, and implementation measures that will be used to guide the future of the County. All four components and the various elements that comprise each component are summarized below in Table ES-1.

**TABLE ES-1
COMPONENTS OF THE GOALS AND POLICIES REPORT, PART I**

Component	Chapter and Element
Component A. General Plan Framework	This component introduces the Goals and Policies Report, provides a profile of Tulare County and establishes a Planning Framework Element for the County. Contents include: Introduction Chapter 1 Tulare County Overview Chapter 2 Planning Framework Element
Component B. Prosperity	This component includes the elements that shape the County's land use and economic futures. Contents include: Chapter 3 Economic Development Element Chapter 4 Agriculture Element Chapter 5 Land Use Element Chapter 6 Housing Element
Component C. Environment	This component covers topics related to natural and cultural resources and public health and safety. Contents include: Chapter 7 Scenic Landscapes Element Chapter 8 Environmental Resources Management Element Chapter 9 Air Quality Element Chapter 10 Health and Safety Element Chapter 11 Water Resources Element
Component D. Infrastructure	This component covers the infrastructure systems necessary to ensure adequate services and capacity of desired growth. Contents include: Chapter 12 Transportation and Circulation Chapter 13 Public Facilities and Services

Within each of the elements identified in Table ES-1, goals and policies are numbered according to the topic they address and can include a one-, two-, or three-letter acronym that identifies each element. This acronym is used to identify all goals and policies in a given element, and is used to identify which policy and implementation measures go together. For example, goals and policies for Land Use have the acronym "LU."

Population Growth Assumptions

Future development in Tulare County will be driven by population growth and the distribution of that growth throughout the County. Based on projections provided by the Tulare County Association of Governments and the State Department of Finance, the population of Tulare County is expected to reach 621,549 in 2030. The General Plan Update assumes that a majority of the future population growth in the County will occur within the incorporated cities (established Urban Development Boundaries). To a lesser degree, there will also be projected population growth in the unincorporated communities and hamlets. Table ES-2 outlines the expected population growth in Tulare County and the percentages of population growth expected to occur between the Urban Development Boundaries and the County. Approximately 75% of the population growth is expected to occur within the Urban Development Boundaries of incorporated cities throughout the County. The remaining population growth will be directed towards unincorporated communities, hamlets and development corridors. These future growth assumptions are consistent with several of the General Plan objectives specific to growth issues.

**TABLE ES-2
POPULATION GROWTH AND DISTRIBUTION**

City/County	Percentage of Population (2006)	Percent of Net New Growth	2000-2003 Net New Growth	2030 Population Estimate	2030 Population Distribution
Cities (UDB)	63%	75.0%	190,545	450,934	72.5%
Unincorporated County	37%	25.0%	63,564	170,615	27.5%
Total		100.0%	254,109	621,549	100.0%

Source: TCAG 2003 Databook; CA DOF, 2004; Mintier & Associates; Matrix Design Group

General Plan Land Use Designations

As of 2006, Tulare County encompasses over 4,661 square miles of classified lands (lands with identified uses). Resource conservation areas, which include wilderness, national forests, monuments and parks, along with County parks, make up 52 percent of the County, the largest classification found in the County. Agricultural uses, which include row crops, orchards, dairies, and grazing lands on the Valley floor and in the foothills total over 2,071 square miles or about 43 percent of the entire county. Urban uses such as incorporated cities, communities, hamlets, other unincorporated urban uses, and infrastructure rights-of-way make up the remaining land in the County.

Although the General Plan Update is considered a comprehensive update of the existing General Plan, there are few changes to the overall intent of the previous document. One of the changes that will occur as a result of implementation of the General Plan Update is an update and consolidation of the general plan land use designations. This change is intended to broaden the range of planning and redevelopment tools available to the County, and to create a more simplified, common set of land use designations that will be consistently applied in all future County planning efforts. The revised, uniform set of land use and development standards will be used in all updates and new planning efforts including the General Plan, Area Plans, Community Plans, Hamlet Plans, County adopted City General Plans, and future adopted Corridor Plans.

General Plan Update Objectives

Although the General Plan Update was developed to meet several fairly broad objectives (i.e., meet the requirements of State law, etc.) the proposed General Plan was also developed to reflect the specific policy needs of Tulare County. To help determine what these specific policy needs were, the Tulare County Board of Supervisors considered the input received from the various community workshops, the Planning Commission, and the Technical Advisory Committee on the fundamental values that would guide the preparation of the proposed General Plan Update. As a result of this input the following five value statements were identified:

- The beauty of the County and the health and safety of its residents will be protected and enhanced.
- The County will create and facilitate opportunities to improve the lives of all County residents.
- The County will protect its agricultural economy while diversifying employment opportunities.
- Every community will have the opportunity to prosper from economic growth.
- Growth will pay its own way providing sustainable, high quality infrastructure and services.

From these value statements, four framework concepts (see Table ES-3 below) were developed for the General Plan.

**TABLE ES-3
TULARE COUNTY GENERAL PLAN FRAMEWORK CONCEPTS**

Concept 1: Agriculture

One of the most identified assets in Tulare County is the rich agricultural land on the Valley floor and in the foothills. The General Plan identifies agriculture not only as an economic asset to the County but also as a cultural, scenic, and environmental element to be protected.

Concept 2: Land Use

Tulare County has a number of communities and hamlets that will grow and develop and natural resource lands (agriculture and open space) that will be preserved. It is anticipated that much of the projected population growth will require a range of housing choices, neighborhood support services, and employment producing uses that are centrally located in cities and communities. The County will also limit the conversion of agricultural and natural resource lands to urban uses.

Concept 3: Scenic Landscapes

The scenic landscapes in Tulare County will continue to be one of its most visible assets. The Tulare County General Plan emphasizes the enhancement and preservation of these resources as critical to the future of the County. The County will continue to assess the recreational, tourism, quality of life, and economic benefits that scenic landscapes provide and implement programs that preserve and use this resource to the fullest extent.

Concept 4: Natural and Cultural Resources

As Tulare County develops its communities and hamlets, the County will ensure that development occurs in a manner that limits impacts to natural and cultural resources through proper site planning and design techniques. Development will be avoided in naturally and culturally sensitive areas wherever possible.

From these framework concepts several guiding principles were identified, which set the foundation for the various goals, policies, and implementation measures that comprise the various elements of the proposed General Plan. These guiding principles also serve as the objectives of the General Plan Update. These objectives consist of the following:

- Provide opportunities for small unincorporated communities to grow or improve quality of life;
- Promote reinvestment in existing communities and hamlets in a way that enhances the quality of life in these locations;
- Protect the County's important agricultural resources and scenic natural lands from urban encroachment;
- Strictly limit rural residential development in important agricultural areas outside of communities, hamlets, and cities (i.e., avoid rural residential sprawl);
- Allow existing, outdated agricultural facilities in rural areas to be used for new businesses (including non-agricultural uses) if they provide employment; and
- Enhance planning coordination and cooperation with the agencies and organizations with land management responsibilities in and adjacent to Tulare County.

Buildout under the General Plan Update

This EIR assumes that overall buildout of the General Plan will occur by 2030. It is assumed that a majority of the development will occur within cities and, to a much lesser extent, within unincorporated communities, hamlets, and development corridors. Development under the General Plan Update will be incremental and timed in response to market conditions in a climate where major infrastructure investments by the public and private sectors are a necessary precursor to enable growth. While the proposed General Plan Update includes policies intended to control the amount and location of new growth (for example encouraging a re-orientation of new agricultural related industrial and commercial uses to within Urban and Hamlet Development Boundaries), it does not solidly advocate, promote or represent any one development scenarios because any attempt to predict the exact pace and locations of future market-driven growth is considered speculative. Appropriate locations for market driven growth may be considered appropriate within the County, as guided by the policies established by this General Plan.

Summary of Draft General Plan Alternatives

Alternative 1: No-Project Alternative

Section 15126.6(e) of the CEQA Guidelines requires that an EIR evaluate and analyze the environmental impacts of the “No-Project” Alternative. When the project is the revision of an existing land use or regulatory plan or policy, the no-project alternative will be the continuation of the existing plan or policy into the future. Therefore, Alternative 1 (No-Project or Existing General Plan) analyzes the effects of continued implementation of the County’s existing General Plan (with some features not having been updated since 1964), which would remain as the adopted long-range planning policy document for the County. Consequently, current development patterns would continue to occur in accordance with the existing General Plan, Development Code, and Community/Area Plans. Continued implementation of the No-Project Alternative would also not likely result in as large a buildout population as that provided under the General Plan Update and would not include any of the new policies and implementation measures designed to address the environmental impacts of future County development.

Alternative 2: City-Centered Alternative

Similar to the General Plan Update, Alternative 2 assumes that all of the proposed policies and implementation measures contained in the Goals and Policies Report for the updated General Plan would be included as part of this alternative. However, unlike the General Plan Update, the focus of growth under Alternative 2 is within existing urban areas (cities). New development (i.e., residential/commercial growth) is to be concentrated in areas already committed to a degree of urban development and have provisions for some utility/road infrastructure or adequate levels of public services. This alternative assumes that incorporated cities would increase the density of development within the city and develop contiguous land adjacent to the city to accommodate growth. Under this alternative, slower development patterns are assumed to continue through the entire 2030 planning horizon, with the unincorporated population being slightly lower than that anticipated under the General Plan Update (see Table 7-1).

Alternative 3: Rural Communities Alternative

Similar to the General Plan Update, Alternative 3 assumes that all of the proposed policies and implementation measures contained in the Goals and Policies Report for the updated General Plan would be included as part of this alternative. However, unlike the General Plan Update, the focus of growth under Alternative 3 is an assumption that existing levels and patterns of growth would continue to occur within the County over the planning horizon of the updated General Plan. Specifically, future growth would be directed towards the County’s unincorporated communities, while growth in rural areas would be limited to accept only 5% of new population. Under this alternative, these growth patterns are assumed to continue through the entire 2030 planning horizon, with total unincorporated population being slightly higher than that anticipated under the General Plan Update (see Table 7-1).

Alternative 4: Transportation Corridors Alternative

Similar to the General Plan Update, Alternative 4 assumes that all of the proposed policies and implementation measures contained in the Goals and Policies Report for the updated General Plan would be included as part of this alternative. However, unlike the General Plan Update, the focus of growth under Alternative 4 is an assumption that cities and communities along Highways 99 and 65 would accept additional population by increasing the densities and developing contiguous land within their Urban Development Boundary (UDB) or Urban Area Boundary (UAB). These communities and cities would also continue to provide sites for urban commercial services and industry. The needs of other unincorporated communities would not be ignored. Better housing, services, and infrastructure would be developed for rural communities to adequately meet the needs of future growth. Under this alternative, these growth patterns are assumed to continue through the entire 2030 planning horizon, with total unincorporated population being slightly higher than that anticipated under the General Plan Update (see Table 7-1).

Alternative 5: Confined Growth Alternative

Similar to the General Plan Update, Alternative 5 assumes that all of the proposed policies and implementation measures contained in the Goals and Policies Report for the updated General Plan would be included as part of this alternative. This alternative was developed based on comments from the Citizens for Responsible Growth and the American Farmland Trust. The primary objective of this alternative is to minimize significant and unavoidable impacts to agriculture. Unlike the General Plan Update, growth under Alternative 5 would be directed to occur within established Urban Development Boundaries (UDB) and Hamlet Boundaries. A key assumption of Alternative 5 is that boundary expansion would only be allowed under a “no net gain” scenario. A “no net gain” scenario could allow modifications to the “hard boundaries”, which are defined by the UDBs and Hamlet Boundaries, only if these are offsetting equivalent deductions in boundaries elsewhere. Another opportunity for adjustments to boundaries could occur through transferring UDB capacity between cities and communities. Under this alternative, these growth patterns are assumed to continue through the entire 2030 planning horizon, with total unincorporated population being similar to the anticipated population under the General Plan Update (see Table 7-1).

Some land use strategies that could be required under this alternative would be greater land use efficiency standards for development on important farmlands, promoting increased densities within developed areas, and creating mixed use areas. Expansion of UDBs or Hamlet Boundaries without offsets would only be allowed under extenuating circumstances. Criteria for expansions might include:

- Mandatory agriculture impact fees for important farmlands added to Urban Development Boundaries.
- Significant job generation projects or projects of regional importance (such as a four year college).

- Regional growth corridors which involve high density mixed use as well as commercial or industrial opportunities.
- Boundary adjustments where Master Planning efforts demonstrate exemplary land use efficiency standards above and beyond base standards.
- Boundary expansion is consistent with the San Joaquin Valley Regional Blueprint.

However, no boundary adjustments would be permitted unless it can be demonstrated that land use efficiency standards (to be set in the General Plan 2030) have been or can be met. No new towns would be allowed on important farmland unless equivalent capacity is transferred from UDBs or Hamlet Development Boundaries through mechanisms such as purchase and transfer of development rights to offset the loss of important farmland.

The hard boundaries concept would link well with the intent of the San Joaquin Valley Regional Blueprint to protect important agricultural resource areas and natural habitats. County cooperation with and input from LAFCO, municipalities, and special districts is integral in implementing the County's General Plan and achieving the goals of this alternative.

Reader's Guide to the Draft EIR

To assist the reader in understanding both the organization and content of this EIR, a "Reader's Guide to the EIR" has been prepared to introduce the reader to the basic concepts of the General Plan Update, help the reader understand the organization of the document, and understand the key assumptions that went into preparation of the EIR analysis. This section provides a summary of several of these basic concepts with additional detail provided in Chapter 1 "Introduction and Reader's Guide" of the EIR.

Issues Addressed in the EIR

As part of the CEQA process for the General Plan Update, an NOP was prepared and circulated for public comment. On the basis of the analysis provided in the NOP and public input, the scope of environmental resources and issues to be addressed in this EIR was established. To help ensure that this EIR evaluates all topics that may be significantly affected by the General Plan Update, the topics in the NOP were again reviewed during preparation of the EIR. As previously mentioned, a copy of the NOP is provided as Appendix A of this EIR.

Terminology Used in the EIR

For each impact identified in this EIR, a statement of the level of significance of the impact is provided. Impacts are categorized in one of the following categories:

- A project impact is considered **beneficial** if it will result in the improvement of a physical condition in the environment (no mitigation required).

- A project impact is considered **less than significant** when it does not reach the standard of significance and, therefore, would cause no substantial change in the environment. No mitigation is required for less-than-significant impacts.
- A **significant impact** is a substantial, or potentially substantial, adverse change in the environment. Physical conditions in the area will be directly or indirectly affected by the General Plan Update. Impacts may be direct or indirect and short-term or long-term. A project impact is considered significant if it reaches or exceeds the threshold of significance identified in the EIR. Mitigation measures may reduce a potentially significant impact to a less-than-significant impact.
- A **significant unavoidable impact** occurs when even with the adoption of all feasible mitigation measures a significant impact cannot be avoided or mitigated to a less-than-significant level should the project be implemented.

The impact assessment provided in this EIR is divided into a number of individual impact statements that deal with specific topics. For example:

- **Impact ERM-15:** The General Plan Update would cause a substantial adverse change in the significance of a unique archaeological resource as defined in Section 15064.5 and/or disturb any human remains, including those interred outside of formal cemeteries.

Following each impact statement is a discussion of the potential impact and the General Plan policies and implementation measures that would help to mitigate this impact. Following each impact statement, a summary table identifying each impact's level of significance and the key policies that were modified to mitigate the impact is provided.

The draft EIR also identifies mitigation measures. The CEQA Guidelines (Section 15370) define mitigation as:

- 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 impacted environment.
- Reducing or eliminating the impact over time by preservation and maintenance operations during the life of the action.
- Compensating for the impact by replacing or providing substitute resources or environments.

Overall EIR Approach and Assumptions

This EIR is a complete EIR with updated information on the Study Area's environmental setting from the General Plan Background Report (October 2004, updated July 31, 2007), impact analysis, mitigation measures, and evaluation of a range of project alternatives. The General Plan Background Report is provided as Appendix B of this EIR.

As more fully described above under Section 1.3, Type of EIR, this EIR has been prepared as a Program EIR. As a Program EIR, this document focuses on the overall effects of the project. However, the analysis does not examine in detail the localized effects of potential site-specific projects that may occur under the overall umbrella of this program in future years. In fact, this EIR assumes that specific development projects and infrastructure improvement proposals submitted to the County may necessitate an independent environmental analysis in accordance with the requirements of CEQA. (For possible means of streamlining such review, see Section 1.3.) The nature of general plans is such that many proposed policies are intended to be general, with details to be later determined during the implementation phases of the general plan. Consequently, many of the impacts and mitigation measures can only be described in general or qualitative terms.

CEQA mandates that lead agencies adopt MMRPs for projects identified as having significant impacts where mitigation measures have been identified to reduce the impacts to a less-than-significant level. MMRPs are intended to ensure compliance during project implementation. These programs provide the additional advantages of providing staff and decision-makers with feedback as to the effectiveness of mitigation measures, as well as the experience and information to shape future mitigation measures. The Mitigation Monitoring and Reporting Plan (MMRP) for this document will be accomplished through the annual review set forth in PF 7-1.

The proposed General Plan Update is intended to be self-mitigating, in that the policies and implementation measures are designed to mitigate environmental impacts. This EIR clearly identifies how the impacts of future development in Tulare County will be mitigated through the implementation of the policies and measures of the project. A significance criterion is an identifiable quantitative, qualitative, or performance level of a particular significant environmental effect that, if exceeded, indicates that the impact is considered to be significant.

The analysis provided in the EIR is based on the following key assumptions:

- **Full Implementation.** This EIR assumes that all policies in the proposed General Plan will be fully implemented and all future development will be consistent with the population/employment projections used in developing the future growth scenario for the County's various area plans (i.e., Valley, Corridor, Foothill, and Mountain areas). The County's overall planning area also includes land within the Kings River and Mountain Sub-Area plans and the various community plans. However, no changes are proposed for these plans as part of the General Plan Update.
- **Buildout in 2030.** This EIR assumes that overall buildout of the project will occur by 2030. It is assumed that a majority of the development will occur within cities and, to a much lesser extent, within unincorporated communities and hamlets.

Development under the project will be incremental and timed in response to market conditions dependent upon infrastructure capabilities. While the proposed General Plan Update includes policies intended to guide the amount and location of new growth, it does not include interim phases (development scenarios) because any attempt to predict the exact pace and locations of market-driven growth is considered unreasonably speculative.

Documents Incorporated By Reference

Section 15150 of the CEQA Guidelines permits documents of lengthy technical detail to be incorporated by reference in an EIR. Specifically, Section 15150 states that an EIR may “incorporate by reference all or portions of another document which is a matter of public record or is generally available to the public” Incorporated documents are to be briefly summarized in the EIR and made available to the public for inspection or reference. The General Plan Update EIR incorporates by references the documents noted below, several of which are provided as appendices to this EIR or are available at the County of Tulare, Resource Management Agency, 5961 South Mooney Boulevard, Visalia, CA 93277. Summaries of important parts of these documents will be provided throughout this EIR in appropriate places.

- **Background Report.** This report provides a detailed description of the conditions that existed within the Planning Area during the development of the General Plan. For the Tulare County General Plan, the Background Report reflects conditions within the Planning Area in 2005.
- **General Plan Goals and Policies Report.** This report contains the current set of goals, policies, and implementation measures that will guide future land use decisions within the County. This goals and policies report has been updated to include several additional policies or suggestions received from County stakeholders.
- **General Plan Policy Matrix.** This report organizes extensive comments on the November 2006 Draft Goals and Policies Report, received from Tulare County residents, Technical Advisory Committee members, RMA staff, the Tulare County Planning Commission, and the Tulare County Agricultural Advisory Committee. Staff comments also constitute a major part of the matrix comments including issues that were not yet addressed as raised during study sessions with the Board of Supervisors, other County advisory bodies, and as a result of coordination meetings with many County departments and divisions. This document will serve to explain the rationale basis for many of the policies, and will be a valuable tool for users of the General Plan in coming years.
- **Policy Alternatives Report.** This report discusses the major planning issues facing the County and alternative approaches to address these issues. The report distills the input of the public, members of the Tulare County Board of Supervisors and Planning Commission, the General Plan Technical Advisory Committee (TAC), and County staff.

Summary of Environmental Impacts and Mitigation Measures

Table ES-4 presents a summary of impacts and mitigation measures identified in this EIR including those proposed in this EIR. It is organized to correspond with the environmental issues discussed throughout the EIR. The table is arranged in four columns: 1) environmental impacts; 2) mitigation measure; 3) significance before mitigation; and 4) significance after mitigation.

**TABLE ES-4
SUMMARY OF IMPACTS AND MITIGATION MEASURES**

Environmental Impact		Mitigation Measure			Level of Significance	Level of Significance
					Before Mitigation	After Mitigation
Less than Significant = LS	Beneficial = B	Significant = S	Cumulative Significant = CS	Significant and Unavoidable = SU	Potentially Significant = PS	N/A = Not Applicable
CHAPTER 3 TULARE COUNTY PROSPERITY						
3.3 AGRICULTURE						
Impact AG-1	The General Plan Update could result in the substantial conversion of important farmland to non-agricultural uses.	Policies designed to conserve agricultural resources within the County include the following: AG-1.1 Primary Land Use AG-1.2 Coordination AG-1.3 Williamson Act AG-1.4 Williamson Act in UDBs and HDBs AG-1.5 Substandard Williamson Act Parcels AG-1.7 Preservation of Agricultural Lands AG-1.8 Agriculture Within Urban Boundaries AG-1.9 Agricultural Preserves Outside Urban Boundaries AG-1.10 Extension of Infrastructure Into Agricultural Areas AG-1.11 Agricultural Buffers AG-1.12 Ranchettes AG-1.13 Agricultural Related Uses AG-1.14 Right-to-Farm Noticing Policies designed to promote the continued productivity and employment of agricultural resources within the County include the following: AG-2.1 Diversified Agriculture AG-2.2 Market Research AG-2.3 Technical Assistance AG-2.4 Crop Care Education AG-2.5 High-Value-Added Food Processing AG-2.6 Biotechnology and Biofuels AG-2.8 Agricultural Education Programs AG-2.9 Global Marketing AG-2.10 Regional Transportation AG-2.11 Energy Production ED-2.10 Supporting Agricultural Industry Implementation measures designed to protect and conserve agricultural resources within the County include the following: Agriculture Implementation Measure #1 (and 1A & 1B) Agriculture Implementation Measure #2 (and 2A) Agriculture Implementation Measure #3 Agriculture Implementation Measure #4 (and 4A-4C) Agriculture Implementation Measure #5			PS	SU

**TABLE ES-4
SUMMARY OF IMPACTS AND MITIGATION MEASURES**

Environmental Impact		Mitigation Measure		Level of Significance Before Mitigation	Level of Significance After Mitigation	
Less than Significant = LS	Beneficial = B	Significant = S	Cumulative Significant = CS	Significant and Unavoidable = SU	Potentially Significant = PS	N/A = Not Applicable
						Agriculture Implementation Measure #6 Agriculture Implementation Measure #7 Agriculture Implementation Measure #8 ED Implementation Measure #4 ED Implementation Measures #4A ED Implementation Measure #4B Policies designed to promote future development patterns within areas of existing development include the following: AG-1.15A Schools in Agricultural Zones LU-1.8 Encourage Infill Development LU-2.1 Agricultural Lands LU 2.2 Agricultural Parcel Splits LU-2.5 Residential Agriculture Uses LU-2.6 Agricultural Support Facilities LU-2.6A Industrial Development LU-2.7 Timing of Conversion from Urban Reserve LU-2.8 Merger of Sub Standard Agricultural Parcels ERM-5.15 Open Space Preservation Similar policies designed to conserve and encourage the continued economic value of agricultural resources within the various planning areas include the following: RVLP-1.1 Development Intensity RVLP-1.2 Existing Parcels and Approvals RVLP-1.4 Determination of Agriculture Land C-1.5 Agricultural Enterprises F-1.12 Development in Success Valley F-6.1 Protect Agricultural Lands M-1.9 Agricultural Preserves Policy AG-1.6 Conservation Easements. The County shall utilize an Agricultural Conservation Easement Program to help protect and preserve agricultural lands, as defined in this Element. This program shall require payment of an in-lieu fee sufficient to purchase a farmland conservation easement, farmland deed restriction, or other farmland conservation mechanism as a condition of approval for conversion of agricultural land to nonagricultural use. The in-lieu fee or other conservation mechanism shall recognize the importance of land value and shall require equivalent mitigation. This may include the use of a variable standard that requires a commitment to preserve

**TABLE ES-4
SUMMARY OF IMPACTS AND MITIGATION MEASURES**

Environmental Impact		Mitigation Measure		Level of Significance Before Mitigation	Level of Significance After Mitigation	
Less than Significant = LS	Beneficial = B	Significant = S	Cumulative Significant = CS	Significant and Unavoidable = SU	Potentially Significant = PS	N/A = Not Applicable
Impact AG-2	The General Plan Update could conflict with existing zoning for agricultural use, or conflict with existing Williamson Act contracts.			<p>fewer acres if the land to be preserved is threatened by development and a greater number of acres to be preserved if the land to be preserved is removed from development pressures. [New Policy – Modified Draft EIR Analysis]</p> <p>Policies designed to conserve agricultural resources within the County include the following:</p> <ul style="list-style-type: none"> AG-1.1 Primary Land Use AG-1.2 Coordination AG-1.3 Williamson Act AG-1.4 Williamson Act in UDBs and HDBs AG-1.5 Substandard Williamson Act Parcels AG-1.6 Conservation Easements AG-1.7 Preservation of Agricultural Lands AG-1.8 Agriculture Within Urban Boundaries AG-1.9 Agricultural Preserves Outside Urban Boundaries AG-1.10 Extension of Infrastructure Into Agricultural Areas AG-1.11 Agricultural Buffers AG-1.12 Ranchettes AG-1.13 Agricultural Related Uses AG-1.14 Right-to-Farm Noticing <p>Implementation measures designed to protect and conserve agricultural resources within the County include the following:</p> <ul style="list-style-type: none"> Agriculture Implementation Measure #1 (and 1A & 1B) Agriculture Implementation Measure #2 (and 2A) Agriculture Implementation Measure #3 Agriculture Implementation Measure #4 (and 4A-4C) Agriculture Implementation Measure #5 Agriculture Implementation Measure #6 Agriculture Implementation Measure #7 Agriculture Implementation Measure #8 ED Implementation Measure #4 ED Implementation Measures #4A ED Implementation Measure #4B <p>Policies and Implementation Measures designed to promote future development patterns within areas of existing development include the following:</p> <ul style="list-style-type: none"> AG-1.15A Schools in Agricultural Zones LU-1.8 Encourage Infill Development LU-2.1 Agricultural Lands 	LS	N/A

**TABLE ES-4
SUMMARY OF IMPACTS AND MITIGATION MEASURES**

Environmental Impact		Mitigation Measure		Level of Significance Before Mitigation	Level of Significance After Mitigation
Less than Significant = LS	Beneficial = B	Significant = S	Cumulative Significant = CS	Potentially Significant = PS	N/A = Not Applicable
			LU 2.2 Agricultural Parcel Splits LU-2.5 Residential Agriculture Uses LU-2.6 Agricultural Support Facilities LU-2.6A Industrial Development LU-2.7 Timing of Conversion from Urban Reserve LU-2.8 Merger of Sub Standard Agricultural Parcels ERM-5.15 Open Space Preservation RVLP-1.1 Development Intensity RVLP-1.2 Existing Parcels and Approvals RVLP-1.3 Tulare County Agricultural Zones RVLP-1.4 Determination of Agricultural Land RVLP-1.5 Non Conforming Uses RVLP Implementation Measure 1 RVLP Implementation Measure 2		
Impact AG-3	The General Plan Update could involve other changes in the existing environment that, due to their location or nature, could result in conversion of important farmland, to non-agricultural uses.		Policies designed to conserve agricultural resources within the County include the following: AG-1.1 Primary Land Use AG-1.2 Coordination AG-1.3 Williamson Act AG-1.4 Williamson Act in UDBs and HDBs AG-1.5 Substandard Williamson Act Parcels AG-1.6 Conservation Easements AG-1.7 Preservation of Agricultural Lands AG-1.8 Agriculture Within Urban Boundaries AG-1.9 Agricultural Preserves Outside Urban Boundaries AG-1.10 Extension of Infrastructure Into Agricultural Areas AG-1.11 Agricultural Buffers AG-1.12 Ranchettes AG-1.13 Agricultural Related Uses AG-1.14 Right-to-Farm Noticing Policies designed to promote the continued productivity and employment of agricultural resources within the County include the following: AG-2.1 Diversified Agriculture AG-2.2 Market Research AG-2.3 Technical Assistance AG-2.4 Crop Care Education AG-2.5 High-Value-Added Food Processing AG-2.6 Biotechnology and Biofuels	PS	SU

**TABLE ES-4
SUMMARY OF IMPACTS AND MITIGATION MEASURES**

Environmental Impact				Mitigation Measure	Level of Significance Before Mitigation	Level of Significance After Mitigation
Less than Significant = LS	Beneficial = B	Significant = S	Cumulative Significant = CS	Significant and Unavoidable = SU	Potentially Significant = PS	N/A = Not Applicable
				AG-2.8 Agricultural Education Programs AG-2.9 Global Marketing AG-2.10 Regional Transportation AG-2.11 Energy Production ED-2.10 Supporting Agricultural Industry Implementation measures designed to protect and conserve agricultural resources within the County include the following: Agriculture Implementation Measure #1 (and 1A & 1B) Agriculture Implementation Measure #2 (and 2A) Agriculture Implementation Measure #3 Agriculture Implementation Measure #4 Agriculture Implementation Measure #5 Agriculture Implementation Measure #6 Agriculture Implementation Measure #7 Agriculture Implementation Measure #8 ED Implementation Measure #4 ED Implementation Measures #4A ED Implementation Measure #4B Policies designed to promote future development patterns within areas of existing development include the following: AG-1.15A Schools in Agricultural Zones LU-1.8 Encourage Infill Development LU-2.1 Agricultural Lands LU 2.2 Agricultural Parcel Splits LU-2.5 Residential Agriculture Uses LU-2.6 Agricultural Support Facilities LU-2.6A Industrial Development LU-2.7 Timing of Conversion from Urban Reserve LU-2.8 Merger of Sub Standard Agricultural Parcels ERM-5.15 Open Space Preservation Similar policies designed to conserve and encourage the continued economic value of agricultural resources within the various planning areas include the following: RVLP-1.1 Development Intensity RVLP-1.2 Existing Parcels and Approvals RVLP-1.4 Determination of Agriculture Land C-1.5 Agricultural Enterprises F-1.12 Development in Success Valley F-6.1 Protect Agricultural Lands		

**TABLE ES-4
SUMMARY OF IMPACTS AND MITIGATION MEASURES**

Environmental Impact		Mitigation Measure			Level of Significance Before Mitigation	Level of Significance After Mitigation
					Potentially Significant = PS	N/A = Not Applicable
Less than Significant = LS	Beneficial = B	Significant = S	Cumulative Significant = CS	Significant and Unavoidable = SU		
M-1.9 Agricultural Preserves						
3.4 LAND USE						
Impact LU-1	The General Plan Update would not divide the physical arrangement of an established community.			Policies are designed to minimize any potential impact of dividing the physical arrangement of an established community by ensuring that growth occurs in an organized manner, including the following: LU-1.1 Smart Growth and Healthy Communities LU-1.2 Innovative Development LU-1.4 Compact Development LU-1.8 Encourage Infill Development LU-1.10 Specific Plans LU-4.1 Neighborhood Commercial Uses LU-7.3 Friendly Streets LU-7.4 Streetscape Continuity TC-1.13 Land Dedication for Roadways and Other Travel Modes TC-1.18 Balance System TC-5.1 Bicycle/Pedestrian Trail System TC-4.4 Nodal Land Use Patterns that Support Public Transit TC-4.5 Transit Coordination Policies designed to minimize this impact through the protection of the County's traditional neighborhoods and historic districts include the following: LU-4.5 Commercial Building Design LU-7.8 Building Abatement LU-7.10 Gateways/Entry Points LU-7.11 Adaptive Reuse LU-7.12 Historic Buildings and Areas LU-7.14 Contextual and Compatible Design ERM-6.6 Historic Structures and Sites ERM-6.7 Cooperation of Property Owners ERM Implementation Measure #57 Land Use Implementation Measure #11 Policies designed to promote compatible land use development and patterns that minimize impacts to surrounding land uses (including open space uses) include the following:	LS	LS

**TABLE ES-4
SUMMARY OF IMPACTS AND MITIGATION MEASURES**

Environmental Impact		Mitigation Measure		Level of Significance Before Mitigation	Level of Significance After Mitigation	
Less than Significant = LS	Beneficial = B	Significant = S	Cumulative Significant = CS	Significant and Unavoidable = SU	Potentially Significant = PS	N/A = Not Applicable
						PF-2.9 Interpretation of Boundaries PF-4.16 Coordination with Cities in Adjacent Counties LU-1.3 Prevent Incompatible Uses LU-3.6 Project Design LU-3.8 Rural Residential Interface LU-5.4 Compatibility with Surrounding Land Use LU-5.6 Industrial Use Buffer LU-6.2 Buffers LU-7.2 Integrate Natural Features SL-3.2 Urban Expansion-Edges SL-3.4 Planned Communities AG-1.11 Agricultural Buffers ERM-1.2 Development in Environmentally Sensitive Areas ERM-1.3 Encourage Cluster Development ERM-1.8 Open Space Buffers PFS-9.2 Appropriate Siting of Natural Gas and Electric Systems PFS-9.3 Transmission Corridors PFS-9.4 Power Transmission Lines Land Use Implementation Measure #1 (and 1A, 1B, 1C) Land Use Implementation Measure #8 (8A through 8G) Policies designed to promote compatible development near County airport facilities include the following: TC-3.4 Airport Compatibility TC-3.6 Airport Encroachment HS-3.1 Airport Land Use Compatibility Plan HS-3.2 Compliance with FAA Regulations HS-8.4 Airport Noise Contours Policies designed to promote compatible development near mineral extraction resource areas include the following: ERM-2.8 Minimize Adverse Impacts ERM-2.9 Minimize Hazards and Nuisances ERM-2.10 Compatibility ERM-2.11 Incompatible Development ERM-3.2 Limited In-City Mining

**TABLE ES-4
SUMMARY OF IMPACTS AND MITIGATION MEASURES**

Environmental Impact		Mitigation Measure		Level of Significance Before Mitigation	Level of Significance After Mitigation	
Less than Significant = LS	Beneficial = B	Significant = S	Cumulative Significant = CS	Significant and Unavoidable = SU	Potentially Significant = PS	N/A = Not Applicable
		Policy PFS-1.7	Coordination with Service Providers. The County shall work with special districts, community service districts, public utility districts, mutual water companies, private water purveyors, sanitary districts, and sewer maintenance districts to provide adequate public facilities and to plan/coordinate, as appropriate, future utility corridors in an effort to minimize future land use conflicts. [New Policy – Modified Draft EIR Analysis]			
		Policy LU-7.12	Historic Buildings and Areas. The County shall seek to encourage preservation of buildings and areas with special and recognized historic, architectural, or aesthetic value. New development should respect architecturally and historically significant buildings and areas. Landscaping, original roadways, sidewalks, and other public realm features of historic buildings or neighborhoods shall be restored or repaired where ever possible. [New Policy – Modified Draft EIR Analysis]			
Impact LU-2	Development proposed under the General Plan would conflict with an adopted applicable land use plan, policy or regulation of an agency with jurisdiction over the project adopted for the purpose of avoiding or mitigating an environmental effect.		Policies designed to promote compatible land use development and patterns that minimize impacts to surrounding land uses (including open space uses) include the following: LU-1.3 Prevent Incompatible Uses LU-3.6 Project Design LU-5.4 Compatibility with Surrounding Land Use LU-5.6 Industrial Use Buffer LU-6.2 Buffers LU-7.2 Integrate Natural Features SL-3.2 Urban Expansion-Edges SL-3.4 Planned Communities AG-1.11 Agricultural Buffers ERM-1.2 Development in Environmentally Sensitive Areas ERM-1.3 Encourage Cluster Development ERM-1.8 Open Space Buffers PFS-9.2 Appropriate Siting of Natural Gas and Electric Systems PFS-9.3 Transmission Corridors PFS-9.4 Power Transmission Lines Land Use Implementation Measure #1 (and 1A, 1B, 1C) Land Use Implementation Measure #8 (8A through 8G) Policies designed to promote development compatible with	LS	LS	

**TABLE ES-4
SUMMARY OF IMPACTS AND MITIGATION MEASURES**

Environmental Impact		Mitigation Measure		Level of Significance Before Mitigation	Level of Significance After Mitigation
Less than Significant = LS	Beneficial = B	Significant = S	Cumulative Significant = CS	Significant and Unavoidable = SU	Potentially Significant = PS N/A = Not Applicable
			<p>local airport land use compatibility plans, include the following:</p> <ul style="list-style-type: none"> TC-3.4 Airport Compatibility TC-3.6 Airport Encroachment HS-3.1 Airport Land Use Compatibility Plan HS-3.2 Compliance with FAA Regulations HS-8.4 Airport Noise Contours <p>Policies designed to minimize this impact through the continued coordination with federal, State, and other local agencies (regulatory and non-regulatory) responsible for addressing regional environmental issues include the following:</p> <ul style="list-style-type: none"> AQ-1.1 Cooperation with Other Agencies AQ-1.2 Cooperation with Local Jurisdictions AQ-2.1 Transportation Demand Management Programs AQ Implementation Measure #1 AQ Implementation Measure #2 WR-2.2 NPDES Enforcement WR-3.2 Develop an Integrated Regional Water Master Plan <p>Policies and Implementation Measures designed to direct urban development within UDBs of existing cities and ensure that all development is well planned and adequately served by infrastructure include the following:</p> <ul style="list-style-type: none"> PF-4.1 UABs for Cities PF-4.2 UDBs for Cities PF-4.3 Modification of City UABs and UDBs PF-4.4 Planning in UDBs PF-4.5 Spheres of Influence PF-4.6 Orderly Expansion of City Boundaries PF-4.7 Avoiding Isolating Unincorporated Areas PF-4.8 General Plan Designations Within City UDBs PF-4.9 Updating Land Use Diagram in City UDBs PF-4.10 City Design Standards PF-4.11 Transition to Agricultural Use PF-4.12 Compatible Project Design PF-4.13 Coordination with Cities on Development Proposals PF-4.14 Revenue Sharing PF-4.15 Urban Improvement Areas for Cities PF-4.16 Coordination with Cities in Adjacent Counties Planning Framework Implementation Measure #2 Planning Framework Implementation Measure #13A 		

**TABLE ES-4
SUMMARY OF IMPACTS AND MITIGATION MEASURES**

Environmental Impact		Mitigation Measure		Level of Significance	Level of Significance
				Before Mitigation	After Mitigation
Less than Significant = LS	Beneficial = B	Significant = S	Cumulative Significant = CS	Potentially Significant = PS	N/A = Not Applicable
CHAPTER 4 TULARE COUNTY ENVIRONMENT					
4.2 SCENIC LANDSCAPES					
Impact SL-1	The General Plan Update would substantially degrade the existing visual character or quality in areas of the County.	Policies designed to protect and feature the existing scenic qualities of the County include the following: SL-1.1 Natural Landscapes SL-1.2 Working Landscapes SL-1.3 Watercourses PFS-9.4 Power Transmission Lines Policies designed to preserve and enhance the character and scale of the County's communities, hamlets, and rural areas include the following: ERM-5.17A Night Sky Protection LU-7.1 Distinctive Neighborhoods LU-7.3 Friendly Streets LU-7.4 Streetscape Continuity LU-7.8 Building Abatement LU-7.9 Visual Access LU-7.10 Gateways/Entry-points LU-7.11 Adaptive Reuse LU-7.12 Historic Buildings and Areas LU-7.13 Preservation of Historic Buildings LU-7.14 Contextual and Compatible Design SL-3.1 Community Centers and Neighborhoods SL-3.2 Urban Expansion-Edges SL-3.4 Planned Communities Policies designed to provide guidance on the development of infrastructure that minimizes impacts to the existing scenic qualities of the County include the following: SL-4.1 Design of Highways SL-4.2 Design of County Roads SL-4.3 Railroads and Rail Transit SL Implementation Measure #8B SL-2.6 Billboard Placement LU Implementation Measure #1A Policies designed to protect scenic views for travelers along County roads and highways include the following: SL-2.3 Historic and Cultural Landscapes SL-2.1 Designated Scenic Routes and Highways		PS	SU

**TABLE ES-4
SUMMARY OF IMPACTS AND MITIGATION MEASURES**

Environmental Impact		Mitigation Measure		Level of Significance Before Mitigation	Level of Significance After Mitigation
Less than Significant = LS	Beneficial = B	Significant = S	Cumulative Significant = CS	Potentially Significant = PS	N/A = Not Applicable
			SL-2.2 Gateways to the Sequoias SL-2.3 Historic and Cultural Landscapes SL-2.4 New Billboards SL-2.5 Billboard Removal SL-2.6 Billboard Placement SL-3.3 Highway Commercial SL Implementation Measure #6A SL Implementation Measure #6B TC-1.12 Scenic Highways and Roads Similar policies and Implementation Measures designed to provide protection to scenic resources and roadways within the various planning areas include the following: C-1.3 Scenic Corridor Protection Plans F-1.7 Preserving Visual Resources F-7.1 Preservation of Scenic Highways F-7.2 Identification of Scenic Highways F-7.3 Development Along Scenic Highways F-7.4 Development Within Scenic Corridors F-9.19 Maintenance of Scenic Vistas SL Implementation Measure #3 FGMP Implementation Measure #13		
Impact SL-2	The General Plan Update would have a substantial adverse effect on a scenic vista or substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway.		Policies designed to protect and feature the existing scenic qualities of the County include the following: SL-1.1 Natural Landscapes SL-1.2 Working Landscapes SL-1.3 Watercourses Policies designed to preserve and enhance the character and scale of the County's communities, hamlets, and rural areas include the following: ERM-5.17A Night Sky Protection LU-7.1 Distinctive Neighborhoods LU-7.3 Friendly Streets LU-7.4 Streetscape Continuity LU-7.8 Building Abatement LU-7.9 Visual Access LU-7.10 Gateways/Entry-points LU-7.11 Adaptive Reuse LU-7.12 Historic Buildings and Areas LU-7.13 Preservation of Historic Buildings	PS	SU

**TABLE ES-4
SUMMARY OF IMPACTS AND MITIGATION MEASURES**

Environmental Impact		Mitigation Measure		Level of Significance Before Mitigation	Level of Significance After Mitigation	
Less than Significant = LS	Beneficial = B	Significant = S	Cumulative Significant = CS	Significant and Unavoidable = SU	Potentially Significant = PS	N/A = Not Applicable
			LU-7.14 Contextual and Compatible Design SL-3.1 Community Centers and Neighborhoods SL-3.2 Urban Expansion-Edges SL-3.4 Planned Communities Policies designed to provide guidance on the development of infrastructure that minimizes impacts to the existing scenic qualities of the County include the following: SL-4.1 Design of Highways SL-4.2 Design of County Roads SL-4.3 Railroads and Rail Transit SL Implementation Measure #8B SL-2.6 Billboard Placement SL Implementation Measure 1A SL Implementation Measure #6A SL Implementation Measure #6B Policies designed to protect scenic views for travelers along County roads and highways include the following: SL-2.1 Designated Scenic Routes and Highways SL-2.2 Gateways to the Sequoias SL-2.3 Historic and Cultural Landscapes SL-2.4 New Billboards SL-2.5 Billboard Removal SL-2.6 Billboard Placement SL-3.3 Highway Commercial SL Implementation Measure #5A SL Implementation Measure #6A SL Implementation Measure #6B TC-1.12 Scenic Highways and Roads Similar policies designed to provide protection to scenic resources and roadways within the various planning areas include the following: C-1.3 Scenic Corridor Protection Plans F-1.7 Preserving Visual Resources F-7.1 Preservation of Scenic Highways F-7.2 Identification of Scenic Highways F-7.3 Development Along Scenic Highways F-7.4 Development Within Scenic Corridors F-9.19 Maintenance of Scenic Vistas F Implementation Measure #8, #12 and #13 SL Implementation Measure #3			

**TABLE ES-4
SUMMARY OF IMPACTS AND MITIGATION MEASURES**

Environmental Impact		Mitigation Measure				Level of Significance	Level of Significance
						Before Mitigation	After Mitigation
Less than Significant = LS	Beneficial = B	Significant = S	Cumulative Significant = CS	Significant and Unavoidable = SU	Potentially Significant = PS	N/A = Not Applicable	
Impact SL-3	The General Plan Update would create a new source of substantial light or glare which would adversely affect day or nighttime views in areas of the County.			<p>Policies designed to protect and feature the existing scenic qualities of the County include the following:</p> <ul style="list-style-type: none"> SL-1.1 Natural Landscapes SL-1.2 Working Landscapes SL-1.3 Watercourses <p>Policies designed to preserve and enhance the character and scale of the County's communities, hamlets, and rural areas include the following:</p> <ul style="list-style-type: none"> ERM-5.17A Night Sky Protection LU-7.1 Distinctive Neighborhoods LU-7.3 Friendly Streets LU-7.4 Streetscape Continuity LU-7.8 Building Abatement LU-7.9 Visual Access LU-7.10 Gateways/Entry-points LU-7.11 Adaptive Reuse LU-7.12 Historic Buildings and Areas LU-7.13 Preservation of Historic Buildings LU-7.14 Contextual and Compatible Design SL-3.1 Community Centers and Neighborhoods SL-3.2 Urban Expansion-Edges SL-3.4 Planned Communities <p>Policies designed to provide guidance on the development of infrastructure that minimizes impacts to the existing scenic qualities of the County include the following:</p> <ul style="list-style-type: none"> SL-4.1 Design of Highways SL-4.2 Design of County Roads SL-4.3 Railroads and Rail Transit SL Implementation Measure #8B SL-2.6 Billboard Placement SL Implementation Measure #6A SL Implementation Measure #6B <p>Policies designed to protect scenic views for travelers along County roads and highways include the following:</p> <ul style="list-style-type: none"> SL-2.1 Designated Scenic Routes and Highways SL-2.2 Gateways to the Sequoias SL-2.3 Historic and Cultural Landscapes SL-2.4 New Billboards SL-2.5 Billboard Removal 	PS	SU	

**TABLE ES-4
SUMMARY OF IMPACTS AND MITIGATION MEASURES**

Environmental Impact		Mitigation Measure		Level of Significance Before Mitigation	Level of Significance After Mitigation	
Less than Significant = LS	Beneficial = B	Significant = S	Cumulative Significant = CS	Significant and Unavoidable = SU	Potentially Significant = PS	N/A = Not Applicable
				SL-2.6 Billboard Placement SL-3.3 Highway Commercial SL Implementation Measure #6A SL Implementation Measure #6B TC-1.12 Scenic Highways and Roads Similar policies designed to provide protection to scenic resources and roadways within the various planning areas include the following: C-1.3 Scenic Corridor Protection Plans F-1.7 Preserving Visual Resources F-7.1 Preservation of Scenic Highways F-7.2 Identification of Scenic Highways F-7.3 Development Along Scenic Highways F-7.4 Development Within Scenic Corridors F-9.19 Maintenance of Scenic Vistas FGMP Implementation Measure #8, #12 and #13 SL Implementation Measure #3		
			Policy LU-7.17	Lighting. The County shall continue to improve and maintain lighting in park and recreation facilities to prevent nuisance light and glare spillage on adjoining residential areas. [New Policy – Draft EIR Analysis].		
			Policy LU-7.18	Minimize Lighting Impacts. The County shall ensure that lighting in residential areas and along County roadways shall be designed to prevent artificial lighting from reflecting into adjacent natural or open space areas. [New Policy – Draft EIR Analysis].		

4.3 ENVIRONMENTAL RESOURCE MANAGEMENT

Biological Resources

Impact ERM-1	The General Plan Update could have a substantial adverse effect, either directly or through habitat modifications, on any fish or wildlife species including those officially designated species identified as an endangered, threatened, candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service.	Policies designed to protect sensitive habitats from the impacts of future development in Tulare County include the following: ERM-1.1 Protection of Rare and Endangered Species ERM-1.2 Development in Environmentally Sensitive Areas ERM-1.3 Encourage Cluster Development ERM-1.4 Protect Riparian Areas ERM-1.5 Riparian Management Plans and Mining Reclamation Plans	PS	SU
--------------	---	--	----	----

**TABLE ES-4
SUMMARY OF IMPACTS AND MITIGATION MEASURES**

Environmental Impact		Mitigation Measure		Level of Significance Before Mitigation	Level of Significance After Mitigation	
Less than Significant = LS	Beneficial = B	Significant = S	Cumulative Significant = CS	Significant and Unavoidable = SU	Potentially Significant = PS	N/A = Not Applicable
			<p>ERM-1.6 Management of Wetlands ERM-1.8 Open Space Buffers ERM-1.9 Coordination of Management on Adjacent Lands ERM-1.12 Management of Oak Woodland Communities ERM-1.13 Pesticides ERM-1.14 Mitigation and Conservation Banking Program ERM-5.7 Public Water Access ERM-5.8 Watercourse Development ERM-5.15 Open Space Preservation ERM Implementation Measure #2, #7, #7A, #8, #9, #10, #12A, #13 and #55A Implementation Measures designed to identify and mitigate the impact of development on key biological resources include the following: ERM Implementation Measure #3 ERM Implementation Measure #4 ERM Implementation Measure #5 Policies designed to preserve and maintain biological resources within the foothill growth management plan include the following: F-5.1 Identification of Environmentally Sensitive Areas F-9.1 Riparian Area Development F-9.5 Protection of Lakes F-9.12 Vegetation Removal F-9.15 Identification of Wildlife F-9.20 Preservation of Unique Features FGMP Implementation Measure #21</p>			
Impact ERM-2	The General Plan Update could have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Game or U.S. Fish and Wildlife Service.		<p>Policy ERM-1.15 Minimize Lighting Impacts. The County shall ensure that lighting associated with new development or facilities (including street lighting, recreational facilities, and parking) shall be designed to prevent artificial lighting from illuminating adjacent natural areas at a level greater than one foot candle above ambient conditions. [New Policy – Draft EIR Analysis].</p>			
			<p>Policies designed to protect sensitive habitats from the impacts of future development in Tulare County include the following: ERM-1.1 Protection of Rare and Endangered Species ERM-1.2 Development in Environmentally Sensitive Areas ERM-1.3 Encourage Cluster Development</p>	PS	SU	

**TABLE ES-4
SUMMARY OF IMPACTS AND MITIGATION MEASURES**

Environmental Impact		Mitigation Measure			Level of Significance Before Mitigation	Level of Significance After Mitigation
Less than Significant = LS	Beneficial = B	Significant = S	Cumulative Significant = CS	Significant and Unavoidable = SU	Potentially Significant = PS	N/A = Not Applicable
				ERM-1.4 Protect Riparian Areas ERM-1.5 Riparian Management Plans and Mining Reclamation Plans ERM-1.6 Management of Wetlands ERM-1.8 Open Space Buffers ERM-1.9 Coordination of Management on Adjacent Lands ERM-1.12 Management of Oak Woodland Communities ERM-1.13 Pesticides ERM-1.14 Mitigation and Conservation Banking Program ERM-5.7 Public Water Access ERM-5.8 Watercourse Development ERM-5.15 Open Space Preservation ERM Implementation Measure #2, #7, #7A, #8, #9, #10, #12A, #13 and #55A Implementation Measures designed to identify and mitigate the impact of development on key biological resources include the following: ERM Implementation Measure #3 ERM Implementation Measure #4 ERM Implementation Measure #5 Policies designed to preserve and maintain FGMP biological resources include the following: F-5.1 Identification of Environmentally Sensitive Areas F-9.1 Riparian Area Development F-9.5 Protection of Lakes F-9.12 Vegetation Removal F-9.15 Identification of Wildlife F-9.20 Preservation of Unique Features FGMP Implementation Measure #21		
Impact ERM-3	The General Plan Update could have a substantial adverse effect on "federally protected" wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, etc.)		Policy ERM-1.15	Minimize Lighting Impacts. The County shall ensure that lighting associated with new development or facilities (including street lighting, recreational facilities, and parking) shall be designed to prevent artificial lighting from illuminating adjacent natural areas at a level greater than one foot candle above ambient conditions. [New Policy – Draft EIR Analysis]. Policies designed to protect sensitive habitats from the impacts of future development in Tulare County include the following: ERM-1.1 Protection of Rare and Endangered Species	PS	SU

**TABLE ES-4
SUMMARY OF IMPACTS AND MITIGATION MEASURES**

Environmental Impact		Mitigation Measure	Level of Significance Before Mitigation	Level of Significance After Mitigation		
Less than Significant = LS	Beneficial = B	Significant = S	Cumulative Significant = CS	Significant and Unavoidable = SU	Potentially Significant = PS	N/A = Not Applicable
	through direct removal, filling, hydrological interruption, or other means.	ERM-1.2 Development in Environmentally Sensitive Areas ERM-1.3 Encourage Cluster Development ERM-1.4 Protect Riparian Areas ERM-1.5 Riparian Management Plans and Mining Reclamation Plans ERM-1.6 Management of Wetlands ERM-1.8 Open Space Buffers ERM-1.9 Coordination of Management on Adjacent Lands ERM-1.12 Management of Oak Woodland Communities ERM-1.13 Pesticides ERM-1.14 Mitigation and Conservation Banking Program ERM-5.7 Public Water Access ERM-5.8 Watercourse Development ERM-5.15 Open Space Preservation ERM Implementation Measure #2, #7, #7A, #8, #9, #10, #12A, #13 and #55A Implementation Measures designed to identify and mitigate the impact of development on key biological resources include the following: ERM Implementation Measure #3 ERM Implementation Measure #4 ERM Implementation Measure #5 Policies designed to preserve and maintain biological resources in the foothills include the following: F-5.1 Identification of Environmentally Sensitive Areas F-9.1 Riparian Area Development F-9.5 Protection of Lakes F-9.12 Vegetation Removal F-9.15 Identification of Wildlife F-9.20 Preservation of Unique Features FGMP Implementation Measure #21				
Impact ERM-4	The General Plan Update could interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites.	Policies designed to protect sensitive habitats from the impacts of future development in Tulare County include the following: ERM-1.1 Protection of Rare and Endangered Species ERM-1.2 Development in Environmentally Sensitive Areas ERM-1.3 Encourage Cluster Development ERM-1.4 Protect Riparian Areas	PS	SU		

**TABLE ES-4
SUMMARY OF IMPACTS AND MITIGATION MEASURES**

Environmental Impact		Mitigation Measure		Level of Significance Before Mitigation	Level of Significance After Mitigation	
Less than Significant = LS	Beneficial = B	Significant = S	Cumulative Significant = CS	Significant and Unavoidable = SU	Potentially Significant = PS	N/A = Not Applicable
						ERM-1.5 Riparian Management Plans and Mining Reclamation Plans
						ERM-1.6 Management of Wetlands
						ERM-1.8 Open Space Buffers
						ERM-1.9 Coordination of Management on Adjacent Lands
						ERM-1.12 Management of Oak Woodland Communities
						ERM-1.13 Pesticides
						ERM-1.14 Mitigation and Conservation Banking Program
						ERM-5.7 Public Water Access
						ERM-5.8 Watercourse Development
						ERM-5.15 Open Space Preservation
						ERM Implementation Measure #2, #7, #7A, #8, #9, #10, #12A, #13 and #55A
						Implementation Measures designed to identify and mitigate the impact of development on key biological resources include the following:
						ERM Implementation Measure #3
						ERM Implementation Measure #4
						ERM Implementation Measure #5
						Policies designed to preserve and maintain Foothill and Mountain Area biological resources include the following:
						F-5.1 Identification of Environmentally Sensitive Areas
						F-9.1 Riparian Area Development
						F-9.5 Protection of Lakes
						F-9.12 Vegetation Removal
						F-9.15 Identification of Wildlife
						F-9.20 Preservation of Unique Features
						F Implementation Measure #21
						Mountain Framework Plan Implementation Measure #7
						Policy ERM-1.15 Minimize Lighting Impacts. The County shall ensure that lighting associated with new development or facilities (including street lighting, recreational facilities, and parking) shall be designed to prevent artificial lighting from illuminating adjacent natural areas at a level greater than one foot candle above ambient conditions. [New Policy – Draft EIR Analysis].

**TABLE ES-4
SUMMARY OF IMPACTS AND MITIGATION MEASURES**

Environmental Impact		Mitigation Measure	Level of Significance Before Mitigation	Level of Significance After Mitigation		
Less than Significant = LS	Beneficial = B	Significant = S	Cumulative Significant = CS	Significant and Unavoidable = SU	Potentially Significant = PS	N/A = Not Applicable
Impact ERM-5	The General Plan Update would not conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance.	<p>Policies designed to protect sensitive habitats from the impacts of future development in Tulare County include the following:</p> <ul style="list-style-type: none"> ERM-1.1 Protection of Rare and Endangered Species ERM-1.2 Development in Environmentally Sensitive Areas ERM-1.3 Encourage Cluster Development ERM-1.4 Protect Riparian Areas ERM-1.5 Riparian Management Plans and Mining Reclamation Plans ERM-1.6 Management of Wetlands ERM-1.8 Open Space Buffers ERM-1.9 Coordination of Management on Adjacent Lands ERM-1.12 Management of Oak Woodland Communities ERM-1.13 Pesticides ERM-1.14 Mitigation and Conservation Banking Program ERM-5.7 Public Water Access ERM-5.8 Watercourse Development ERM-5.15 Open Space Preservation ERM Implementation Measure #2, #7, #7A, #8, #9, #10, #12A, #13 and #55A <p>Implementation Measures designed to identify and mitigate the impact of development on key biological resources include the following:</p> <ul style="list-style-type: none"> ERM Implementation Measure #3 ERM Implementation Measure #4 ERM Implementation Measure #5 <p>Policies designed to preserve and maintain FGMP biological resources include the following:</p> <ul style="list-style-type: none"> F -5.1 Identification of Environmentally Sensitive Areas F -9.1 Riparian Area Development F -9.5 Protection of Lakes F -9.12 Vegetation Removal F -9.15 Identification of Wildlife F -9.20 Preservation of Unique Features FGMP Implementation Measure #21 	LS	N/A		

**TABLE ES-4
SUMMARY OF IMPACTS AND MITIGATION MEASURES**

Environmental Impact		Mitigation Measure		Level of Significance Before Mitigation	Level of Significance After Mitigation	
Less than Significant = LS	Beneficial = B	Significant = S	Cumulative Significant = CS	Significant and Unavoidable = SU	Potentially Significant = PS	N/A = Not Applicable
Impact ERM-6	The General Plan Update could conflict with the provisions of an adopted habitat conservation plan, natural community conservation plan, or other approved local, regional, or state habitat conservation plan.			Policies designed to protect sensitive habitats from the impacts of future development in Tulare County include the following: ERM-1.1 Protection of Rare and Endangered Species ERM-1.2 Development in Environmentally Sensitive Areas ERM-1.3 Encourage Cluster Development ERM-1.4 Protect Riparian Areas ERM-1.5 Riparian Management Plans and Mining Reclamation Plans ERM-1.6 Management of Wetlands ERM-1.8 Open Space Buffers ERM-1.9 Coordination of Management on Adjacent Lands ERM-1.12 Management of Oak Woodland Communities ERM-1.13 Pesticides ERM-1.14 Mitigation and Conservation Banking Program ERM-5.7 Public Water Access ERM-5.8 Watercourse Development ERM-5.15 Open Space Preservation ERM Implementation Measure #2, #7, #7A, #8, #9, #10, #12A, #13 and #55A Implementation Measures designed to identify and mitigate the impact of development on key biological resources include the following: ERM Implementation Measure #3 ERM Implementation Measure #4 ERM Implementation Measure #5 Policies designed to preserve and maintain FGMP biological resources include the following: F-5.1 Identification of Environmentally Sensitive Areas F-9.1 Riparian Area Development F-9.5 Protection of Lakes F-9.12 Vegetation Removal F-9.15 Identification of Wildlife F-9.20 Preservation of Unique Features FGMP Implementation Measure #21	LS	LS
			Policy ERM-1.17 Conservation Plan Coordination. The County shall coordinate with local, State, and federal habitat conservation planning efforts (including Section 10 Habitat Conservation Plan) to protect critical habitat areas that support endangered species and other special-status species. [New Policy – Draft EIR Analysis]			

**TABLE ES-4
SUMMARY OF IMPACTS AND MITIGATION MEASURES**

Environmental Impact		Mitigation Measure			Level of Significance	Level of Significance
					Before Mitigation	After Mitigation
Less than Significant = LS	Beneficial = B	Significant = S	Cumulative Significant = CS	Significant and Unavoidable = SU	Potentially Significant = PS	N/A = Not Applicable
Mineral Resources						
Impact ERM-7	The General Plan Update would not result in the loss of availability of a known mineral resource that would be of a value to the region and the residents of the State or result in the loss of availability of a locally important mineral resource recovery site delineated on a local general plan, specific plan, or other land use plan.	Policies designed to promote the efficient use of mineral extraction resources include the following: ERM-2.1 Conserve Mineral Deposits ERM-2.2 Recognize Mineral Deposits ERM-2.3 Future Resource Development ERM-2.4 identify New Resources ERM-2.5 Resources Development ERM Implementation Measures #20, #21, #21A, #22, and #23-#31 Policies designed to promote compatible development near mineral extraction resource areas include the following: ERM-2.8 Minimize Adverse Impacts ERM-2.9 Minimize Hazards and Nuisances ERM-2.10 Compatibility ERM-2.11 Incompatible Development ERM-3.2 Limited In-City Mining			LS	N/A
Impact ERM-8	The General Plan Update could result in land use incompatibilities with adjacent mineral extraction operations.	Policies designed to promote compatible development near mineral extraction resource areas include the following: ERM-2.8 Minimize Adverse Impacts ERM-2.9 Minimize Hazards and Nuisances ERM-2.10 Compatibility ERM-2.11 Incompatible Development ERM-2.14 SMARA Requirements ERM-3.2 Limited In-City Mining ERM Implementation Measures #32-#47A			LS	NA
Energy Resources						
Impact ERM-9	The General Plan Update would not result in the loss of availability of a known oil and/or gas resource that would be of a value to the region and the residents of the State.	Policies designed to promote the efficient use of oil/gas resources include the following: ERM-3.3 Small-scale Oil and Gas Extraction ERM-3.4 Oil and Gas Extraction ERM-3.5 Reclamation of Oil and Gas Sites			LS	N/A
Impact ERM-10	The General Plan Update could result in land use incompatibilities with adjacent oil and gas operations.	Policies designed to promote the efficient use of oil/gas resources include the following: ERM-3.3 Small-scale Oil and Gas Extraction ERM-3.4 Oil and Gas Extraction ERM-3.5 Reclamation of Oil and Gas Sites			LS	N/A

**TABLE ES-4
SUMMARY OF IMPACTS AND MITIGATION MEASURES**

Environmental Impact		Mitigation Measure			Level of Significance Before Mitigation	Level of Significance After Mitigation
					Potentially Significant = PS	N/A = Not Applicable
Less than Significant = LS	Beneficial = B	Significant = S	Cumulative Significant = CS	Significant and Unavoidable = SU		
Recreation and Open Space Resources						
Impact ERM-11	The General Plan Update would result in the substantial physical deterioration of existing neighborhood and regional parks or other recreational facilities through increased use.			Policies designed to minimize this impact through the establishment of guidelines or standards that promote the continued support of recreation-related programs and organizations include the following: ERM-5.1 Parks as Community Focal Points ERM-5.2 Park Amenities ERM-5.3 Park Dedication Requirements ERM-5.4 Park-Related Organizations ERM-5.6 Location and Size Criteria for Parks ERM-5.7 Public Water Access ERM-5.8 Watercourse Development ERM-5.9 Encourage Development of Private Recreation Facilities ERM-5.10 Recreational Facilities for Special Use Groups ERM-5.11 Cooperation with Federal and State Agencies ERM-5.12 Meet Changing Recreation Needs ERM-5.16 Regional Recreation Planning ERM-5.17 Activity Prioritization ERM Implementation Measures #48-#54 PFS-1.1 Existing Development PFS-1.2 Maintain Existing Levels of Services PFS-1.7 Coordination with Service Providers PFS-1.9 New Special Districts PFS-1.10 Homeowners Associations PFS-1.11 Facility Sizing Policies designed to minimize this impact through the promotion of joint use facilities with other public agencies include the following: ERM-5.5 Collocated Facilities PFS-4.5 Detention/Retention Basins Design PFS-8.2 Joint use Facilities and Programs Policies designed to minimize this impact through the encouragement of park facility and staffing funding mechanisms include the following: ERM-5.13 Funding for Recreational Areas and Facilities PFS -1.3 Impact Mitigation PFS-1.4 Standards of Approval PFS-1.5 Funding for Public Facilities PFS-1.6 Funding Mechanisms PFS-1.8 Funding for Services Providers PFS Implementation Measure #3	LS	LS

**TABLE ES-4
SUMMARY OF IMPACTS AND MITIGATION MEASURES**

Environmental Impact			Mitigation Measure			Level of Significance Before Mitigation	Level of Significance After Mitigation
Less than Significant = LS	Beneficial = B	Significant = S	Cumulative Significant = CS	Significant and Unavoidable = SU	Potentially Significant = PS	N/A = Not Applicable	
Impact ERM-12	The General Plan Update would include recreational facilities or require the construction or expansion of recreational facilities, which would have an adverse physical effect on the environment.	Implementation Measure PFS-3	The County shall develop and adopt an impact fee program for new development to ensure the provision, operation, and on-going maintenance of appropriate public facilities and services (including, but not limited to, fire stations and equipment, police stations and equipment, utility infrastructure, park recreational and library facilities). [New Implementation Program – Draft EIR Analysis].				
			Policies designed to minimize this impact through the development of new facilities that address all applicable public safety and environmental concerns include the following: LU-2.1 Agricultural Lands LU-2.4 Open Space Character LU-7.12 Historic Buildings and Areas AG-1.7 Preservation of Agricultural Lands TC-1.15 Traffic Impact Study AQ-1.5 CEQA Compliance SL-1.1 Natural Landscapes ERM-1.2 Development in Environmentally Sensitive Areas			PS	SU
		Policy PFS-1.4	Standards of Approval. The County should not approve any development unless the following conditions are met: - The applicant can demonstrate all necessary infrastructure will be installed and adequately financed; - Infrastructure improvements are consistent with adopted County infrastructure plans and standards; - Funding mechanisms are provided to maintain, operate, and upgrade the facilities throughout the life of the project; and - Facilities shall be developed in compliance with all applicable regulations designed to address public safety and environmental impacts that may result through the construction, operation, and maintenance of these facilities. [New Policy – Draft EIR Analysis].				
		Policy HS-8.12	Noise Analysis. The County shall require a detailed noise impact analysis in areas where current or future exterior noise levels from transportation or stationary sources have the potential to exceed the adopted noise policies of the				

**TABLE ES-4
SUMMARY OF IMPACTS AND MITIGATION MEASURES**

Environmental Impact		Mitigation Measure		Level of Significance Before Mitigation	Level of Significance After Mitigation	
Less than Significant = LS	Beneficial = B	Significant = S	Cumulative Significant = CS	Significant and Unavoidable = SU	Potentially Significant = PS	N/A = Not Applicable
				Health and Safety Element, where there are development of new noise sensitive land uses or the development of potential noise generating land uses near existing sensitive land uses. The noise analysis shall be the responsibility of the project applicant and be prepared by a qualified acoustical specialist (i.e., a Registered Civil Engineer in the State of California, etc.). The analysis shall include recommendations and evidence to establish mitigation that will reduce noise exposure to acceptable levels. [New Policy – Draft EIR Analysis].		
Impact ERM-13	The General Plan Update could result in land use incompatibilities with adjacent timber or forestry operations.			Policies designed to protect and promote the efficient use of timber resources include the following: M-1.6 Mountain Service Areas M-1.19 USFS Support M-1.11 Resource Conservation Criteria M-1.12 Resource Conservation Uses M-1. 29 Privately-Owned Forest Lands ERM-5.19 Allowable Uses on Timber Production Lands	LS	N/A
Cultural Resources						
Impact ERM-14	The General Plan Update could cause a substantial adverse change in the significance of a historical resource as defined in Section 15064.5.			Policies designed to preserve and maintain historic resources in Tulare County include the following: LU-7.11 Adaptive Reuse LU-7.12 Historic Buildings and Areas LU-7.13 Preservation of Historic Buildings SL-2.3 Historic and Cultural Landscapes SL-3.1 Community Centers and Neighborhoods SL-3.2 Urban Expansion–Edges SL-3.4 Planned Communities SL-4.1 Design of Highways SL-4.2 Design of County Roads SL Implementation Measure #8B ERM-6.1 Evaluation of Cultural and Archaeological Resources ERM-6.2 Protection of Resources with Potential State or Federal Designations ERM-6.3 Alteration of Sites with Identified Cultural Resources ERM-6.4 Mitigation	PS	SU

**TABLE ES-4
SUMMARY OF IMPACTS AND MITIGATION MEASURES**

Environmental Impact		Mitigation Measure		Level of Significance Before Mitigation	Level of Significance After Mitigation	
Less than Significant = LS	Beneficial = B	Significant = S	Cumulative Significant = CS	Significant and Unavoidable = SU	Potentially Significant = PS	N/A = Not Applicable
				ERM-6.5 Cultural Resources Education Programs ERM-6.6 Historic Structures and Sites ERM-6.7 Cooperation of Property Owners ERM-6.8 Solicit Input from Local Native Americans ERM-6.10 Grading Cultural Resources Sites Policies designed to preserve and maintain FGMP historical and archaeological sites include the following: F-8.1 Inventory of Historical Sites F-8.2 Preparation of an Archaeological Sensitivity Map F-8.3 Protection of Historical or Archaeological Sites		
			Policy ERM-6.6	Historic Structures and Sites. The County shall support public and private efforts to preserve, rehabilitate, and continue the use of historic structures, sites, and Parks. Where applicable, preservation efforts shall conform to the current Secretary of the Interior's Standards for the Treatment of Historic Properties and Guidelines for Preserving, Rehabilitating, Restoring, and Reconstructing Historic Buildings. [Revised Draft EIR Analysis].		
Impact ERM-15	The General Plan Update could cause a substantial adverse change in the significance of a unique archaeological resource as defined in Section 15064.5 and/or disturb any human remains, including those interred outside of formal cemeteries.			Policies designed to preserve and maintain County archaeological resources include the following: ERM-6.1 Evaluation of Cultural and Archaeological Resources ERM-6.2 Protection of Resources with Potential State or Federal Designations ERM-6.3 Alteration of Sites with Identified Cultural Resources ERM-6.4 Mitigation ERM-6.5 Cultural Resources Education Programs ERM-6.7 Cooperation of Property Owners ERM-6.8 Solicit Input from Local Native Americans ERM-6.9 Confidentiality of Archaeological Sites ERM-6.10 Grading Cultural Resources Sites Policies designed to preserve and maintain FGMP historical and archaeological sites include the following: F-8.1 Inventory of Historical Sites F-8.2 Preparation of an Archaeological Sensitivity Map F-8.3 Protection of Historical or Archaeological Sites	PS	SU for "Historical Resources" LS for "Archaeological Resources and Human Remains"

**TABLE ES-4
SUMMARY OF IMPACTS AND MITIGATION MEASURES**

Environmental Impact			Mitigation Measure			Level of Significance Before Mitigation	Level of Significance After Mitigation
Less than Significant = LS	Beneficial = B	Significant = S	Cumulative Significant = CS	Significant and Unavoidable = SU	Potentially Significant = PS	N/A = Not Applicable	
			ERM Implementation Measure 56A	<p>Archaeological Resource Surveys. Prior to project approval and after consultation, the County shall determine the need for project applicant to have a qualified archeologist conduct the following activities: (1) conduct a record search at the Regional Archaeological Information Center and other appropriate historical repositories, (2) conduct field surveys where appropriate, and (3) prepare technical reports, where appropriate, meeting California Office of Historic Preservation Standards (Archeological Resource Management Reports). [New Policy – Draft EIR Analysis].</p>			
			ERM Implementation Measure 56B	<p>Discovery of Archaeological Resources. In the event that archaeological or paleontological resources are discovered during site excavation, the County shall required that grading and construction work on the project site be suspended until the significance of the features can be determined by a qualified archaeologist or paleontologist. The County will require that a qualified archeologist/paleontologist make recommendations for measures necessary to protect any site determined to contain or constitute an historical resource, a unique archaeological resource, or a unique paleontological resource or to undertake data recovery, excavation, analysis, and curation of archaeological or paleontological materials. County staff shall consider such recommendations and implement them where they are feasible in light of project design as previously approved by the County. [New Policy – Draft EIR Analysis].</p>			
			ERM Implementation Measure 56C	<p>Discovery of Human Remains. Consistent with Section 7050.5 of the California Health and Safety Code and (CEQA Guidelines) Section 15064.5, if human remains of Native American origin are discovered during project construction, it is necessary to comply with state laws relating to the disposition of Native American burials, which fall within the jurisdiction of the Native American Heritage Commission (Public Resources Code Sec. 5097). If any human remains are discovered or recognized in any location on the project site, there shall be no further excavation or disturbance of the site or any nearby area reasonably suspected to overlie adjacent human remains until:</p> <p>a. The Tulare County Coroner/Sheriff has been informed and has determined that no investigation of the cause of</p>			

**TABLE ES-4
SUMMARY OF IMPACTS AND MITIGATION MEASURES**

Environmental Impact		Mitigation Measure		Level of Significance Before Mitigation	Level of Significance After Mitigation
Less than Significant = LS	Beneficial = B	Significant = S	Cumulative Significant = CS	Significant and Unavoidable = SU	Potentially Significant = PS N/A = Not Applicable
			death is required; and b. if the remains are of Native American origin, 1. The descendants of the deceased Native Americans have made a timely recommendation to the landowner or the person responsible for the excavation work, for means of treating or disposing of, with appropriate dignity, the human remains and any associated grave goods as provided in Public Resources Code Section 5097.98, 2. The Native American Heritage Commission was unable to identify a descendant or the descendant failed to make a recommendation within 24 hours after being notified by the Commission, or 3. The landowner or his or her authorized representative rejects any timely recommendations of the descendent, and mediation conducted by the Native American Heritage Commission has failed to provide measures acceptable to the landowner. [New Policy – Draft EIR Analysis].		

Soil Resources

The Soil Resources section of the Goals and Policies Report (Section 8.7) focuses on preserving and protecting soil resources in the County for agriculture and timber productivity and to protect public health and safety. Impacts related to these issues are covered in other areas of this EIR, as follows: Impact HS-1 (page 4-46) addresses the loss of topsoil and erosion potential; Impact HS-2 (page 4-48) addresses rupture of an earthquake fault; Impact HS-3 (page 4-49) addresses unstable soil and geologic units; and Impact HS-4 (page 4-51) addresses expansive soil.

4.4 AIR QUALITY

Impact AQ-1	The General Plan Update would result in a cumulatively considerable net increase of air pollutants. Future growth in accordance with the General Plan Update would exceed the SJVAPCD thresholds for ROG and PM-10.	Policies designed to improve air quality through a regional approach and interagency cooperation include the following: AQ-1.1 Cooperation with Other Agencies AQ-1.2 Cooperation with Local Jurisdictions AQ-1.3 Cumulative Air Quality Impacts AQ-1.4 Air Quality Land Use Compatibility AQ-1.5 CEQA Compliance AQ-1.6 Purchase of Low Emission/Alternative Fuel Vehicles	PS	SU
-------------	---	---	----	----

**TABLE ES-4
SUMMARY OF IMPACTS AND MITIGATION MEASURES**

Environmental Impact		Mitigation Measure		Level of Significance Before Mitigation	Level of Significance After Mitigation	
Less than Significant = LS	Beneficial = B	Significant = S	Cumulative Significant = CS	Significant and Unavoidable = SU	Potentially Significant = PS	N/A = Not Applicable
						<p>AQ-1.7 Support Statewide Global Warming Solutions Policies designed to improve air quality by reducing air emissions related to transportation include the following:</p> <p>AQ-2.1 Transportation Demand Management Programs AQ-2.2 Indirect Source Review AQ-2.3 Transportation and Air Quality AQ-2.4 Transportation Management Associations AQ-2.5 Ridesharing AQ Implementation Measure #12 Policies designed to improve air quality and minimize impacts to human health and the economy of the county through smart land use planning and design include the following:</p> <p>AQ-3.1 Location of Support Services AQ-3.2 Infill Near Employment AQ-3.3 Street Design AQ-3.4 Landscape AQ-3.5 Alternative Energy Design AQ-3.6 Mixed Land Uses AQ Implementation Measure #9A and #9B Policies designed to implement the best available controls and monitoring to regulate air emissions include the following:</p> <p>AQ-4.1 Air Pollution Control Technology AQ-4.2 Dust Suppression Measures AQ-4.3 Paving or Treatment of Roadways for Reduced Air Emissions AQ-4.4 Wood Burning Devices Policies designed to encourage economic and social growth while retaining quality of life standards include the following:</p> <p>LU-1.1 Smart Growth and Healthy Communities LU-1.2 Innovative Development LU-1.3 Prevent Incompatible Uses LU-1.4 Compact Development LU-1.8 Encourage Infill Development Policies designed to encourage energy conservation in new and developing developments include the following:</p> <p>ERM-4.1 Energy Conservation and Efficiency Measures ERM-4.2 Streetscape and Parking Area Improvements for Energy Conservation</p>

**TABLE ES-4
SUMMARY OF IMPACTS AND MITIGATION MEASURES**

Environmental Impact		Mitigation Measure		Level of Significance Before Mitigation	Level of Significance After Mitigation	
Less than Significant = LS	Beneficial = B	Significant = S	Cumulative Significant = CS	Significant and Unavoidable = SU	Potentially Significant = PS	N/A = Not Applicable
				ERM-4.3 Local and State Programs ERM-4.4 Promote Energy Conservation Awareness ERM-4.5 Advance Planning ERM-4.6 Renewable Energy		
			Policy AQ-4.6	PM-10 and PM-2.5 Reduction Measures for Dairy and Feedlot Operations. The County shall ensure that dairy and feedlot operators implement the following particulate matter reduction measures as part of all dairy operations: <ul style="list-style-type: none"> • A Fugitive Dust Emissions Control Plan (FDECP) shall be submitted with all applications for new or expanded dairies and feedlots. The plan shall describe and demonstrate compliance with SJVAPCD fugitive dust emissions control requirements. • The dairy or feedlot operator shall minimize fugitive dust emissions from cattle movement in and out of corrals using soil stabilizers that are safe for both the ambient environment and cattle. • In addition to daily flushing of paved areas, manure shall be removed from all cattle areas as required to prevent pulverization of dried manure. • Maintain a manure pack less than 2 inches deep. • Refrain from spreading dry manure on nutrient application areas when wind speeds exceed 10 miles an hour. • Disc dry manure into nutrient application fields immediately after spreading. • Field perimeter roads and onsite dairy or feedlot facility roads shall be paved or stabilized with gravel, decomposed granite, or equivalent dust control treatment such that no visible dust clouds extend beyond the site boundary from manure spreading or agricultural vehicles using these roads. • Mud or dirt on public roads adjacent to the dairies or feedlots that originates from operations shall be removed within 24 hours of deposition. 		

**TABLE ES-4
SUMMARY OF IMPACTS AND MITIGATION MEASURES**

Environmental Impact				Mitigation Measure	Level of Significance Before Mitigation	Level of Significance After Mitigation
Less than Significant = LS	Beneficial = B	Significant = S	Cumulative Significant = CS	Significant and Unavoidable = SU	Potentially Significant = PS	N/A = Not Applicable
				<ul style="list-style-type: none"> • Dry feed storage shall be protected on three sides to prevent material loss and transport due to wind erosion. • All dairies and feedlots shall comply with the control measures for fugitive dust from agricultural sources established by the most recently adopted SJVAPCD Regulation VIII. The FDECP shall specify these control measures to be implemented during dairy operation. • Conduct AERMOD dispersion analysis using the 24-hour 10.4 µg/m3 PM-10 threshold on a case-by-case basis, to be submitted with a new or expanded dairy or feedlot application. 		
			Policy AQ-4.7	<p>ROG Reduction Measures for Dairy and Feedlot Operations. The County shall ensure that dairy operators implement the following ROG reduction measures as part of all dairy operations:</p> <ul style="list-style-type: none"> • The General Plan Update shall comply with SJVAPCD Rule 4570 (Confined Animal Facilities), which provides dairies with several options for reducing ROG, including: <ul style="list-style-type: none"> ○ feed manipulation, ○ improvement of manure and manure-water collection and treatment, ○ capture and treatment of effluent gases using high-technology treatment systems , and, ○ enhanced dispersion of manure and manure wastewater. • All animals shall be fed in accord with the National Research Council (NRC) guidelines (NRC, 2001), utilizing routine dairy nutritionist analyses of rations and maintaining feed analyses onsite for regulatory agency monitoring. • Feed lanes shall be cleared daily. • Silage piles shall be covered with tarps. • General Plan Update dairy and feedlot facilities design and construction shall include concrete- 		

**TABLE ES-4
SUMMARY OF IMPACTS AND MITIGATION MEASURES**

Environmental Impact				Mitigation Measure	Level of Significance Before Mitigation	Level of Significance After Mitigation
Less than Significant = LS	Beneficial = B	Significant = S	Cumulative Significant = CS	Significant and Unavoidable = SU	Potentially Significant = PS	N/A = Not Applicable
				base freestalls and walk lanes, as well as water drainage to separator facilities. <ul style="list-style-type: none"> • Manure water shall be either injected subsurface or placed on the surface in thin layers, blending such manure water with irrigation water at a ratio in compliance with the nutrient management plan that shall be required for each dairy and feedlot. • Design and construction of dairy and feedlot lagoons shall comply with the specifications set forth in National Conservation Practice Standard 359 (Natural Resources Conservation Service, 2003). 		
Impact AQ-2	The General Plan Update would not conflict with or obstruct implementation of an applicable air quality plan.			Policies designed to improve air quality through a regional approach and interagency cooperation include the following: <ul style="list-style-type: none"> AQ-1.1 Cooperation with Other Agencies AQ-1.2 Cooperation with Local Jurisdictions AQ-1.3 Cumulative Air Quality Impacts AQ-1.4 Air Quality Land Use Compatibility AQ-1.5 CEQA Compliance AQ-1.6 Purchase of Low Emission/Alternative Fuel Vehicles AQ-1.7 Support Statewide Global Warming Solutions Policies designed to improve air quality by reducing air emissions related to transportation include the following: <ul style="list-style-type: none"> AQ-2.1 Transportation Demand Management Programs AQ-2.2 Indirect Source Review AQ-2.3 Transportation and Air Quality AQ-2.4 Transportation Management Associations AQ-2.5 Ridesharing AQ Implementation Measure #12 Policies designed to improve air quality and minimize impacts to human health and the economy of the county through smart land use planning and design include the following: <ul style="list-style-type: none"> AQ-3.1 Location of Support Services AQ-3.2 Infill Near Employment AQ-3.3 Street Design AQ-3.4 Landscape AQ-3.5 Alternative Energy Design AQ-3.6 Mixed Land Uses 	PS	LS

**TABLE ES-4
SUMMARY OF IMPACTS AND MITIGATION MEASURES**

Environmental Impact		Mitigation Measure		Level of Significance Before Mitigation	Level of Significance After Mitigation	
Less than Significant = LS	Beneficial = B	Significant = S	Cumulative Significant = CS	Significant and Unavoidable = SU	Potentially Significant = PS	N/A = Not Applicable
						<p>AQ Implementation Measure #9A and #9B</p> <p>Policies designed to encourage economic and social growth while retaining quality of life standards include the following:</p> <ul style="list-style-type: none"> LU-1.1 Smart Growth and Healthy Communities LU-1.2 Innovative Development LU-1.3 Prevent Incompatible Uses LU-1.4 Compact Development LU-1.8 Encourage Infill Development <p>Policies designed to encourage energy conservation in new and developing developments include the following:</p> <ul style="list-style-type: none"> ERM-4.1 Energy Conservation and Efficiency Measures ERM-4.2 Streetscape and Parking Area Improvements for Energy Conservation ERM-4.3 Local and State Programs ERM-4.4 Promote Energy Conservation Awareness ERM-4.5 Advance Planning ERM-4.6 Renewable Energy <p>Policy AQ-4.6</p> <p>PM-10 and PM-2.5 Reduction Measures for Dairy and Feedlot Operations. The County shall ensure that dairy and feedlot operators implement the following particulate matter reduction measures as part of all dairy operations:</p> <ul style="list-style-type: none"> • A Fugitive Dust Emissions Control Plan (FDECP) shall be submitted with all applications for new or expanded dairies and feedlots. The plan shall describe and demonstrate compliance with SJVAPCD fugitive dust emissions control requirements. • The dairy or feedlot operator shall minimize fugitive dust emissions from cattle movement in and out of corrals using soil stabilizers that are safe for both the ambient environment and cattle. • In addition to daily flushing of paved areas, manure shall be removed from all cattle areas as required to prevent pulverization of dried manure. • Maintain a manure pack less than 2 inches deep. • Refrain from spreading dry manure on nutrient application areas when wind speeds exceed 10 miles an hour.

**TABLE ES-4
SUMMARY OF IMPACTS AND MITIGATION MEASURES**

Environmental Impact				Mitigation Measure	Level of Significance Before Mitigation	Level of Significance After Mitigation
Less than Significant = LS	Beneficial = B	Significant = S	Cumulative Significant = CS	Significant and Unavoidable = SU	Potentially Significant = PS	N/A = Not Applicable
				<ul style="list-style-type: none"> Disc dry manure into nutrient application fields immediately after spreading. Field perimeter roads and onsite dairy or feedlot facility roads shall be paved or stabilized with gravel, decomposed granite, or equivalent dust control treatment such that no visible dust clouds extend beyond the site boundary from manure spreading or agricultural vehicles using these roads. Mud or dirt on public roads adjacent to the dairies or feedlots that originates from operations shall be removed within 24 hours of deposition. Dry feed storage shall be protected on three sides to prevent material loss and transport due to wind erosion. All dairies and feedlots shall comply with the control measures for fugitive dust from agricultural sources established by the most recently adopted SJVAPCD Regulation VIII. The FDECP shall specify these control measures to be implemented during dairy operation. Conduct AERMOD dispersion analysis using the 24-hour 10.4 µg/m³ PM-10 threshold on a case-by-case basis, to be submitted with a new or expanded dairy or feedlot application. 		
			Policy AQ-4.7	<p>ROG Reduction Measures for Dairy and Feedlot Operations. The County shall ensure that dairy operators implement the following ROG reduction measures as part of all dairy operations:</p> <ul style="list-style-type: none"> The General Plan Update shall comply with SJVAPCD Rule 4570 (Confined Animal Facilities), which provides dairies with several options for reducing ROG, including: <ul style="list-style-type: none"> feed manipulation, improvement of manure and manure-water collection and treatment, capture and treatment of effluent gases using high-technology treatment 		

**TABLE ES-4
SUMMARY OF IMPACTS AND MITIGATION MEASURES**

Environmental Impact		Mitigation Measure		Level of Significance Before Mitigation	Level of Significance After Mitigation
Less than Significant = LS	Beneficial = B	Significant = S	Cumulative Significant = CS	Significant and Unavoidable = SU	Potentially Significant = PS N/A = Not Applicable
			<ul style="list-style-type: none"> systems , and, <ul style="list-style-type: none"> o enhanced dispersion of manure and manure wastewater. • All animals shall be fed in accord with the National Research Council (NRC) guidelines (NRC, 2001), utilizing routine dairy nutritionist analyses of rations and maintaining feed analyses onsite for regulatory agency monitoring. • Feed lanes shall be cleared daily. • Silage piles shall be covered with tarps. • General Plan Update dairy and feedlot facilities design and construction shall include concrete-base freestalls and walk lanes, as well as water drainage to separator facilities. • Manure water shall be either injected subsurface or placed on the surface in thin layers, blending such manure water with irrigation water at a ratio in compliance with the nutrient management plan that shall be required for each dairy and feedlot. • Design and construction of dairy and feedlot lagoons shall comply with the specifications set forth in National Conservation Practice Standard 359 (Natural Resources Conservation Service, 2003). 		
Impact AQ-3	The General Plan Update would expose sensitive receptors to substantial pollutant concentrations.		<p>Policies designed to improve air quality through a regional approach and interagency cooperation include the following:</p> <ul style="list-style-type: none"> AQ-1.1 Cooperation with Other Agencies AQ-1.2 Cooperation with Local Jurisdictions AQ-1.3 Cumulative Air Quality Impacts AQ-1.4 Air Quality Land Use Compatibility AQ-1.5 CEQA Compliance AQ-1.6 Purchase of Low Emission/Alternative Fuel Vehicles AQ-1.7 Support Statewide Global Warming Solutions <p>Policies designed to improve air quality by reducing air emissions related to transportation include the following:</p> <ul style="list-style-type: none"> AQ-2.1 Transportation Demand Management Programs AQ-2.2 Indirect Source Review AQ-2.3 Transportation and Air Quality 	PS	SU

**TABLE ES-4
SUMMARY OF IMPACTS AND MITIGATION MEASURES**

Environmental Impact			Mitigation Measure			Level of Significance Before Mitigation	Level of Significance After Mitigation
Less than Significant = LS	Beneficial = B	Significant = S	Cumulative Significant = CS	Significant and Unavoidable = SU	Potentially Significant = PS	N/A = Not Applicable	
				AQ-2.4 Transportation Management Associations AQ-2.5 Ridesharing AQ Implementation Measure #12 Policies designed to improve air quality and minimize impacts to human health and the economy of the county through smart land use planning and design include the following: AQ-3.1 Location of Support Services AQ-3.2 Infill Near Employment AQ-3.3 Street Design AQ-3.4 Landscape AQ-3.5 Alternative Energy Design AQ-3.6 Mixed Land Uses AQ Implementation Measure #9A and #9B Policies designed to implement the best available controls and monitoring to regulate air emissions include the following: AQ-4.1 Air Pollution Control Technology AQ-4.2 Dust Suppression Measures AQ-4.3 Paving or Treatment of Roadways for Reduced Air Emissions AQ-4.4 Wood Burning Devices Policies designed to encourage economic and social growth while retaining quality of life standards include the following: LU-1.1 Smart Growth and Healthy Communities LU-1.2 Innovative Development LU-1.3 Prevent Incompatible Uses LU-1.4 Compact Development LU-1.8 Encourage Infill Development Policies designed to encourage energy conservation in new and developing developments include the following: ERM-4.1 Energy Conservation and Efficiency Measures ERM-4.2 Streetscape and Parking Area Improvements for Energy Conservation ERM-4.3 Local and State Programs ERM-4.4 Promote Energy Conservation Awareness ERM-4.5 Advance Planning ERM-4.6 Renewable Energy			

**TABLE ES-4
SUMMARY OF IMPACTS AND MITIGATION MEASURES**

Environmental Impact			Mitigation Measure			Level of Significance Before Mitigation	Level of Significance After Mitigation
Less than Significant = LS	Beneficial = B	Significant = S	Cumulative Significant = CS	Significant and Unavoidable = SU	Potentially Significant = PS	N/A = Not Applicable	
		Policy AQ-4.6		<p>PM-10 and PM-2.5 Reduction Measures for Dairy and Feedlot Operations. The County shall ensure that dairy and feedlot operators implement the following particulate matter reduction measures as part of all dairy operations:</p> <ul style="list-style-type: none"> • A Fugitive Dust Emissions Control Plan (FDECP) shall be submitted with all applications for new or expanded dairies and feedlots. The plan shall describe and demonstrate compliance with SJVAPCD fugitive dust emissions control requirements. • The dairy or feedlot operator shall minimize fugitive dust emissions from cattle movement in and out of corrals using soil stabilizers that are safe for both the ambient environment and cattle. • In addition to daily flushing of paved areas, manure shall be removed from all cattle areas as required to prevent pulverization of dried manure. • Maintain a manure pack less than 2 inches deep. • Refrain from spreading dry manure on nutrient application areas when wind speeds exceed 10 miles an hour. • Disc dry manure into nutrient application fields immediately after spreading. • Field perimeter roads and onsite dairy or feedlot facility roads shall be paved or stabilized with gravel, decomposed granite, or equivalent dust control treatment such that no visible dust clouds extend beyond the site boundary from manure spreading or agricultural vehicles using these roads. • Mud or dirt on public roads adjacent to the dairies or feedlots that originates from operations shall be removed within 24 hours of deposition. • Dry feed storage shall be protected on three sides to prevent material loss and transport due to wind erosion. • All dairies and feedlots shall comply with the control measures for fugitive dust from 			

**TABLE ES-4
SUMMARY OF IMPACTS AND MITIGATION MEASURES**

Environmental Impact		Mitigation Measure		Level of Significance Before Mitigation	Level of Significance After Mitigation
Less than Significant = LS	Beneficial = B	Significant = S	Cumulative Significant = CS	Significant and Unavoidable = SU	Potentially Significant = PS N/A = Not Applicable
				agricultural sources established by the most recently adopted SJVAPCD Regulation VIII. The FDECP shall specify these control measures to be implemented during dairy operation.	
				<ul style="list-style-type: none"> Conduct AERMOD dispersion analysis using the 24-hour 10.4 µg/m³ PM-10 threshold on a case-by-case basis, to be submitted with a new or expanded dairy or feedlot application. 	
			Policy AQ-4.7	<p>ROG Reduction Measures for Dairy and Feedlot Operations. The County shall ensure that dairy operators implement the following ROG reduction measures as part of all dairy operations:</p> <ul style="list-style-type: none"> The General Plan Update shall comply with SJVAPCD Rule 4570 (Confined Animal Facilities), which provides dairies with several options for reducing ROG, including: <ul style="list-style-type: none"> feed manipulation, improvement of manure and manure-water collection and treatment, capture and treatment of effluent gases using high-technology treatment systems , and, enhanced dispersion of manure and manure wastewater. All animals shall be fed in accord with the National Research Council (NRC) guidelines (NRC, 2001), utilizing routine dairy nutritionist analyses of rations and maintaining feed analyses onsite for regulatory agency monitoring. Feed lanes shall be cleared daily. Silage piles shall be covered with tarps. General Plan Update dairy and feedlot facilities design and construction shall include concrete-base freestalls and walk lanes, as well as water drainage to separator facilities. Manure water shall be either injected subsurface or placed on the surface in thin layers, blending such manure water with irrigation water at a ratio 	

**TABLE ES-4
SUMMARY OF IMPACTS AND MITIGATION MEASURES**

Environmental Impact		Mitigation Measure		Level of Significance Before Mitigation	Level of Significance After Mitigation	
Less than Significant = LS	Beneficial = B	Significant = S	Cumulative Significant = CS	Significant and Unavoidable = SU	Potentially Significant = PS	N/A = Not Applicable
Impact AQ-4	The General Plan Update would not create objectionable odors affecting a substantial number of people.			<p>in compliance with the nutrient management plan that shall be required for each dairy and feedlot.</p> <ul style="list-style-type: none"> Design and construction of dairy and feedlot lagoons shall comply with the specifications set forth in National Conservation Practice Standard 359 (Natural Resources Conservation Service, 2003). <p>Policies designed to improve air quality through a regional approach and interagency cooperation include the following:</p> <ul style="list-style-type: none"> AQ-1.1 Cooperation with Other Agencies AQ-1.2 Cooperation with Local Jurisdictions AQ-1.3 Cumulative Air Quality Impacts AQ-1.4 Air Quality Land Use Compatibility AQ-1.5 CEQA Compliance AQ-1.6 Purchase of Low Emission/Alternative Fuel Vehicles AQ-1.7 Support Statewide Global Warming Solutions <p>Policies designed to improve air quality by reducing air emissions related to transportation include the following:</p> <ul style="list-style-type: none"> AQ-2.1 Transportation Demand Management Programs AQ-2.2 Indirect Source Review AQ-2.3 Transportation and Air Quality AQ-2.4 Transportation Management Associations AQ-2.5 Ridesharing AQ Implementation Measure #12 <p>Policies designed to improve air quality and minimize impacts to human health and the economy of the county through smart land use planning and design include the following:</p> <ul style="list-style-type: none"> AQ-3.1 Location of Support Services AQ-3.2 Infill Near Employment AQ-3.3 Street Design AQ-3.4 Landscape AQ-3.5 Alternative Energy Design AQ-3.6 Mixed Land Uses AQ Implementation Measure #9A and #9B <p>Policies designed to implement the best available controls and monitoring to regulate air emissions include the following:</p> <ul style="list-style-type: none"> AQ-4.1 Air Pollution Control Technology 	PS	LS

**TABLE ES-4
SUMMARY OF IMPACTS AND MITIGATION MEASURES**

Environmental Impact			Mitigation Measure		Level of Significance Before Mitigation	Level of Significance After Mitigation
Less than Significant = LS	Beneficial = B	Significant = S	Cumulative Significant = CS	Significant and Unavoidable = SU	Potentially Significant = PS	N/A = Not Applicable
				AQ-4.2 Dust Suppression Measures AQ-4.3 Paving or Treatment of Roadways for Reduced Air Emissions AQ-4.4 Wood Burning Devices Policies designed to encourage economic and social growth while retaining quality of life standards include the following: LU-1.1 Smart Growth and Healthy Communities LU-1.2 Innovative Development LU-1.3 Prevent Incompatible Uses LU-1.4 Compact Development LU-1.8 Encourage Infill Development Policies designed to encourage energy conservation in new and developing developments include the following: ERM-4.1 Energy Conservation and Efficiency Measures ERM-4.2 Streetscape and Parking Area Improvements for Energy Conservation ERM-4.3 Local and State Programs ERM-4.4 Promote Energy Conservation Awareness ERM-4.5 Advance Planning ERM-4.6 Renewable Energy		
			Policy AQ-4.7	ROG Reduction Measures for Dairy and Feedlot Operations. The County shall ensure that dairy operators implement the following ROG reduction measures as part of all dairy operations: <ul style="list-style-type: none"> • The General Plan Update shall comply with SJVAPCD Rule 4570 (Confined Animal Facilities), which provides dairies with several options for reducing ROG, including: <ul style="list-style-type: none"> ○ feed manipulation, ○ improvement of manure and manure-water collection and treatment, ○ capture and treatment of effluent gases using high-technology treatment systems , and, ○ enhanced dispersion of manure and manure wastewater. • All animals shall be fed in accord with the National Research Council (NRC) guidelines (NRC, 2001), utilizing routine dairy nutritionist 		

**TABLE ES-4
SUMMARY OF IMPACTS AND MITIGATION MEASURES**

Environmental Impact				Mitigation Measure		Level of Significance Before Mitigation	Level of Significance After Mitigation
Less than Significant = LS	Beneficial = B	Significant = S	Cumulative Significant = CS	Significant and Unavoidable = SU	Potentially Significant = PS	N/A = Not Applicable	
				analyses of rations and maintaining feed analyses onsite for regulatory agency monitoring. <ul style="list-style-type: none"> • Feed lanes shall be cleared daily. • Silage piles shall be covered with tarps. • General Plan Update dairy and feedlot facilities design and construction shall include concrete-base freestalls and walk lanes, as well as water drainage to separator facilities. • Manure water shall be either injected subsurface or placed on the surface in thin layers, blending such manure water with irrigation water at a ratio in compliance with the nutrient management plan that shall be required for each dairy and feedlot. • Design and construction of dairy and feedlot lagoons shall comply with the specifications set forth in National Conservation Practice Standard 359 (Natural Resources Conservation Service, 2003). 			
			Policy AQ-4.8	Odor Management Plan for Dairy and Feedlot Operations. The County shall ensure that dairy and feedlot operators develop and implement an Odor Management Plan (OMP) as part of the each application submitted to either establish a new or expanded dairy or feedlot. The OMP would include standard operating practices for cattle handling, and manure collection, treatment, storage, and land application. The development of the odor management plan would have four basic steps (Schmidt, 2001). <ul style="list-style-type: none"> • Create a list of the potential odor sources on the farm. • Determine which of the odor sources are the most likely to bring about odor complaints. • List one or two odor control strategies for each of the significant odor sources. • Develop a protocol to respond to odor complaints. 			
Impact AQ-5	The General Plan Update could conflict with implementation of state goals for reducing greenhouse gas emissions and thereby have a negative effect on			Policies designed to improve air quality through a regional approach and interagency cooperation include the following: AQ-1.1 Cooperation with Other Agencies	PS	SU	

**TABLE ES-4
SUMMARY OF IMPACTS AND MITIGATION MEASURES**

Environmental Impact			Mitigation Measure		Level of Significance Before Mitigation	Level of Significance After Mitigation
Less than Significant = LS	Beneficial = B	Significant = S	Cumulative Significant = CS	Significant and Unavoidable = SU	Potentially Significant = PS	N/A = Not Applicable
Global Climate Change due to CO2 emissions from on-road vehicles and methane emissions from cattle and cattle manure.			AQ-1.2 Cooperation with Local Jurisdictions AQ-1.3 Cumulative Air Quality Impacts AQ-1.4 Air Quality Land Use Compatibility AQ-1.5 CEQA Compliance AQ-1.6 Purchase of Low Emission/Alternative Fuel Vehicles AQ-1.7 Support Statewide Global Warming Solutions Policies designed to improve air quality by reducing air emissions related to transportation include the following: AQ-2.1 Transportation Demand Management Programs AQ-2.2 Indirect Source Review AQ-2.3 Transportation and Air Quality AQ-2.4 Transportation Management Associations AQ-2.5 Ridesharing AQ Implementation Measure #12 Policies designed to improve air quality and minimize impacts to human health and the economy of the county through smart land use planning and design include the following: AQ-3.1 Location of Support Services AQ-3.2 Infill Near Employment AQ-3.3 Street Design AQ-3.4 Landscape AQ-3.5 Alternative Energy Design AQ-3.6 Mixed Land Uses AQ Implementation Measure #9A and #9B Policies designed to implement the best available controls and monitoring to regulate air emissions include the following: AQ-4.1 Air Pollution Control Technology AQ-4.2 Dust Suppression Measures AQ-4.3 Paving or Treatment of Roadways for Reduced Air Emissions AQ-4.4 Wood Burning Devices Policies designed to encourage economic and social growth while retaining quality of life standards include the following: LU-1.1 Smart Growth and Healthy Communities LU-1.2 Innovative Development LU-1.3 Prevent Incompatible Uses LU-1.4 Compact Development			

**TABLE ES-4
SUMMARY OF IMPACTS AND MITIGATION MEASURES**

Environmental Impact		Mitigation Measure		Level of Significance Before Mitigation	Level of Significance After Mitigation	
Less than Significant = LS	Beneficial = B	Significant = S	Cumulative Significant = CS	Significant and Unavoidable = SU	Potentially Significant = PS	N/A = Not Applicable
			<p>LU-1.8 Encourage Infill Development Policies designed to encourage energy conservation in new and developing developments include the following: ERM-4.1 Energy Conservation and Efficiency Measures ERM-4.2 Streetscape and Parking Area Improvements for Energy Conservation ERM-4.3 Local and State Programs ERM-4.4 Promote Energy Conservation Awareness ERM-4.5 Advance Planning ERM-4.6 Renewable Energy</p> <p>Policy AQ-4.7 ROG Reduction Measures for Dairy and Feedlot Operations. The County shall ensure that dairy operators implement the following ROG reduction measures as part of all dairy operations:</p> <ul style="list-style-type: none"> • The General Plan Update shall comply with SJVAPCD Rule 4570 (Confined Animal Facilities), which provides dairies with several options for reducing ROG, including: <ul style="list-style-type: none"> ○ feed manipulation, ○ improvement of manure and manure-water collection and treatment, ○ capture and treatment of effluent gases using high-technology treatment systems , and, ○ enhanced dispersion of manure and manure wastewater. • All animals shall be fed in accord with the National Research Council (NRC) guidelines (NRC, 2001), utilizing routine dairy nutritionist analyses of rations and maintaining feed analyses onsite for regulatory agency monitoring. • Feed lanes shall be cleared daily. • Silage piles shall be covered with tarps. • General Plan Update dairy and feedlot facilities design and construction shall include concrete-base freestalls and walk lanes, as well as water drainage to separator facilities. • Manure water shall be either injected subsurface or placed on the surface in thin layers, blending 			

**TABLE ES-4
SUMMARY OF IMPACTS AND MITIGATION MEASURES**

Environmental Impact		Mitigation Measure		Level of Significance Before Mitigation	Level of Significance After Mitigation	
Less than Significant = LS	Beneficial = B	Significant = S	Cumulative Significant = CS	Significant and Unavoidable = SU	Potentially Significant = PS N/A = Not Applicable	
				such manure water with irrigation water at a ratio in compliance with the nutrient management plan that shall be required for each dairy and feedlot.		
				<ul style="list-style-type: none"> Design and construction of dairy and feedlot lagoons shall comply with the specifications set forth in National Conservation Practice Standard 359 (Natural Resources Conservation Service, 2003). 		
		Policy AQ-4.9	Greenhouse Gas Emissions Reduction Plan. The County will develop a Greenhouse Gas Emissions Reduction Plan that identifies greenhouse gas emissions within the County as well as ways to reduce those emissions. The plan will parallel the requirements adopted by the California Air Resources Board specific to this issue.			
HEALTH AND SAFETY						
Geologic and Seismic Hazards						
Impact HS-1	The General Plan Update would not result in substantial soil erosion or the loss of topsoil.			Policies designed to address soil erosion impacts include the following: WR-1.10 Channel Modification WR-2.2 NPDES Enforcement WR-2.3 Best Management Practices WR-2.4 Construction Site Sediment Control HS-2.3 Hillside Development HS-2.4 Structure Siting F-1.4 Grading F-1.13 Hillside Development F-9.7 Minimize Soil Disturbance F-9.8 Erosion Mitigation Measures F-9.11 Development on Slopes F-9.12 Vegetation Removal FGMP Implementation Measure #7, #14 and #34	LS	N/A
Impact HS-2	The General Plan Update would not expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving: 1) rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map, issued by the State Geologist for the area or based on			Policies designed to minimize geologic hazard impacts to people and structures in the County include the following: HS-1.2 Development Constraints HS-1.3 Hazardous Lands HS-1.4 Building and Codes HS-1.5 Hazard Awareness and Public Education	PS	LS

**TABLE ES-4
SUMMARY OF IMPACTS AND MITIGATION MEASURES**

Environmental Impact		Mitigation Measure		Level of Significance Before Mitigation	Level of Significance After Mitigation	
Less than Significant = LS	Beneficial = B	Significant = S	Cumulative Significant = CS	Significant and Unavoidable = SU	Potentially Significant = PS	N/A = Not Applicable
	other substantial evidence of a known fault; 2) strong seismic groundshaking; 3) seismic-related ground failure, including liquefaction. including liquefaction.			HS-1.7 Safe Housing and Structures HS-1.11 Site Investigations HS-2.1 Continued Evaluation of Earthquake Risks HS-2.5 Financial Assistance for Seismic Upgrades HS-2.6 Seismic Standards for Dams HS-2.7 Subsidence Health and Safety Implementation Measure #1 F-9.10 Development in Hazard Areas		
			Policy HS-2.8	Alquist-Priolo Act Compliance. The County shall not permit any structure for human occupancy to be placed within designated Earthquake Fault Zones (pursuant to and as determined by the Alquist-Priolo Earthquake Fault Zoning Act; Public Resources Code, Chapter 7.5) unless the specific provisions of the Act and Title 14 of the California Code of Regulations have been satisfied. [New Policy – Draft EIR Analysis].		
Impact HS-3	The General Plan Update would not be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on-or off-site landslide, lateral spreading, subsidence, liquefaction, or collapse.			Policies designed to minimize geologic hazard impacts to people and structures in the County include the following: HS-1.2 Development Constraints HS-1.3 Hazardous Lands HS-1.4 Building and Codes HS-1.5 Hazard Awareness and Public Education HS-1.7 Safe Housing and Structures HS-1.11 Site Investigations HS-2.1 Continued Evaluation of Earthquake Risks HS-2.5 Financial Assistance for Seismic Upgrades HS-2.6 Seismic Standards for Dams Implementation Measure #1 Policies designed to minimize landslide hazard impacts to people and structures in the County through the establishment of development guidelines in hillside areas include the following: HS-1.2 Development Constraints HS-1.3 Hazardous Lands HS-2.2 Landslide Areas HS-2.3 Hillside Development	LS	N/A

**TABLE ES-4
SUMMARY OF IMPACTS AND MITIGATION MEASURES**

Environmental Impact		Mitigation Measure			Level of Significance	Level of Significance
					Before Mitigation	After Mitigation
Less than Significant = LS	Beneficial = B	Significant = S	Cumulative Significant = CS	Significant and Unavoidable = SU	Potentially Significant = PS	N/A = Not Applicable
				HS-2.4 Structure Siting HS-2.7 Subsidence F-1.13 Hillside Development F-9.7 Minimize Soil Disturbance F-9.8 Erosion Mitigation Measures F-9.11 Development on Slopes F-9.12 Vegetation Removal		
Impact HS-4	The General Plan Update could be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), but would not create substantial risks to life or property.			Policies designed to minimize geologic hazard impacts to people and structures in the County include the following: HS-1.2 Development Constraints HS-1.3 Hazardous Lands HS-1.4 Building and Codes HS-1.5 Hazard Awareness and Public Education HS-1.7 Safe Housing and Structures HS-1.11 Site Investigations HS-2.1 Continued Evaluation of Earthquake Risks HS-2.5 Financial Assistance for Seismic Upgrades HS-2.6 Seismic Standards for Dams Health and Safety Implementation Measure #1 F-9.10 Development in Hazard Areas	LS	N/A
Airport Hazards						
Impact HS-5	The General Plan Update could result in development located within an airport land use plan area or could result in a safety hazard for people residing or working in the project area.			Policies designed to promote compatible land use development and patterns that minimize impacts to surrounding land uses (including open space uses) include the following: LU-1.3 Prevent Incompatible Uses LU-3.6 Project Design LU-5.4 Compatibility with Surrounding Land Use LU-6.2 Buffers Policies designed to promote development compatible with local airport land use compatibility plans, include the following: TC-3.4 Airport Compatibility TC-3.6 Airport Encroachment HS-3.1 Airport Land Use Compatibility Plan HS-3.2 Compliance with FAA Regulations HS-8.4 Airport Noise Contours	LS	N/A

**TABLE ES-4
SUMMARY OF IMPACTS AND MITIGATION MEASURES**

Environmental Impact		Mitigation Measure		Level of Significance	Level of Significance	
				Before Mitigation	After Mitigation	
Less than Significant = LS	Beneficial = B	Significant = S	Cumulative Significant = CS	Significant and Unavoidable = SU	Potentially Significant = PS	N/A = Not Applicable
Hazardous Materials						
Impact HS-6	The General Plan Update could create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials or create a significant hazard to the public or the environment through reasonable foreseeable upset and accident conditions involving the release of hazardous materials to the environment.			<p>Policies designed to promote compatible land use development and patterns that minimize impacts to surrounding land uses (including open space uses) include the following:</p> <ul style="list-style-type: none"> LU-1.3 Prevent Incompatible Uses LU-5.4 Compatibility with Surrounding Land Use <p>Policies designed to minimize the risk of County residents and property associated with the transport, distribution, use, and storage of hazardous materials include the following:</p> <ul style="list-style-type: none"> HS-4.1 Hazardous Materials HS-4.2 Establishment of Procedures to Transport Hazardous Waste HS-4.3 Incompatible Land Uses HS-4.4 Contamination Prevention HS-4.5 Increase Public Awareness HS-4.6 Pesticide Control HS-4.7 Coordination of Materials on Public Lands Health and Safety Implementation Measure #12 	PS	LS
		Policy HS-4.8	Designated Routes for Hazardous Materials Transport. The County shall continue to encourage the transportation of hazardous materials within the County to routes that have been designated for such transport. [New Policy – Draft EIR Analysis].			
		Policy HS-4.9	Hazardous Materials Studies. The County shall ensure that the proponents of new development projects address hazardous materials concerns through the preparation of Phase I or Phase II hazardous materials studies for each identified site as part of the design phase for each project. Recommendations required to satisfy federal or State cleanup standards outlined in the studies will be implemented as part of the construction phase for each project. [New Policy – Draft EIR Analysis].			
Impact HS-7	The General Plan Update would not emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school.			<p>Policies designed to promote compatible land use development and patterns that minimize impacts to surrounding land uses (including open space uses) include the following:</p> <ul style="list-style-type: none"> LU-1.3 Prevent Incompatible Uses 	LS	N/A

**TABLE ES-4
SUMMARY OF IMPACTS AND MITIGATION MEASURES**

Environmental Impact		Mitigation Measure		Level of Significance Before Mitigation	Level of Significance After Mitigation
Less than Significant = LS	Beneficial = B	Significant = S	Cumulative Significant = CS	Potentially Significant = PS	N/A = Not Applicable
			LU-5.4 Compatibility with Surrounding Land Use LU-6.3 Schools in Neighborhoods LU-6.4 School District Coordination Policies designed to minimize the risk of County residents and property associated with the transport, distribution, use, and storage of hazardous materials include the following: HS-4.1 Hazardous Materials HS-4.2 Establishment of Procedures to Transport Hazardous Waste HS-4.3 Incompatible Land Uses HS-4.4 Contamination Prevention HS-4.5 Increase Public Awareness HS-4.6 Pesticide Control HS-4.7 Coordination of Materials on Public Lands Health and Safety Implementation Measure #12		
Impact HS-8	Development under the General Plan Update could be located on a site which is included on a list of hazardous materials sites compiled pursuant to government code section 65962.5 and, as a result, could create a significant hazard to the public or the environment.		Policies designed to promote compatible land use development and patterns that minimize impacts to surrounding land uses (including open space uses) include the following: LU-1.3 Prevent Incompatible Uses LU-5.4 Compatibility with Surrounding Land Use Policies designed to minimize the risk of County residents and property associated with the transport, distribution, use, and storage of hazardous materials include the following: HS-4.1 Hazardous Materials HS-4.2 Establishment of Procedures to Transport Hazardous Waste HS-4.3 Incompatible Land Uses HS-4.4 Contamination Prevention HS-4.5 Increase Public Awareness HS-4.6 Pesticide Control HS-4.7 Coordination of Materials on Public Lands Health and Safety Implementation Measure #12	PS	LS
		Policy HS-4.8	Designated Routes for Hazardous Materials Transport. The County shall continue to encourage the transportation of hazardous materials within the County to routes that have been designated for such transport. [New Policy – Draft EIR Analysis].		

**TABLE ES-4
SUMMARY OF IMPACTS AND MITIGATION MEASURES**

Environmental Impact			Mitigation Measure			Level of Significance Before Mitigation	Level of Significance After Mitigation
Less than Significant = LS	Beneficial = B	Significant = S	Cumulative Significant = CS	Significant and Unavoidable = SU	Potentially Significant = PS	N/A = Not Applicable	
		Policy HS-4.9	Hazardous Materials Studies. The County shall ensure that the proponents of new development projects address hazardous materials concerns through the preparation of Phase I or Phase II hazardous materials studies for each identified site as part of the design phase for each project. Recommendations required to satisfy federal or State cleanup standards outlined in the studies will be implemented as part of the construction phase for each project. [New Policy – Draft EIR Analysis].				
Flood Hazards							
Impact HS-9	The General Plan Update could place housing within a 100-year flood hazard area, as mapped on a federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map or place within a 100-year flood hazard area structures which could impede or redirect flood flows.			Policies designed to minimize this impact through the preservation of floodplain areas and the management of new development in hazardous areas include the following: HS-1.2 Development Constraints HS-1.3 Hazardous Lands HS-1.12 Addressing HS-5.1 Development Compliance with Federal, State, and Local Regulations HS-5.2 Development in Floodplain Zones HS-5.3 Participation in Federal Flood Insurance Program HS-5.4 Multi-Purpose Flood Control Measures HS-5.5 Development in Dam and Seiche Inundation Zones HS-5.6 Impacts to Downstream Properties HS-5.7 Mapping of Flood Hazard Areas HS-5.8 Road Location HS-5.9 Floodplain Development Restrictions HS-5.10 Flood Control Design HS-5.11 Natural Design Implementation Measure #14 Policies designed to minimize this impact through the continued coordination with service providers, implementation of emergency response plans, and emergency training programs include the following: HS-1.1 Maintain Emergency Public Services HS-7.1 Coordinate Emergency Response Services with Government Agencies HS-7.2 Mutual Aid Agreement HS-7.3 Maintain Emergency Evacuation Plans HS-7.7 Joint Exercises		LS	N/A

**TABLE ES-4
SUMMARY OF IMPACTS AND MITIGATION MEASURES**

Environmental Impact		Mitigation Measure		Level of Significance Before Mitigation	Level of Significance After Mitigation
Less than Significant = LS	Beneficial = B	Significant = S	Cumulative Significant = CS	Potentially Significant = PS	N/A = Not Applicable
			<ul style="list-style-type: none"> Implementation Measure #1 Implementation Measure #2 Implementation Measure #3 Implementation Measure #5 Implementation Measure #9 Implementation Measure #16 Implementation Measure #18 		
			<ul style="list-style-type: none"> Policies designed to minimize this impact through adherence to appropriate levels of stormwater infrastructure planning, financing and construction include the following: <ul style="list-style-type: none"> PFS-4.1 Stormwater Management Plans PFS-4.2 Site Improvements PFS-4.3 Development Requirements PFS-4.4 Stormwater Retention Facilities PFS-4.6 Agency Coordination 		
Impact HS-10	The General Plan Update could expose people or structures to a significant risk of loss, injury or death involving flooding, including flooding as a result of the failure of a levee or dam.		<ul style="list-style-type: none"> Policies designed to minimize this impact through the preservation of floodplain areas and the management of new development in hazardous areas include the following: <ul style="list-style-type: none"> HS-1.2 Development Constraints HS-1.3 Hazardous Lands HS-1.12 Addressing HS-5.1 Development Compliance with Federal, State, and Local Regulations HS-5.2 Development in Floodplain Zones HS-5.3 Participation in Federal Flood Insurance Program HS-5.4 Multi-Purpose Flood Control Measures HS-5.5 Development in Dam and Seiche Inundation Zones HS-5.6 Impacts to Downstream Properties HS-5.7 Mapping of Flood Hazard Areas HS-5.8 Road Location HS-5.9 Floodplain Development Restrictions HS-5.10 Flood Control Design HS-5.11 Natural Design Implementation Measure #14 Policies designed to minimize this impact through the continued coordination with service providers, implementation of emergency response plans, and emergency training programs include the following: <ul style="list-style-type: none"> HS-1.1 Maintain Emergency Public Services 	PS	SU

**TABLE ES-4
SUMMARY OF IMPACTS AND MITIGATION MEASURES**

Environmental Impact		Mitigation Measure		Level of Significance Before Mitigation	Level of Significance After Mitigation	
Less than Significant = LS	Beneficial = B	Significant = S	Cumulative Significant = CS	Significant and Unavoidable = SU	Potentially Significant = PS	N/A = Not Applicable
			HS-7.1 Coordinate Emergency Response Services with Government Agencies HS-7.2 Mutual Aid Agreement HS-7.3 Maintain Emergency Evacuation Plans HS-7.7 Joint Exercises Implementation Measure #1 Implementation Measure #2 Implementation Measure #3 Implementation Measure #5 Implementation Measure #9 Implementation Measure #16 Implementation Measure #18 Policies designed to minimize this impact through adherence to appropriate levels of stormwater infrastructure planning, financing and construction include the following: PFS-4.1 Stormwater Management Plans PFS-4.2 Site Improvements PFS-4.3 Development Requirements PFS-4.4 Stormwater Retention Facilities PFS-4.6 Agency Coordination			
Urban and Wildland Fire Hazards						
Impact HS-11	The General Plan Update could expose people or structures to a significant risk of loss, injury, or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands.		Policies designed to minimize this impact through the continued provision of fire protection services and emergency response planning include the following: HS-1.4 Building and Codes HS-1.5 Hazard Awareness and Public Education HS-1.6 Public Safety Programs HS-1.8 Response Times Planning in GIS HS-1.9 Emergency Access HS-1.10 Emergency Services Near Assisted Living Housing HS-1.12 Addressing HS-6.1 New Building Fire Hazards HS-6.2 Development in Fire Hazard Zones HS-6.3 Consultation with Fire Service Districts HS-6.4 Encourage Cluster Development HS-6.5 Fire Risk Recommendations HS-6.6 Wildland Fire Management Plans HS-6.7 Water Supply System	LS	N/A	

**TABLE ES-4
SUMMARY OF IMPACTS AND MITIGATION MEASURES**

Environmental Impact		Mitigation Measure		Level of Significance Before Mitigation	Level of Significance After Mitigation	
Less than Significant = LS	Beneficial = B	Significant = S	Cumulative Significant = CS	Significant and Unavoidable = SU	Potentially Significant = PS	N/A = Not Applicable
						HS-6.8 Private Water Supply HS-6.9 Fuel Modification Programs HS-6.10 Fuel Breaks HS-6.11 Fire Buffers HS-6.12 Weed Abatement HS-6.13 Restoration of Disturbed Lands HS-6.14 Coordination with Cities HS-6.15 Coordination of Fuel Hazards on Public Lands HS-7.1 Coordinate Emergency Response Services with Government Agencies HS-7.2 Mutual Aid Agreement HS-7.3 Maintain Emergency Evacuation Plans HS-7.4 Upgrading for Streets and Highways HS-7.5 Emergency Centers HS-7.6 Search and Rescue HS-7.7 Joint Exercises HS Implementation Measure #15A PF-5.2 Criteria for New Towns PFS-1.3 Impact Mitigation PFS-2.1 Water Supply PFS-7.1 Fire Protection PFS-7.2 Fire Protection Standards PFS-7.3 Visible Signage for Roads and Buildings PFS-7.4 Interagency Fire Protection Cooperation PFS-7.5 Fire Staffing and Response Time Standards PFS-7.6 Provision of Station Facilities and Equipment PFS-7.8 Cost Sharing PFS-7.12 Locations of Fire and Sheriff Stations/Sub-stations F-11.2 Provision of Safety Services F-11.3 Fire and Crime Protection Plan Public Facilities and Services Implementation Measures designed to ensure funding for County utilities to provide adequate service levels. Public Facilities and Services Implementation Measure #1 Public Facilities and Services Implementation Measure #2 Public Facilities and Services Implementation Measure #3 Public Facilities and Services Implementation Measure #9

Emergency Response

**TABLE ES-4
SUMMARY OF IMPACTS AND MITIGATION MEASURES**

Environmental Impact		Mitigation Measure	Level of Significance Before Mitigation	Level of Significance After Mitigation		
Less than Significant = LS	Beneficial = B	Significant = S	Cumulative Significant = CS	Significant and Unavoidable = SU	Potentially Significant = PS	N/A = Not Applicable
Impact HS-12	The General Plan Update could impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan.	<p>Policies designed to ensure a coordinated approach to emergency response and evacuation planning include the following:</p> <ul style="list-style-type: none"> HS-1.12 Addressing HS-7.1 Coordinate Emergency Response Services with Government Agencies HS-7.2 Mutual Aid Agreement HS-7.3 Maintain Emergency Evacuation Plans HS-7.4 Upgrading for Streets and Highways HS-7.5 Emergency Centers HS-7.6 Search and Rescue HS-7.7 Joint Exercises 	PS	SU		
Noise						
Impact HS-13	The General Plan Update would result in the exposure of persons to or generation of noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies; or would result in a substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project; or would result in a substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project.	<p>Policies designed to provide guidance on the analysis, mitigation and monitoring of a variety of noise-related impacts that could occur within the County include the following:</p> <ul style="list-style-type: none"> HS-8.2 Noise Impacted Areas HS-8.5 State Noise Standards HS-8.6 Noise Level Criteria HS-8.7 Inside Noise HS-8.8 Adjacent Uses HS-8.9 County Equipment HS-8.10 Automobile Noise Enforcement HS-8.11 Peak Noise Generators <p>Policies designed to promote compatible development within areas that minimize impacts (including noise) to surrounding land uses include the following:</p> <ul style="list-style-type: none"> HS-8.1 Economic Base Protection HS-8.3 Noise Sensitive Land Uses HS-8.4 Airport Noise Contours LU-1.3 Prevent Incompatible Uses LU-5.4 Compatibility with Surrounding Land Use 	PS	SU		

**TABLE ES-4
SUMMARY OF IMPACTS AND MITIGATION MEASURES**

Environmental Impact			Mitigation Measure			Level of Significance Before Mitigation	Level of Significance After Mitigation
Less than Significant = LS	Beneficial = B	Significant = S	Cumulative Significant = CS	Significant and Unavoidable = SU	Potentially Significant = PS	N/A = Not Applicable	
			Policy HS-8.12	Noise Analysis. The County shall require a detailed noise impact analysis in areas where current or future exterior noise levels from transportation or stationary sources have the potential to exceed the adopted noise policies of the Noise Element, where there are development of new noise sensitive land uses or the development of potential noise generating land uses near existing sensitive land uses. The noise analysis shall be the responsibility of the project applicant and be prepared by a qualified acoustical engineer (i.e., a Registered Professional Engineer in the State of California, etc.). The analysis shall include recommendations and evidence to establish mitigation that will reduce noise exposure to acceptable levels. [New Policy – Draft EIR Analysis].			
			Policy HS-8.13	Sound Attenuation Features. The County shall require sound attenuation features such as walls, berming, heavy landscaping, and between commercial, industrial, and residential uses to reduce noise and vibration impacts. [New Policy – Draft EIR Analysis].			
			Policy HS-8.14	Noise Buffering. The County shall require noise buffering or insulation in new development along major streets, highways, and railroad tracks. [New Policy - Draft EIR Analysis].			
			Policy HS-8.15	State Noise Insulation Standards. The County shall enforce the State Noise Insulation Standards (California Administrative Code, Title 24) and Chapter 35 of the Uniform Building Code. [New Policy - Draft EIR Analysis].			
			Policy HS-8.16	Coordinate with Caltrans. The County shall work with Caltrans to mitigate noise impacts on sensitive receptors near state roadways, by requiring noise buffering or insulation in new construction. [New Policy - Draft EIR Analysis].			
			Policy HS-8.17	Construction Noise. The County shall seek to limit the potential noise impacts of construction activities on surrounding land uses. [New Policy - Draft EIR Analysis].			
Impact HS-14	The General Plan Update will result in the exposure of persons to or generation of excessive groundborne vibration or groundborne noise levels.			Policies designed to provide guidance on the analysis, mitigation and monitoring of a variety of noise-related impacts that could occur within the County include the following: HS-8.2 Noise Impacted Areas		PS	SU

**TABLE ES-4
SUMMARY OF IMPACTS AND MITIGATION MEASURES**

Environmental Impact			Mitigation Measure		Level of Significance Before Mitigation	Level of Significance After Mitigation
Less than Significant = LS	Beneficial = B	Significant = S	Cumulative Significant = CS	Significant and Unavoidable = SU	Potentially Significant = PS	N/A = Not Applicable
				HS-8.5 State Noise Standards HS-8.6 Noise Level Criteria HS-8.7 Inside Noise HS-8.8 Adjacent Uses HS-8.9 County Equipment HS-8.10 Automobile Noise Enforcement HS-8.11 Peak Noise Generators Policies designed to promote compatible development within areas that minimize impacts (including noise) to surrounding land uses include the following: HS-8.1 Economic Base Protection HS-8.3 Noise Sensitive Land Uses HS-8.4 Airport Noise Contours LU-1.3 Prevent Incompatible Uses LU-5.4 Compatibility with Surrounding Land Use		
			Policy HS-8.12	Noise Analysis. The County shall require a detailed noise impact analysis in areas where current or future exterior noise levels from transportation or stationary sources have the potential to exceed the adopted noise policies of the Noise Element, where there are development of new noise sensitive land uses or the development of potential noise generating land uses near existing sensitive land uses. The noise analysis shall be the responsibility of the project applicant and be prepared by a qualified acoustical engineer (i.e., a Registered Professional Engineer in the State of California, etc.). The analysis shall include recommendations and evidence to establish mitigation that will reduce noise exposure to acceptable levels. [New Policy – Draft EIR Analysis].		
			Policy HS-8.13	Sound Attenuation Features. The County shall require sound attenuation features such as walls, berming, heavy landscaping, and between commercial, industrial, and residential uses to reduce noise and vibration impacts. [New Policy – Draft EIR Analysis].		
			Policy HS-8.14	Noise Buffering. The County shall require noise buffering or insulation in new development along major streets, highways, and railroad tracks. [New Policy - Draft EIR Analysis].		

**TABLE ES-4
SUMMARY OF IMPACTS AND MITIGATION MEASURES**

Environmental Impact			Mitigation Measure			Level of Significance Before Mitigation	Level of Significance After Mitigation
Less than Significant = LS	Beneficial = B	Significant = S	Cumulative Significant = CS	Significant and Unavoidable = SU	Potentially Significant = PS	N/A = Not Applicable	
			Policy HS-8.15	State Noise Insulation Standards. The County shall enforce the State Noise Insulation Standards (California Administrative Code, Title 24) and Chapter 35 of the Uniform Building Code. [New Policy - Draft EIR Analysis].			
			Policy HS-8.16	Coordinate with Caltrans. The County shall work with Caltrans to mitigate noise impacts on sensitive receptors near state roadways, by requiring noise buffering or insulation in new construction. [New Policy - Draft EIR Analysis].			
			Policy HS-8.17	Construction Noise. The County shall seek to limit the potential noise impacts of construction activities on surrounding land uses. [New Policy - Draft EIR Analysis].			
Impact HS-15	The General Plan Update will be located within an airport land use plan area or within the vicinity of a private airstrip and could expose people residing or working within the project area to excessive noise levels.			Policies designed to promote compatible land use development and patterns that minimize impacts to surrounding land uses (including open space uses) include the following: LU-1.3 Prevent Incompatible Uses LU-3.6 Project Design LU-5.4 Compatibility with Surrounding Land Use Policies designed to promote development compatible with local airport land use compatibility plans, include the following: TC-3.4 Airport Compatibility TC-3.6 Airport Encroachment HS-3.1 Airport Land Use Compatibility Plan HS-3.2 Compliance with FAA Regulations HS-8.4 Airport Noise Contours		PS	SU
WATER RESOURCES							
Impact WR-1	The General Plan Update would require or result in the construction of new water treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects.			Policies designed to minimize this impact through the development of new facilities that address all applicable public safety and environmental concerns include the following: LU-2.1 Agricultural Lands LU-2.4 Open Space Character LU-7.12 Historic Buildings and Areas AG-1.7 Preservation of Agricultural Lands TC-1.15 Traffic Impact Study AQ-1.5 CEQA Compliance AQ-4.2 Dust Suppression Measures		PS	SU

**TABLE ES-4
SUMMARY OF IMPACTS AND MITIGATION MEASURES**

Environmental Impact				Mitigation Measure	Level of Significance Before Mitigation	Level of Significance After Mitigation
Less than Significant = LS	Beneficial = B	Significant = S	Cumulative Significant = CS	Significant and Unavoidable = SU	Potentially Significant = PS	N/A = Not Applicable
				SL-1.1 Natural Landscapes WR-1.10 Channel Modification WR-2.2 NPDES Enforcement WR-2.3 Best Management Practices WR-2.4 Construction Site Sediment Control ERM-1.2 Development in Environmentally Sensitive Areas		
			Policy PFS-1.4	Standards of Approval. The County should not approve any development unless the following conditions are met: - The applicant can demonstrate all necessary infrastructure will be installed and adequately financed; - Infrastructure improvements are consistent with adopted County infrastructure plans and standards; - Funding mechanisms are provided to maintain, operate, and upgrade the facilities throughout the life of the project; and - Facilities shall be developed in compliance with all applicable regulations designed to address public safety and environmental impacts that may result through the construction, operation, and maintenance of these facilities. [New Policy – Draft EIR Analysis].		
			Policy HS-8.12	Noise Analysis. The County shall require a detailed noise impact analysis in areas where current or future exterior noise levels from transportation or stationary sources have the potential to exceed the adopted noise policies of the Health and Safety Element, where there are development of new noise sensitive land uses or the development of potential noise generating land uses near existing sensitive land uses. The noise analysis shall be the responsibility of the project applicant and be prepared by a qualified acoustical specialist (i.e., a Registered Civil Engineer in the State of California, etc.). The analysis shall include recommendations and evidence to establish mitigation that will reduce noise exposure to acceptable levels. [New Policy – Draft EIR Analysis].		

**TABLE ES-4
SUMMARY OF IMPACTS AND MITIGATION MEASURES**

Environmental Impact		Mitigation Measure	Level of Significance Before Mitigation	Level of Significance After Mitigation		
Less than Significant = LS	Beneficial = B	Significant = S	Cumulative Significant = CS	Significant and Unavoidable = SU	Potentially Significant = PS	N/A = Not Applicable
Impact WR-2	The General Plan Update would require new or expanded water supply entitlements.	<p>Policies designed to minimize this impact through the early identification of required infrastructure and the orderly construction and rehabilitation of the facilities needed to serve existing and planned urban areas include the following:</p> <ul style="list-style-type: none"> PF-2.3 UDB and Other Boundaries PF-2.4 Community Plans PF-2.4A Collaborative Community Planning Partnerships PF-2.4B Land Use Consistency PF-3.3 Hamlet Plans PF-6.5 Regional Planning Coordination ED-1.6 Develop Public/Private Partnerships PFS-1.7 Coordination with Service Providers PFS-1.8 Funding for Service Providers PFS-1.14 Capital Improvement Plans PFS-1.16 Joint Planning Efforts PFS-2.1 Water Supply F-10.1 Infrastructure Capacity F-10.2 Provision of Adequate Infrastructure WR-1.3 Water Export Outside County WR-3.1 Develop Additional Water Sources WR-3.2 Develop an Integrated Regional Water Master Plan WR-3.3 Adequate Water Availability WR-3.4 Water Resource Planning WR-3.9 Establish Critical Water Supply Areas WR-3.10 Diversion of Surface Water WR-3.11 Policy Impacts to Water Resources WR-3.12 Joint Water Projects with Neighboring Counties WR-3.13 Coordination of Watershed Management on Public Lands WR Implementation Measure #14B, #14C and #23 <p>Additional policies designed to minimize this impact through the provision and conservation of water resources and service include the following:</p> <ul style="list-style-type: none"> WR-3.4 Water Resource Planning WR-3.7 Emergency Water Conservation Plan WR-3.8 Educational Programs WR-3.11 Policy Impacts to Water Resources 	PS	SU		

**TABLE ES-4
SUMMARY OF IMPACTS AND MITIGATION MEASURES**

Environmental Impact		Mitigation Measure		Level of Significance Before Mitigation	Level of Significance After Mitigation	
Less than Significant = LS	Beneficial = B	Significant = S	Cumulative Significant = CS	Significant and Unavoidable = SU	Potentially Significant = PS	N/A = Not Applicable
Impact WR-3	The General Plan Update would have the potential, in the long-term, to deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table.		Policies designed to minimize groundwater impacts through the early identification of required infrastructure and the orderly construction and rehabilitation of the facilities needed to serve existing and planned urban areas include the following: WR-1.1 Groundwater Withdrawal WR-1.2 Groundwater Monitoring WR-1.3 Water Export Outside County WR-1.4 Conversion of Agricultural Water Resources WR-1.5 Expand Use of Reclaimed Wastewater WR-1.6 Expand Use of Reclaimed Water WR-1.7 Collection of Additional Groundwater Information WR-1.8 Groundwater Basin Management WR-3.2 Develop an Integrated Regional Water Master Plan WR-3.6 Agricultural Irrigation Efficiency WR-3.9 Establish Critical Water Supply Areas WR-3.10 Diversion of Surface Water WR Implementation Measure #7A, #14B and #23 Additional policies designed to minimize this impact through the provision and conservation of water resources and service include the following: WR-3.4 Water Resource Planning WR-3.7 Emergency Water Conservation Plan WR-3.8 Educational Programs WR-3.11 Policy Impacts to Water Resources		PS	SU
Impact WR-4	The General Plan Update could violate water quality standards or waste discharge requirements, or otherwise degrade water quality		Policies designed to minimize this impact through adherence to appropriate levels of water, wastewater, and storm drainage infrastructure planning, financing and construction include the following: ERM-2.8 Minimize Adverse Impacts F-9.5 Protection of Lakes HS-4.4 Contamination Prevention PF-5.2 Criteria for New Towns PFS-1.3 Impact Mitigation PFS-2.5 New Systems or Individual Wells PFS-3.1 Private Sewage Disposal Standards PFS-3.5 Wastewater System Failures PFS-3.7 Financing PFS-4.7 NPDES Enforcement WR-1.9 Collection of Additional Surface Water Information		LS	N/A

**TABLE ES-4
SUMMARY OF IMPACTS AND MITIGATION MEASURES**

Environmental Impact		Mitigation Measure		Level of Significance Before Mitigation	Level of Significance After Mitigation	
Less than Significant = LS	Beneficial = B	Significant = S	Cumulative Significant = CS	Significant and Unavoidable = SU	Potentially Significant = PS	N/A = Not Applicable
						WR-2.1 Protect Water Quality WR-2.2 NPDES Enforcement WR-2.3 Best Management Practices WR-2.4 Construction Site Sediment Control WR-2.5 Major Drainage Management WR-2.6 Degraded Water Resources WR-2.7 Industrial and Agricultural Sources WR-2.8 Point Source Control WR-2.9 Private Wells WR Implementation Measure #14A and #14C Policies designed to minimize water quality impacts associated with stormwater, water, and wastewater utility infrastructure needed to serve existing and planned urban areas include the following: ERM-5.7 Public Water Access ERM-7.3 Protection of Soils on Slopes F-9.2 Development Drainage Patterns F-9.6 Development in the Frazier Valley Watershed HS-5.8 Road Location HS-5.9 Floodplain Development Restrictions PF-5.2 Criteria for New Towns PFS-2.5 New Systems or Individual Wells PFS-4.1 Stormwater Management Plans PFS-4.2 Site Improvements PFS-4.3 Development Requirements PFS-4.4 Stormwater Retention Facilities PFS-4.5 Detention/Retention Basins Design PFS-4.6 Agency Coordination PFS-4.7 NPDES Enforcement WR-1.9 Collection of Additional Surface Water Information WR-2.1 Protect Water Quality WR-2.2 NPDES Enforcement WR-2.3 Best Management Practices WR-2.4 Construction Site Sediment Control WR-2.5 Major Drainage Management WR-2.6 Degraded Water Resources WR-2.7 Industrial and Agricultural Sources WR-2.8 Point Source Control WR-2.9 Private Wells

**TABLE ES-4
SUMMARY OF IMPACTS AND MITIGATION MEASURES**

Environmental Impact		Mitigation Measure		Level of Significance Before Mitigation	Level of Significance After Mitigation
Less than Significant = LS	Beneficial = B	Significant = S	Cumulative Significant = CS	Potentially Significant = PS	N/A = Not Applicable
		WR-3.10 Diversion of Surface Water WR Implementation Measure #14A and #14C Foothills Implementation Measure #33 Public Facilities and Services Implementation Measures designed to ensure funding for County utilities to provide adequate service levels. Public Facilities and Services Implementation Measure #1 Public Facilities and Services Implementation Measure #2 Public Facilities and Services Implementation Measure #3 Public Facilities and Services Implementation Measure #3A			
TRANSPORTATION AND CIRCULATION					
Roads and Highways					
Impact TC-1	The General Plan Update would result in a substantial increase in vehicular traffic.	Policies designed to minimize transportation impacts through the establishment of design and LOS standards for a variety of circulation, traffic, transit, and non-motorized transportation modes, include the following: TC-1.1 Provision of an Adequate Public Road Network TC-1.2 County Improvement Standards TC-1.3 Regional Coordination TC-1.4 Funding Sources TC-1.5 Public Road System Maintenance TC-1.6 Intermodal Connectivity TC-1.8 Promoting Operational Efficiency TC-1.9 Highway Completion TC-1.10 Urban Interchanges TC-1.11 Regionally Significant Intersections TC-1.13 Land Dedication for Roadways and Other Travel Modes TC-1.14 Roadway Facilities TC-1.15 Traffic Impact Study TC-1.16 County LOS Standards TC-1.17 Level of Service Coordination TC-1.18 Balanced System TC-1.19 Balanced Funding TC Implementation Measure #3A, #7A and #9A Policies designed to integrate land use and circulation concepts during the early planning and design phases of Countywide development to minimize land use conflicts		PS	SU

**TABLE ES-4
SUMMARY OF IMPACTS AND MITIGATION MEASURES**

Environmental Impact		Mitigation Measure		Level of Significance Before Mitigation	Level of Significance After Mitigation
Less than Significant = LS	Beneficial = B	Significant = S	Cumulative Significant = CS	Potentially Significant = PS	N/A = Not Applicable
			<p>include the following:</p> <ul style="list-style-type: none"> TC-1.3 Regional Coordination TC-1.7 Intermodal Freight Villages TC-1.12 Scenic Highways and Roads TC-1.13 Land Dedication for Roadways and Other Travel Modes LU-1.11 Roadway Access LU-4.4 Travel-Oriented Tourist Commercial Uses LU-5.4 Compatibility with Surrounding Land Use 		
Rail Transportation					
Impact TC-2	The General Plan Update would result in substantial changes in accessibility to County-area railroad terminals and cargo transfer points.		<p>Policies designed to minimize transportation impacts through the establishment of design and LOS standards for a variety of circulation, traffic, transit, and non-motorized transportation modes, include the following:</p> <ul style="list-style-type: none"> TC-1.6 Intermodal Connectivity TC-1.7 Intermodal Freight Villages TC-1.8 Promoting Operational Efficiency TC-2.1 Rail Service TC-2.2 Rail Improvements TC-2.3 Amtrak Service TC-2.4 High Speed Rail (HSR) TC Implementation Measure #7A <p>Policies designed to integrate land use and circulation concepts during the early planning and design phases of Countywide development to minimize land use conflicts include the following:</p> <ul style="list-style-type: none"> TC-2.5 Railroad Corridor Preservation LU-5.4 Compatibility with Surrounding Land Use 	PS	LS
		Policy TC-2.7	<p>Rail Facilities and Existing Development. The County shall ensure that new railroad rights-of-way or yards adjacent to existing residential or commercial areas are screened or buffered to reduce noise, air, and visual impacts [New Policy – Draft EIR Analysis].</p>		

**TABLE ES-4
SUMMARY OF IMPACTS AND MITIGATION MEASURES**

Environmental Impact		Mitigation Measure		Level of Significance	Level of Significance	
				Before Mitigation	After Mitigation	
Less than Significant = LS	Beneficial = B	Significant = S	Cumulative Significant = CS	Significant and Unavoidable = SU	Potentially Significant = PS	N/A = Not Applicable
Aviation						
Impact TC-3	The General Plan Update would result in a substantial increase in Countywide aviation usage at local facilities.			Policies designed to minimize transportation impacts through the establishment of design and LOS standards for a variety of circulation, traffic, transit, and non-motorized transportation modes, include the following: TC-1.6 Intermodal Connectivity TC-1.8 Promoting Operational Efficiency TC-1.18 Balanced System TC-1.19 Balanced Funding TC-3.1 Enhancement of County-wide Airport System TC-3.2 Airport System Development TC-3.3 Airport Enhancement TC-3.4 Airport Compatibility TC-3.5 Private Ownership TC-3.6 Airport Encroachment TC-3.7 Multi-Modal Development TC Implementation Measure #7A	LS	NA
Public Transportation						
Impact TC-4	The General Plan Update would result in a substantial increase in public transit usage.			Policies designed to minimize transportation impacts through the establishment of design and LOS standards for a variety of circulation, traffic, transit, and non-motorized transportation modes, include the following: TC-1.3 Regional Coordination TC-1.4 Funding Sources TC-1.6 Intermodal Connectivity TC-1.18 Balanced System TC-1.19 Balanced Funding TC-2.3 Amtrak Service TC-2.4 High Speed Rail (HSR) TC-4.1 Transportation Programs TC-4.2 Determine Transit Needs TC-4.3 Support Tulare County Area Transit TC-4.4 Nodal Land Use Patterns that Support Public Transit TC-4.5 Transit Coordination TC-4.6 San Joaquin Valley Intelligent Transportation System Strategic Deployment Plan TC-4.7 Transit Ready Development TC-5.5 Facilities TC Implementation Measure #7A F-9.17 Proximity to Transportation	LS	NA
Bicycle Routes and Trails						

**TABLE ES-4
SUMMARY OF IMPACTS AND MITIGATION MEASURES**

Environmental Impact		Mitigation Measure				Level of Significance Before Mitigation	Level of Significance After Mitigation
						Less than Significant = LS	Beneficial = B
Impact TC-5	The General Plan Update could result in a substantial increase in bicycle and pedestrian activity.						
						LS	NA
<p>Policies designed to minimize transportation impacts through the establishment of design and LOS standards for a variety of circulation, traffic, transit, and non-motorized transportation modes, include the following:</p> <ul style="list-style-type: none"> TC-5.1 Bicycle/Pedestrian Trail System TC-5.2 Consider Non-Motorized Modes in Planning and Development TC-5.3 Provisions for Bicycle Use TC-5.4 Design Standards for Bicycle Routes TC-5.5 Facilities TC-5.6 Regional Bicycle Plan TC-5.7 Designated Bike Paths TC-5.8 Multi-Use Trails TC-5.9 Existing Facilities <p>Policies designed to integrate land use and circulation concepts during the early planning and design phases of County-wide development to minimize land use conflicts include the following:</p> <ul style="list-style-type: none"> LU-7.1 Distinctive Neighborhoods LU-7.3 Friendly Streets LU-7.4 Streetscape Continuity 							
PUBLIC FACILITIES AND SERVICES							
Wastewater							
Impact PFS-1	The General Plan Update would exceed wastewater treatment requirements of the RWQCB for certain service providers and/or result in a determination by the wastewater treatment provider that serves or may serve the project that it has inadequate capacity to serve the project's projected demand in addition to the provider's existing commitments.						
						PS	SU
<p>Policies designed to minimize this impact through the early identification of required infrastructure and the orderly construction and rehabilitation of the facilities needed to serve existing and planned urban areas include the following:</p> <ul style="list-style-type: none"> PF-1.4 Available Infrastructure PF-2.4 Community Plans PF-2.4A Collaborative Community Planning Partnerships PF-2.4B Land Use Consistency PF-2.5 Improvement Standards in Communities PF-3.3 Hamlet Plans PF-6.4 UDBs and Interagency Coordination PFS-1.2 Maintain Existing Levels of Service PFS-1.3 Impact Mitigation PFS-1.5 Funding for Public Facilities PFS-1.6 Funding Mechanisms 							

**TABLE ES-4
SUMMARY OF IMPACTS AND MITIGATION MEASURES**

Environmental Impact		Mitigation Measure		Level of Significance Before Mitigation	Level of Significance After Mitigation
Less than Significant = LS	Beneficial = B	Significant = S	Cumulative Significant = CS	Potentially Significant = PS	N/A = Not Applicable
			PFS-1.7 Coordination with Service Providers PFS-1.8 Funding for Service Providers PFS-3.2 Adequate Capacity PFS-3.3 New Development Requirements PFS-3.7 Financing Additional policies designed to minimize this impact through the provision and conservation of water resources and service include the following: WR-1.6 Expanded use of Reclaimed Water WR-3.7 Emergency Water Conservation Plan WR-3.8 Educational Programs		
Impact PFS-2	The General Plan Update would require or result in the construction of new wastewater treatment facilities or expansion of existing facilities, the construction of which would cause significant environmental effects.		Policies designed to minimize this impact through the development of new facilities that address all applicable public safety and environmental concerns include the following: LU-2.1 Agricultural Lands LU-2.4 Open Space Character LU-7.12 Historic Buildings and Areas AG-1.7 Preservation of Agricultural Lands TC-1.15 Traffic Impact Study AQ-1.5 CEQA Compliance AQ-4.2 Dust Suppression Measures SL-1.1 Natural Landscapes WR-1.10 Channel Modification WR-2.2 NPDES Enforcement WR-2.3 Best Management Practices WR-2.4 Construction Site Sediment Control ERM-1.2 Development in Environmentally Sensitive Areas	PS	SU
		Policy PFS-1.4	Standards of Approval. The County should not approve any development unless the following conditions are met: - The applicant can demonstrate all necessary infrastructure will be installed and adequately financed; - Infrastructure improvements are consistent with adopted County infrastructure plans and standards; - Funding mechanisms are provided to maintain, operate, and upgrade the facilities throughout the life of the project; and - Facilities shall be developed in compliance with all applicable regulations designed to address public safety and environmental impacts that may result through the construction, operation, and maintenance of these facilities. [New Policy – Draft EIR Analysis].		

**TABLE ES-4
SUMMARY OF IMPACTS AND MITIGATION MEASURES**

Environmental Impact			Mitigation Measure			Level of Significance Before Mitigation	Level of Significance After Mitigation
Less than Significant = LS	Beneficial = B	Significant = S	Cumulative Significant = CS	Significant and Unavoidable = SU	Potentially Significant = PS	N/A = Not Applicable	
			Policy HS-8.12	Noise Analysis. The County shall require a detailed noise impact analysis in areas where current or future exterior noise levels from transportation or stationary sources have the potential to exceed the adopted noise policies of the Noise Element, where there are development of new noise sensitive land uses or the development of potential noise generating land uses near existing sensitive land uses. The noise analysis shall be the responsibility of the project applicant and be prepared by a qualified acoustical engineer (i.e., a Registered Professional Engineer in the State of California, etc.). The analysis shall include recommendations and evidence to establish mitigation that will reduce noise exposure to acceptable levels. [New Policy – Draft EIR Analysis].			
Storm Drainage							
Impact PFS-3	The General Plan Update would require or result in the construction of new stormwater drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects.			Policies designed to minimize this impact through the development of new facilities that address all applicable public safety and environmental concerns include the following: LU-2.1 Agricultural Lands LU-2.4 Open Space Character LU-7.12 Historic Buildings and Areas AG-1.7 Preservation of Agricultural Lands TC-1.15 Traffic Impact Study AQ-1.5 CEQA Compliance AQ-4.2 Dust Suppression Measures SL-1.1 Natural Landscapes WR-1.10 Channel Modification WR-2.2 NPDES Enforcement WR-2.3 Best Management Practices WR-2.4 Construction Site Sediment Control ERM-1.2 Development in Environmentally Sensitive Areas		PS	SU
			Policy PFS-1.4	Standards of Approval. The County should not approve any development unless the following conditions are met: - The applicant can demonstrate all necessary infrastructure will be installed and adequately financed; - Infrastructure improvements are consistent with adopted County infrastructure plans and standards;			

**TABLE ES-4
SUMMARY OF IMPACTS AND MITIGATION MEASURES**

Environmental Impact		Mitigation Measure		Level of Significance Before Mitigation	Level of Significance After Mitigation	
Less than Significant = LS	Beneficial = B	Significant = S	Cumulative Significant = CS	Significant and Unavoidable = SU	Potentially Significant = PS	N/A = Not Applicable
			<p>- Funding mechanisms are provided to maintain, operate, and upgrade the facilities throughout the life of the project; and</p> <p>- Facilities shall be developed in compliance with all applicable regulations designed to address public safety and environmental impacts that may result through the construction, operation, and maintenance of these facilities. [New Policy – Draft EIR Analysis].</p> <p>Policy HS-8.12 Noise Analysis. The County shall require a detailed noise impact analysis in areas where current or future exterior noise levels from transportation or stationary sources have the potential to exceed the adopted noise policies of the Noise Element, where there are development of new noise sensitive land uses or the development of potential noise generating land uses near existing sensitive land uses. The noise analysis shall be the responsibility of the project applicant and be prepared by a qualified acoustical engineer (i.e., a Registered Professional Engineer in the State of California, etc.). The analysis shall include recommendations and evidence to establish mitigation that will reduce noise exposure to acceptable levels. [New Policy – Draft EIR Analysis].</p>			
Impact PFS-4	The General Plan Update could substantially alter the existing drainage pattern of the area, including through the alteration of the course of a stream or river, in a manner which would result in substantial erosion or siltation on- or off-site or substantially increase the rate or amount of surface runoff in a manner which would result in on- or off-site flooding.		<p>Policies designed to minimize this impact through adherence to appropriate levels of stormwater infrastructure planning, financing and construction include the following:</p> <p>ERM-7.3 Protection of Soils on Slopes F-9.2 Development Drainage Patterns F-9.6 Development in the Frazier Valley Watershed HS-5.9 Floodplain Development Restrictions PF-5.2 Criteria for New Towns PFS-1.3 Impact Mitigation PFS-2.5 New Systems or Individual Wells PFS-3.1 Private Sewage Disposal Standards PFS-3.5 Wastewater System Failures PFS-3.7 Financing PFS-4.1 Stormwater Management Plans PFS-4.2 Site Improvements PFS-4.3 Development Requirements PFS-4.4 Stormwater Retention Facilities</p>	LS	NA	

**TABLE ES-4
SUMMARY OF IMPACTS AND MITIGATION MEASURES**

Environmental Impact		Mitigation Measure		Level of Significance Before Mitigation	Level of Significance After Mitigation	
Less than Significant = LS	Beneficial = B	Significant = S	Cumulative Significant = CS	Significant and Unavoidable = SU	Potentially Significant = PS	N/A = Not Applicable
						<ul style="list-style-type: none"> PFS-4.5 Detention/Retention Basins Design PFS-4.6 Agency Coordination PFS-4.7 NPDES Enforcement WR-1.9 Collection of Additional Surface Water Information WR-2.1 Protect Water Quality WR-2.2 NPDES Enforcement WR-2.3 Best Management Practices WR-2.4 Construction Site Sediment Control WR-2.5 Major Drainage Management WR-2.6 Degraded Water Resources WR-2.7 Industrial and Agricultural Sources WR-2.8 Point Source Control WR-2.9 Private Wells WR-3.10 Diversion of Surface Water WR Implementation Measure #14A and #14C <p>Policies designed to minimize this water quality impact through adherence to appropriate best management practices designed to address soil erosion include the following:</p> <ul style="list-style-type: none"> F-9.7 Minimize Soil Disturbances F-9.8 Erosion Mitigation Measures F-9.12 Vegetation Removal WR-2.3 Best Management Practices <p>Policies designed to minimize this impact through the preservation of floodplain areas and the management of new development in hazardous areas include the following:</p> <ul style="list-style-type: none"> F-9.3 Development in the Floodplain HS-1.4 Building and Codes HS-1.5 Hazard Awareness and Public Education HS-1.11 Site Investigations HS-5.1 Development Compliance with Federal, State, and Local Regulations HS-5.2 Development in Floodplain Zones HS-5.3 Participation in Federal Flood Insurance Program HS-5.4 Multi-Purpose Flood Control Measures HS-5.5 Development in Dam and Seiche Inundation Zones HS-5.6 Impacts to Downstream Properties HS-5.7 Mapping of Flood Hazard Areas HS-5.9 Floodplain Development Restrictions

**TABLE ES-4
SUMMARY OF IMPACTS AND MITIGATION MEASURES**

Environmental Impact		Mitigation Measure		Level of Significance Before Mitigation	Level of Significance After Mitigation
Less than Significant = LS	Beneficial = B	Significant = S	Cumulative Significant = CS	Potentially Significant = PS	N/A = Not Applicable
			HS-5.10 Flood Control Design HS-5.11 Natural Design HS-7.3 Maintain Emergency Evacuation Plans PFS-4.1 Stormwater Management Plans PFS-4.3 Development Requirements PFS-4.6 Agency Coordination Public Facilities and Services Implementation Measures designed to ensure funding for County utilities to provide adequate service levels. Public Facilities and Services Implementation Measure #1 Public Facilities and Services Implementation Measure #2 Public Facilities and Services Implementation Measure #3 Public Facilities and Services Implementation Measure #3A		
Impact PFS-5	The General Plan Update could create or contribute runoff water which would exceed the capacity of existing stormwater drainage systems or provide substantial additional sources of polluted runoff.		Policies designed to minimize this impact through adherence to appropriate levels of stormwater infrastructure planning, financing and construction include the following: ERM-7.3 Protection of Soils on Slopes F-9.2 Development Drainage Patterns F-9.6 Development in the Frazier Valley Watershed HS-5.9 Floodplain Development Restrictions PF-5.2 Criteria for New Towns PFS-1.3 Impact Mitigation PFS-2.5 New Systems or Individual Wells PFS-3.1 Private Sewage Disposal Standards PFS-3.5 Wastewater System Failures PFS-3.7 Financing PFS-4.1 Stormwater Management Plans PFS-4.2 Site Improvements PFS-4.3 Development Requirements PFS-4.4 Stormwater Retention Facilities PFS-4.5 Detention/Retention Basins Design PFS-4.6 Agency Coordination PFS-4.7 NPDES Enforcement WR-1.9 Collection of Additional Surface Water Information WR-2.1 Protect Water Quality WR-2.2 NPDES Enforcement WR-2.3 Best Management Practices WR-2.4 Construction Site Sediment Control WR-2.5 Major Drainage Management	LS	NA

**TABLE ES-4
SUMMARY OF IMPACTS AND MITIGATION MEASURES**

Environmental Impact		Mitigation Measure		Level of Significance Before Mitigation	Level of Significance After Mitigation
Less than Significant = LS	Beneficial = B	Significant = S	Cumulative Significant = CS	Potentially Significant = PS	N/A = Not Applicable
			WR-2.6 Degraded Water Resources WR-2.7 Industrial and Agricultural Sources WR-2.8 Point Source Control WR-2.9 Private Wells WR-3.10 Diversion of Surface Water WR Implementation Measure #14A and #14C Policies designed to minimize this water quality impact through adherence to appropriate best management practices designed to address soil erosion include the following: F-9.7 Minimize Soil Disturbances F-9.8 Erosion Mitigation Measures F-9.12 Vegetation Removal WR-2.3 Best Management Practices Policies designed to minimize this impact through the preservation of floodplain areas and the management of new development in hazardous areas include the following: F-9.3 Development in the Floodplain HS-1.4 Building and Codes HS-1.5 Hazard Awareness and Public Education HS-1.11 Site Investigations HS-5.1 Development Compliance with Federal, State, and Local Regulations HS-5.2 Development in Floodplain Zones HS-5.3 Participation in Federal Flood Insurance Program HS-5.4 Multi-Purpose Flood Control Measures HS-5.5 Development in Dam and Seiche Inundation Zones HS-5.6 Impacts to Downstream Properties HS-5.7 Mapping of Flood Hazard Areas HS-5.9 Floodplain Development Restrictions HS-5.10 Flood Control Design HS-5.11 Natural Design HS-7.3 Maintain Emergency Evacuation Plans PFS-4.1 Stormwater Management Plans PFS-4.3 Development Requirements PFS-4.6 Agency Coordination Public Facilities and Services Implementation Measures designed to ensure funding for County utilities to provide adequate service levels.		

**TABLE ES-4
SUMMARY OF IMPACTS AND MITIGATION MEASURES**

Environmental Impact		Mitigation Measure		Level of Significance Before Mitigation	Level of Significance After Mitigation	
Less than Significant = LS	Beneficial = B	Significant = S	Cumulative Significant = CS	Significant and Unavoidable = SU	Potentially Significant = PS	N/A = Not Applicable
		Public Facilities and Services Implementation Measure #1 Public Facilities and Services Implementation Measure #2 Public Facilities and Services Implementation Measure #3 Public Facilities and Services Implementation Measure #3A				
Solid Waste						
Impact PFS-6	The General Plan Update would produce substantial amounts of solid waste that could exceed the permitted capacity of a landfill serving the County.	Policies designed to minimize this impact through the continued provision of solid waste services and recycling activities include the following: PFS-1.3 Impact Mitigation PFS-5.1 Land Use Compatibility with Solid Waste Facilities PFS-5.2 Notification PFS-5.3 Solid Waste Reduction PFS-5.4 County Usage of Recycled Materials and Products PFS-5.5 Private Use of Recycled Products PFS-5.6 Ensure Capacity PFS-5.7 Provisions for Solid Waste Storage, Handling, and Collection PFS-5.8 Hazardous Waste Disposal Capabilities PFS-5.9 Agricultural Waste Public Facilities and Services Implementation Measures designed to ensure funding for County utilities to provide adequate service levels. Public Facilities and Services Implementation Measure #1 Public Facilities and Services Implementation Measure #2 Public Facilities and Services Implementation Measure #3 Public Facilities and Services Implementation Measure #3A Public Facilities and Services Implementation Measure #6 Public Facilities and Services Implementation Measure #7		PS	SU	
Impact PFS-7	The General Plan Update would comply with all federal, State, and Local Statutes and Regulations related to solid waste.	Policies designed to minimize this impact through the continued provision of solid waste services and recycling activities include the following: PFS-1.3 Impact Mitigation PFS-5.1 Land Use Compatibility with Solid Waste Facilities PFS-5.2 Notification PFS-5.3 Solid Waste Reduction PFS-5.4 County Usage of Recycled Materials and Products PFS-5.5 Private Use of Recycled Products PFS-5.6 Ensure Capacity		LS	NA	

**TABLE ES-4
SUMMARY OF IMPACTS AND MITIGATION MEASURES**

Environmental Impact		Mitigation Measure		Level of Significance Before Mitigation	Level of Significance After Mitigation
Less than Significant = LS	Beneficial = B	Significant = S	Cumulative Significant = CS	Potentially Significant = PS	N/A = Not Applicable
			PFS-5.7 Provisions for Solid Waste Storage, Handling, and Collection PFS-5.8 Hazardous Waste Disposal Capabilities PFS-5.9 Agricultural Waste Water Resources and Air Quality policies designed to minimize this impact through the protection of air and water quality include the following: AQ-1.3 Cumulative Air Quality Impacts AQ-1.4 Air Quality Land Use Compatibility AQ-4.5 Public Awareness WR-2.1 Protect Water Quality WR-2.2 NPDES Enforcement WR-2.3 Best Management Practices WR-2.6 Degraded Water Resources WR-2.8 Point Source Control Public Facilities and Services Implementation Measures designed to ensure funding for County utilities to provide adequate service levels. Public Facilities and Services Implementation Measure #1 Public Facilities and Services Implementation Measure #2 Public Facilities and Services Implementation Measure #3 Public Facilities and Services Implementation Measure #3A Public Facilities and Services Implementation Measure #6 Public Facilities and Services Implementation Measure #7		

Communications Systems

No environmental issues were identified relating to the provision of local and regional communications systems. However, aesthetic and land use conflict issues related to the future placement of new infrastructure (including above ground and below ground cell towers, transmission lines, etc.) in the County are addressed in Chapter 4.2, "Scenic Resources." Except for the kinds of impacts addressed in those chapters, the provision of communications infrastructure typically does not cause other kinds of environmental impacts.

Fire Protection and Law Enforcement

Impact PFS-8 The General Plan Update would result in a substantial adverse physical impact to the continued provision of fire protection services in the County.

Policies designed to minimize this impact through the continued provision of fire protection services and emergency response planning include the following:
 HS-1.4 Building and Codes
 HS-1.5 Hazard Awareness and Public Education
 HS-1.6 Public Safety Programs
 HS-1.8 Response Times Planning in GIS
 HS-1.9 Emergency Access
 HS-1.10 Emergency Services Near Assisted Living

PS

LS

**TABLE ES-4
SUMMARY OF IMPACTS AND MITIGATION MEASURES**

Environmental Impact				Mitigation Measure	Level of Significance Before Mitigation	Level of Significance After Mitigation
Less than Significant = LS	Beneficial = B	Significant = S	Cumulative Significant = CS	Significant and Unavoidable = SU	Potentially Significant = PS	N/A = Not Applicable
				Housing		
				HS-6.1 New Building Fire Hazards		
				HS-6.2 Development in Fire Hazard Zones		
				HS-6.3 Consultation with Fire Service Districts		
				HS-6.4 Encourage Cluster Development		
				HS-6.5 Fire Risk Recommendations		
				HS-6.6 Wildland Fire Management Plans		
				HS-6.7 Water Supply System		
				HS-6.8 Private Water Supply		
				HS-6.9 Fuel Modification Programs		
				HS-6.10 Fuel Breaks		
				HS-6.11 Fire Buffers		
				HS-6.12 Weed Abatement		
				HS-6.14 Coordination with Cities		
				HS-7.1 Coordinate Emergency Response Services with Government Agencies		
				HS-7.2 Mutual Aid Agreement		
				HS-7.3 Maintain Emergency Evacuation Plans		
				HS-7.4 Upgrading for Streets and Highways		
				HS-7.5 Emergency Centers		
				HS-7.6 Search and Rescue		
				HS-7.7 Joint Exercises		
				PF-5.2 Criteria for New Towns		
				PFS-1.3 Impact Mitigation		
				PFS-2.1 Water Supply		
				PFS-7.1 Fire Protection		
				PFS-7.2 Fire Protection Standards		
				PFS-7.3 Visible Signage for Roads and Buildings		
				PFS-7.4 Interagency Fire Protection Cooperation		
				PFS-7.5 Fire Staffing and Response Time Standards		
				PFS-7.8 Cost Sharing		
				PFS-7.12 Locations of Fire and Sheriff Stations/Sub-stations		
				PFS Implementation Measure #11		
				Similar policies designed to minimize this impact through the continued provision of fire protection services and emergency response planning within the various planning areas include the following:		
				PFS-7.6 Provision of Station Facilities and Equipment		

**TABLE ES-4
SUMMARY OF IMPACTS AND MITIGATION MEASURES**

Environmental Impact			Mitigation Measure			Level of Significance Before Mitigation	Level of Significance After Mitigation
Less than Significant = LS	Beneficial = B	Significant = S	Cumulative Significant = CS	Significant and Unavoidable = SU	Potentially Significant = PS	N/A = Not Applicable	
				F-11.2 Provision of Safety Services F-11.3 Fire and Crime Protection Plan Public Facilities and Services Implementation Measures designed to ensure funding for County programs to provide adequate service levels. Public Facilities and Services Implementation Measure #1 Public Facilities and Services Implementation Measure #2 Public Facilities and Services Implementation Measure #3 Public Facilities and Services Implementation Measure #3A Public Facilities and Services Implementation Measure #9			
			PFS Implementation Measure #3	The County shall develop and adopt an impact fee program for new development to ensure the provision, operation, and on-going maintenance of appropriate public facilities and services (including, but not limited to, fire stations and equipment, police stations and equipment, ambulance or dispatch service, utility infrastructure, recreational, and library facilities). [New Implementation Program – Draft EIR Analysis].			
Impact PFS-9	The General Plan Update would result in a substantial adverse physical impact to the continued provision of law enforcement services in the County.			Policies designed to minimize this impact through the continued provision of law enforcement services and emergency response planning include the following: HS-1.8 Response Times Planning in GIS HS-1.10 Emergency Services Near Assisted Living Housing HS-7.1 Coordinate Emergency Response Services with Government Agencies HS-7.2 Mutual Aid Agreement HS-7.3 Maintain Emergency Evacuation Plans HS-7.4 Upgrading for Streets and Highways HS-7.5 Emergency Centers HS-7.6 Search and Rescue HS-7.7 Joint Exercises PF-5.2 Criteria for New Towns PFS-1.3 Impact Mitigation PFS-7.3 Visible Signage for Roads and Buildings PFS-7.9 Law Enforcement Staffing Ratios PFS-7.10 Sheriff Response Time PFS-7.11 Interagency Law Enforcement Protection Cooperation	PS	LS	

**TABLE ES-4
SUMMARY OF IMPACTS AND MITIGATION MEASURES**

Environmental Impact		Mitigation Measure		Level of Significance Before Mitigation	Level of Significance After Mitigation	
Less than Significant = LS	Beneficial = B	Significant = S	Cumulative Significant = CS	Significant and Unavoidable = SU	Potentially Significant = PS	N/A = Not Applicable
				PFS-7.12 Locations of Fire and Sheriff Stations/Sub-stations PFS-7.13 Design Features for Crime Prevention and Reduction PFS Implementation Measure #10 Similar policies designed to minimize this impact through the continued provision of fire protection services and emergency response planning within the various planning areas include the following: F-11.2 Provision of Safety Services F-11.3 Fire and Crime Protection Plan Public Facilities and Services Implementation Measures designed to ensure funding for County programs to provide adequate service levels. Public Facilities and Services Implementation Measure #1 Public Facilities and Services Implementation Measure #2 Public Facilities and Services Implementation Measure #3 Public Facilities and Services Implementation Measure #3A		
		PFS Implementation Measure #3	The County shall develop and adopt an impact fee program for new development to ensure the provision, operation, and on-going maintenance of appropriate public facilities and services (including, but not limited to, fire stations and equipment, police stations and equipment, ambulance or dispatch service, utility infrastructure, recreational, and library facilities). [New Implementation Program – Draft EIR Analysis].			
Impact PFS-10	The General Plan Update would include fire protection/law enforcement facilities or require the construction/expansion of facilities which would have an adverse physical effect on the environment.		Policies designed to minimize this impact through the development of new facilities that address all applicable public safety and environmental concerns include the following: LU-2.1 Agricultural Lands LU-2.4 Open Space Character LU-7.12 Historic Buildings and Areas AG-1.7 Preservation of Agricultural Lands TC-1.15 Traffic Impact Study AQ-1.5 CEQA Compliance AQ-4.2 Dust Suppression Measures SL-1.1 Natural Landscapes WR-1.10 Channel Modification	PS	SU	

**TABLE ES-4
SUMMARY OF IMPACTS AND MITIGATION MEASURES**

Environmental Impact		Mitigation Measure		Level of Significance Before Mitigation	Level of Significance After Mitigation
Less than Significant = LS	Beneficial = B	Significant = S	Cumulative Significant = CS	Potentially Significant = PS	N/A = Not Applicable
			WR-2.2 NPDES Enforcement WR-2.3 Best Management Practices WR-2.4 Construction Site Sediment Control ERM-1.2 Development in Environmentally Sensitive Areas Policy PFS-1.4 Standards of Approval. The County should not approve any development unless the following conditions are met: - The applicant can demonstrate all necessary infrastructure will be installed and adequately financed; - Infrastructure improvements are consistent with adopted County infrastructure plans and standards; - Funding mechanisms are provided to maintain, operate, and upgrade the facilities throughout the life of the project; and - Facilities shall be developed in compliance with all applicable regulations designed to address public safety and environmental impacts that may result through the construction, operation, and maintenance of these facilities. [New Policy – Draft EIR Analysis]. Policy HS-8.12 Noise Analysis. The County shall require a detailed noise impact analysis in areas where current or future exterior noise levels from transportation or stationary sources have the potential to exceed the adopted noise policies of the Health and Safety Element, where there are development of new noise sensitive land uses or the development of potential noise generating land uses near existing sensitive land uses. The noise analysis shall be the responsibility of the project applicant and be prepared by a qualified acoustical specialist (i.e., a Registered Civil Engineer in the State of California, etc.). The analysis shall include recommendations and evidence to establish mitigation that will reduce noise exposure to acceptable levels. [New Policy – Draft EIR Analysis].		
Community Facilities					
Impact PFS-11	The General Plan Update would result in a substantial adverse physical impact to the continued provision of school services in the County		Policies designed to minimize this impact through the continued provision of school services include the following: ED-4.2 Workforce Education ED-4.6 Vocational Training in Secondary Schools ERM-5.5 Co-located Facilities	PS	LS

**TABLE ES-4
SUMMARY OF IMPACTS AND MITIGATION MEASURES**

Environmental Impact		Mitigation Measure		Level of Significance Before Mitigation	Level of Significance After Mitigation	
Less than Significant = LS	Beneficial = B	Significant = S	Cumulative Significant = CS	Significant and Unavoidable = SU	Potentially Significant = PS	N/A = Not Applicable
				PF-5.2 Criteria for New Towns SL-3.1 Community Centers and Neighborhoods LU-3.3 High-Density Residential Locations LU-5.6 Industrial Use Buffer LU-6.1 Public Activity Centers LU-6.3 Schools in Neighborhoods LU-6.4 Schools District Coordination PFS-1.3 Impact Mitigation PFS-8.1 Work with Local School Districts PFS-8.2 Joint Use Facilities and Programs PFS-8.3 Location of School Sites PFS-8.4 Library Facilities and Services Public Facilities and Services Implementation Measures designed to ensure funding for County programs to provide adequate service levels. Public Facilities and Services Implementation Measure #1 Public Facilities and Services Implementation Measure #2 Public Facilities and Services Implementation Measure #3 Public Facilities and Services Implementation Measure #3A		
			Policy PFS-8.6	School Funding. To the extent allowed by State law, the County may require new projects to mitigate impacts on school facilities, in addition to the use of school fees. The County will also work with school districts, developers, and the public to evaluate alternatives to funding/providing adequate school facilities. [New Implementation Program – Draft EIR Analysis].		
			PFS Implementation Measure #3	The County shall develop and adopt an impact fee program for new development to ensure the provision, operation, and on-going maintenance of appropriate public facilities and services (including, but not limited to, fire stations and equipment, police stations and equipment, ambulance or dispatch service, utility infrastructure, recreational, and library facilities). [New Implementation Program – Draft EIR Analysis].		
Impact PFS-12	The General Plan Update would result in a substantial adverse physical impact to the continued provision of library services in the County.			Policies designed to minimize this impact through the continued provision of community services include the following: ERM-5.5 Co-located Facilities	PS	LS

**TABLE ES-4
SUMMARY OF IMPACTS AND MITIGATION MEASURES**

Environmental Impact		Mitigation Measure			Level of Significance Before Mitigation	Level of Significance After Mitigation
Less than Significant = LS	Beneficial = B	Significant = S	Cumulative Significant = CS	Significant and Unavoidable = SU	Potentially Significant = PS	N/A = Not Applicable
Impact PFS-13	The General Plan Update would include community facilities or require the construction/expansion of facilities which would have an adverse physical effect on the environment.		PFS Implementation Measure #3	<p>LU-6.1 Public Activity Centers PF-5.2 Criteria for New Towns PFS-1.3 Impact Mitigation PFS-8.4 Library Facilities and Services Public Facilities and Services Implementation Measures designed to ensure funding for County programs to provide adequate service levels. Public Facilities and Services Implementation Measure #1 Public Facilities and Services Implementation Measure #2 Public Facilities and Services Implementation Measure #3 Public Facilities and Services Implementation Measure #3A</p> <p>The County shall develop and adopt an impact fee program for new development to ensure the provision, operation, and on-going maintenance of appropriate public facilities and services (including, but not limited to, fire stations and equipment, police stations and equipment, ambulance or dispatch service, utility infrastructure, recreational, and library facilities). [New Implementation Program – Draft EIR Analysis].</p> <p>Policies designed to minimize this impact through the development of new facilities that address all applicable public safety and environmental concerns include the following: LU-2.1 Agricultural Lands LU-2.4 Open Space Character LU-7.12 Historic Buildings and Areas AG-1.7 Preservation of Agricultural Lands TC-1.15 Traffic Impact Study AQ-1.5 CEQA Compliance AQ-4.2 Dust Suppression Measures SL-1.1 Natural Landscapes WR-1.10 Channel Modification WR-2.2 NPDES Enforcement WR-2.3 Best Management Practices WR-2.4 Construction Site Sediment Control ERM-1.2 Development in Environmentally Sensitive Areas</p>	PS	SU

**TABLE ES-4
SUMMARY OF IMPACTS AND MITIGATION MEASURES**

Environmental Impact			Mitigation Measure			Level of Significance Before Mitigation	Level of Significance After Mitigation
Less than Significant = LS	Beneficial = B	Significant = S	Cumulative Significant = CS	Significant and Unavoidable = SU	Potentially Significant = PS	N/A = Not Applicable	
			Policy PFS-1.4	Standards of Approval. The County should not approve any development unless the following conditions are met: - The applicant can demonstrate all necessary infrastructure will be installed and adequately financed; - Infrastructure improvements are consistent with adopted County infrastructure plans and standards; - Funding mechanisms are provided to maintain, operate, and upgrade the facilities throughout the life of the project; and - Facilities shall be developed in compliance with all applicable regulations designed to address public safety and environmental impacts that may result through the construction, operation, and maintenance of these facilities. [New Policy – Draft EIR Analysis].			
			Policy HS-8.12	Noise Analysis. The County shall require a detailed noise impact analysis in areas where current or future exterior noise levels from transportation or stationary sources have the potential to exceed the adopted noise policies of the Health and Safety Element, where there are development of new noise sensitive land uses or the development of potential noise generating land uses near existing sensitive land uses. The noise analysis shall be the responsibility of the project applicant and be prepared by a qualified acoustical specialist (i.e., a Registered Civil Engineer in the State of California, etc.). The analysis shall include recommendations and evidence to establish mitigation that will reduce noise exposure to acceptable levels. [New Policy – Draft EIR Analysis].			
Energy Facilities							
Impact PFS-14	The General Plan Update would not result in the wasteful, inefficient, or unnecessary consumption of energy by residential, commercial, industrial, or public uses.			Policies designed to minimize this impact through the conservation of existing energy supplies include the following: AQ-3.5 Alternative Energy Design LU-7.15 Energy Conservation PFS-1.3 Impact Mitigation ERM-4.1 Energy Conservation and Efficiency Measures ERM-4.2 Streetscape and Parking Area Improvements for Energy Conservation		LS	NA

**TABLE ES-4
SUMMARY OF IMPACTS AND MITIGATION MEASURES**

Environmental Impact		Mitigation Measure			Level of Significance Before Mitigation	Level of Significance After Mitigation	
Less than Significant = LS	Beneficial = B	Significant = S	Cumulative Significant = CS	Significant and Unavoidable = SU	Potentially Significant = PS	N/A = Not Applicable	
Impact PFS-15	The General Plan Update may require the construction or expansion of additional energy infrastructure facilities, the construction of which could cause significant environmental effects.	ERM-4.3 Local and State Programs ERM-4.4 Promote Energy Conservation Awareness			PS	SU	
		Policies designed to minimize this impact through the development of new facilities that address all applicable public safety and environmental concerns include the following: LU-2.1 Agricultural Lands LU-2.4 Open Space Character LU-7.12 Historic Buildings and Areas AG-1.7 Preservation of Agricultural Lands TC-1.15 Traffic Impact Study AQ-1.5 CEQA Compliance AQ-4.2 Dust Suppression Measures SL-1.1 Natural Landscapes WR-1.10 Channel Modification WR-2.2 NPDES Enforcement WR-2.3 Best Management Practices WR-2.4 Construction Site Sediment Control ERM-1.2 Development in Environmentally Sensitive Areas					
		Policy PFS-1.4	Standards of Approval. The County should not approve any development unless the following conditions are met: - The applicant can demonstrate all necessary infrastructure will be installed and adequately financed; - Infrastructure improvements are consistent with adopted County infrastructure plans and standards; - Funding mechanisms are provided to maintain, operate, and upgrade the facilities throughout the life of the project; and - Facilities shall be developed in compliance with all applicable regulations designed to address public safety and environmental impacts that may result through the construction, operation, and maintenance of these facilities. [New Policy – Draft EIR Analysis].				

**TABLE ES-4
SUMMARY OF IMPACTS AND MITIGATION MEASURES**

Environmental Impact				Mitigation Measure		Level of Significance Before Mitigation	Level of Significance After Mitigation
Less than Significant = LS	Beneficial = B	Significant = S	Cumulative Significant = CS	Significant and Unavoidable = SU	Potentially Significant = PS	N/A = Not Applicable	
			Policy HS-8.12	<p>Noise Analysis. The County shall require a detailed noise impact analysis in areas where current or future exterior noise levels from transportation or stationary sources have the potential to exceed the adopted noise policies of the Health and Safety Element, where there are development of new noise sensitive land uses or the development of potential noise generating land uses near existing sensitive land uses. The noise analysis shall be the responsibility of the project applicant and be prepared by a qualified acoustical specialist (i.e., a Registered Civil Engineer in the State of California, etc.). The analysis shall include recommendations and evidence to establish mitigation that will reduce noise exposure to acceptable levels. [New Policy – Draft EIR Analysis].</p>			

Chapter 1

Introduction and Reader's Guide to the EIR



CHAPTER 1.0

Introduction and Reader's Guide to the EIR

1.1 Purpose and Use of the EIR

The California Environmental Quality Act (CEQA) requires that all state and local government agencies consider the environmental consequences of programs and projects over which they have discretionary authority before taking action on them. This chapter outlines the overall approach to preparation of the environmental impact report (EIR) on the proposed Tulare County 2030 General Plan Update (General Plan Update). The County of Tulare Resource Management Agency (County) is the CEQA lead agency for the project and the Tulare County Board of Supervisors, as the lead agency's decision-making body, will consider the information presented in this EIR before taking discretionary action on the project.

This EIR has two primary purposes:

- The EIR will assist the County in complying with CEQA requirements for the analysis of environmental impacts by including a complete and comprehensive evaluation of the physical impacts of the project and its alternatives.
- The EIR will inform interested stakeholders (including local residents) and members of the Board of Supervisors and Planning Commission of the environmental impacts prior to the County Planning Commission making its recommendations and the Board of Supervisors taking action on the project.

Additionally, the EIR is intended to identify ways to minimize significant effects of the project and describe reasonable alternatives to the project that would avoid or reduce the project's significant effects (State CEQA Guidelines Section 15121[a]).

The proposed General Plan Update includes the Goals and Policies Report (see Appendix C of the Draft EIR), which consists of policies and implementation measures to guide the future growth of the County (see Chapter 2.0 "Project Description"). This Draft EIR evaluates the potential impacts resulting from adoption and implementation of the project. The information contained in this EIR will be used to inform local decision makers and the general public of the potentially significant environmental impacts associated with the project and to assist County officials in reviewing and considering adoption of the project or one of the alternatives. This EIR may also be used as a first-tier (or "program") environmental document for subsequent environmental review of specific plans and infrastructure improvements, general plan and zoning amendments, impact fees, and other local development plans and proposals.

As readers will see in reviewing this document, various chapters refer readers not only to the above-described Goals and Policies Report, which contains numerous policies that function like mitigating measures governing future actions consistent with the General Plan, but also to another

General Plan document as well: the General Plan Background Report. This latter, highly informative document, included in a separately bound volume as Appendix B to this Draft EIR, includes a great deal of information relevant to the environmental settings for various impact topics, in addition to providing relevant information to the EIR impact discussions. In order to avoid undue repetition and to avoid creating an overwhelming amount of paper for members of the public and decision-makers to sort through, this document frequently incorporates by reference or briefly summarizes information from both the Background and Goals and Policies Reports. Because of the interrelatedness of the EIR and these two General Plan documents, readers should consider all three documents as contributing to the County's CEQA compliance for the proposed General Plan.

Section 15150 of the CEQA Guidelines permits documents of lengthy technical detail to be incorporated by reference in an EIR. Specifically, Section 15150 states that an EIR may "incorporate by reference all or portions of another document which is a matter of public record or is generally available to the public..." Consequently, the General Plan Background Report is incorporated by reference.

Additionally, Section 15146(b) of the CEQA Guidelines states that an EIR on a project such as the adoption or amendment of a local general plan "should focus on the secondary effects that can be expected to follow from the adoption or amendment, but the EIR need not be as detailed as an EIR on the specific construction projects that might follow." The purpose of this EIR is to provide analysis on the effects that can be expected from implementation of the General Plan Update, but will not provide detail on the impacts of specific construction projects that might follow.

1.2 Type of EIR

The CEQA Guidelines provide information on the types of environmental analysis that can be used to analyze a project, and one of these is a Program EIR. According to the CEQA Guidelines (Section 15168[a]), a local agency may prepare a program-level EIR that can be characterized as one large project or series of actions that are linked geographically; logical parts of a chain of contemplated events; rules, regulations, or plans that govern the conduct of a continuing program; or individual activities carried out under the same authorizing statutory or regulatory authority and having generally similar environmental effects that can be mitigated in similar ways.

Under CEQA, a Program EIR can function as a first-tier environmental document that assesses and documents the broad environmental impacts of a program with the understanding that a more detailed site-specific review may be required to assess future projects implemented under the program. As described above, the analysis contained in this EIR may also be used as a reference for subsequent environmental review of community plans, specific plans, infrastructure improvements, zoning amendments, impact fees, and other development plans and proposals within Tulare County.

With respect to the processing of subsequent, more site-specific projects, the County, in making optimal use of this EIR once it is certified, intends to avail itself of two separate, but complementary processes authorized by CEQA that are intended to streamline the review of projects consistent with approved general plans. These two processes are described below to put the public on notice of how, specifically, the County intends to use this EIR in the future.

First, as noted above, this Program EIR also functions as a first-tier EIR. Thus, the scope of future site-specific approvals may be narrowed, pursuant to the rules for tiering set forth in CEQA Guidelines Section 15152. That section provides, for example, that where a first-tier EIR has “adequately addressed” the subject of cumulative impacts, such impacts need not be revisited in second- and/or third-tier documents. According to subdivision (f)(3) of Section 15152, significant effects identified in a first-tier EIR are adequately addressed, for purposes of later approvals, if the lead agency determines that such effects either (a) “have been mitigated or avoided as a result of the prior [EIR] and findings adopted in connection with that prior [EIR]” or (b) “have been examined at a sufficient level of detail in the prior [EIR] to enable those effects to be mitigated or avoided by site-specific revisions, the imposition of conditions, or by other means in connection with the approval of the later project.”

Second, future environmental review can also be streamlined pursuant to Public Resources Code Section 21083.3 and CEQA Guidelines Section 15183. These provisions generally limit the scope of necessary environmental review for site-specific approvals following the preparation of an EIR for a general plan. For such site-specific approvals, CEQA generally applies only to impacts that are “peculiar to the parcel or to the project” and that have not been disclosed in the general plan EIR, except where “substantial new information” shows that previously identified impacts will be more significant than previously assumed. Notably, impacts are considered **not** to be “peculiar to the parcel or to the project” if they can be substantially mitigated pursuant to previously adopted “uniformly applied development policies or standards.”

1.3 EIR Process

In preparing this EIR and considering approval of the project, the County has completed, or will complete, the activities identified in Table 1-1. Each of these activities is further described below.

**TABLE 1-1
STATUS OF TULARE COUNTY GENERAL PLAN UPDATE EIR**

Activity	Status
Notice of Preparation - Preparation and Circulation	✓ Completed Spring 2006
Public Scoping Meetings and/or Workshops	✓ Completed Spring 2006
Draft EIR – Preparation	✓ Completed Fall 2007
Draft EIR – Circulation - 60 Day Public Review and Comment	Winter, 2007
Final EIR – Preparation	To be completed
Final EIR – Circulation	To be completed

Notice of Preparation

In accordance with Section 15082(a) of the CEQA Guidelines, the County prepared and circulated a Notice of Preparation (NOP) of a Draft EIR for the project. The NOP was circulated for a 30-day comment period, which began on April 29, 2006, and ended on May 29, 2006. Appendix A contains a copy of the NOP; and copies of the comment letters received during the 30-day comment period (April 29, 2006, to May 29, 2006), as well as letters that were received after the close of the comment period. All letters, including those received late, were considered in preparation of this EIR.

Notice of Preparation Public Scoping Letters

A summary of the comment letters received during both NOP public review periods is provided below in Table 1-2. The table identifies the letters received (by date) and the commenter and provides a brief summary of the key issues described in the letters. Additionally, as part of the NOP public review periods a public scoping meeting was held in Visalia at the Tulare County Resource Management Agency on May 1, 2006. A range of issues similar to those identified in the following table was also provided at that meeting.

**TABLE 1-2
SUMMARY OF KEY ISSUES FROM COMMENTS RECEIVED
DURING THE PUBLIC REVIEW PERIOD**

Date	Commenter	Summary of Key Issues
May 18, 2006	Carole Clum	<p>The General Plan should include a stronger, permanent open space designation.</p> <p>The EIR should include mitigation to avoid the merger of communities.</p> <p>Air quality should be analyzed from a cumulative perspective instead of a project by project perspective.</p> <p>The General Plan should include analysis of habitat buffers around riparian zones, vernal pools and other sensitive zones.</p> <p>“Ability to farm” instead of “right to farm” should be the basis of ag/urban interface.</p> <p>Open space should be analyzed under both agriculture as well as economic development via tourism.</p> <p>The EIR should include stringent water conservation consideration.</p> <p>Analysis of new town criteria should include population and housing need and the impact of the additive population.</p> <p>Large projects should include indicators of EIR success as milestones to completion.</p>
May 22, 2006	Tulare County Airport Land Use Commission Staff	The planned update for the <i>Tulare County Comprehensive Airport Land Use Plan</i> should be considered for conformation to the General Plan.
May 23, 2006	Joan Stewart	The General Plan should confine growth to already built up core areas.

**TABLE 1-2
SUMMARY OF KEY ISSUES FROM COMMENTS RECEIVED
DURING THE PUBLIC REVIEW PERIOD**

Date	Commenter	Summary of Key Issues
May 25, 2006	Maya Ricci	<p>The EIR needs to address proposed locations of new towns in order to best create environmental guidelines.</p> <p>The EIR should analyze a project alternative that consists of a City-centered alternative without new town policies.</p> <p>The EIR should examine how new town policies will affect air quality, water quality and supply, as well as agriculture and open space.</p> <p>Mitigation measures proposed in the EIR should include specific indicators which will correlate with each of the environmental impacts, demonstrating their achievement of the desired outcome.</p> <p>The EIR should address the need to update the Foothill Growth Management Plan.</p> <p>The EIR should examine impacts to agriculture and tourism economies, affordable housing supply, education, jobs-housing balance, and meeting the population growth trend needs of county residents.</p> <p>The new town element should only be created in discrete locations identified by the general plan, when certain prerequisite conditions are met, and that the new towns themselves should be held to the highest performance standards.</p> <p>The County's Oak Woodlands Management plan should be added to the General Plan's Conservation/Open Space Element.</p>
May 26, 2006	Center on Race, Poverty and the Environment	<p>The language of several of the EIR's Topical Issues/Key Goals should be clarified for consistency of word usage and meaning.</p> <p>The EIR's agriculture and open space impacts should discuss the possibility of conservation easements to mitigate the loss of farm land.</p> <p>The EIR's air quality impacts should include modeling or dispersion analysis of growth.</p> <p>The EIR's hazards and health and safety impacts should discuss the impact of pesticide use.</p> <p>The EIR's hydrologic and water quality impacts should discuss water resources in terms of quality and consumption.</p> <p>The EIR's recreation impacts should consider adoption of the Quimby Act.</p> <p>The EIR's alternatives should examine policy alternatives that are environmentally superior to the proposed policies.</p> <p>EIR should address additional impacts to air quality, such as the violation of any air quality standard or creation of a toxic "hot spot."</p> <p>EIR should address additional impacts to biology, such as impacts to endangered species or impacting riparian or sensitive habitats.</p> <p>EIR should address additional impacts to cultural resources, such as disturbance of human remains.</p>

**TABLE 1-2
SUMMARY OF KEY ISSUES FROM COMMENTS RECEIVED
DURING THE PUBLIC REVIEW PERIOD**

Date	Commenter	Summary of Key Issues
May 26, 2006	Wildplaces	<p>EIR should address additional impacts to hazards and hazardous materials, such as the creation of significant hazards to the public or environment due to transportation of hazardous materials.</p> <p>EIR should address additional impacts to hydrology and water quality, such as the violation of water quality standards.</p> <p>EIR should address additional impacts to land use and Planning, such as the physical division of an established community or conflicts with any applicable habitat conservation plan.</p> <p>EIR should address additional impacts to population and housing, such as the displacement of substantial numbers of people or houses, resulting in the construction of replacement housing elsewhere.</p> <p>EIR should address additional impacts to transportation/traffic, such as a substantial increase of hazards to a traffic design feature or inadequate emergency access.</p> <p>EIR should address additional impacts to utilities and service systems., such as ensuring sufficient water supplies to serve project needs from existing entitlements and resources.</p> <p>The EIR needs to address proposed locations of new towns in order to best create environmental guidelines.</p> <p>The EIR should analyze a project alternative that consists of a city-centered alternative without new town policies.</p> <p>The EIR should examine how new town policies will affect air quality, water quality and supply, as well as agriculture and open space.</p> <p>Mitigation measures proposed in the EIR should include specific indicators which will correlate with each of the environmental impacts, demonstrating their achievement of the desired outcome.</p> <p>The EIR should address the need to update the Foothill Growth Management Plan.</p> <p>The EIR should examine impacts to agriculture and tourism economies, affordable housing supply, education, jobs-housing balance, and meeting the population growth trend needs of county residents.</p> <p>The new town element should only be created in discrete locations identified by the general plan, when certain prerequisite conditions are met, and that the new towns themselves should be held to the highest performance standards.</p> <p>The County's Oak Woodlands Management plan should be added to the General Plan's Conservation/Open Space Element.</p>
May 26, 2006	San Joaquin Valley Air Pollution Control District	<p>The air quality section of the EIR should have four main components:</p> <ul style="list-style-type: none"> • A description of the regulatory and existing conditions impacting the area; • Estimates of existing emissions and projected pollutant emissions related to the increase in project source emissions and vehicle use and the effects of these increases;

**TABLE 1-2
SUMMARY OF KEY ISSUES FROM COMMENTS RECEIVED
DURING THE PUBLIC REVIEW PERIOD**

Date	Commenter	Summary of Key Issues
		<ul style="list-style-type: none"> • Identify and discuss existing District regulations that apply to the plan area; • Identify and discuss all feasible measures that will reduce air quality impacts generated by the project.
May 26, 2006	The County of Fresno	No comments
May 26, 2007	US Bureau of Reclamation: South Central Office	The General Plan EIR should include a discussion of current water supplies and future water needs to support development. If Central Valley water supplies are planned to support new development, Section 7 of the Endangered Species Act and further reviews under the National Environmental Policy Act may be required prior to this water being delivered for such uses.
May 28, 2007	Robert Kruse	<p>The County should include measurable criteria for open space so that impacts of any development projects on open space are consistent. Such criteria should include:</p> <ul style="list-style-type: none"> • No ridge top building to preserve scenic skyline; • Creation of adequate wildlife corridors • Protection of waterways and riparian habitats • Protection of special features, such as vernal pools, critical species, etc; <p>Such criteria may require that more open space be set aside than the required minimum percentage, but the minimum should never be reduced by such criteria. In addition, criteria should be implemented as they relate to the surrounding area. Thus, land that is to be developed that is near sensitive habitats appropriately have higher requirements.</p> <p>Similar to open space, specific criteria should be resolved to preserve agricultural land.</p> <p>In connection with preserving open space and agricultural land, more concern and emphasis needs to be placed upon private and public grants for land acquisition as well as for conservation easements.</p> <p>The scoping also needs to deal directly with piecemeal development outside of existing villages and hamlets. There must be emphasis on EIRs and monitoring developments outside of existing developed areas, and more enforcements of requirements for items such as proper sewage disposal and provision of services.</p>
May 28, 2007	Britt Fussel, Assistant Director of Engineering, Tulare County Resource Management Agency	The EIR should address concerns over the accelerated deterioration of the County road system.
May 30, 2006	Valley Citizens for Water (2)	The EIR should address the impact of increased population, agriculture and development on existing water resources, as well as flooding concerns.
May 30, 2006	Valley Citizens for Water (1)	Prefaces second VCW letter.
May 30, 2006	Del Strange	The General Plan should include separate elements for water supply (quantity) and water quality, air quality, flood control, agriculture, land use, open space (conservation), economic, transportation and circulation, mineral resources, alternative energy.

**TABLE 1-2
SUMMARY OF KEY ISSUES FROM COMMENTS RECEIVED
DURING THE PUBLIC REVIEW PERIOD**

Date	Commenter	Summary of Key Issues
May 30, 2006	Sierra Club: Kern-Kaweah Chapter	<p>The General Plan should include a water budget for the county as well as a county-wide Water Master Plan.</p> <p>The General Plan should address water quantity and quality concerns and promote surface water use over ground water use in both urban and rural areas.</p> <p>The General Plan should address air quality impacts and standards that take global warming, green-house gases, alternate fuels, and dairy emissions into consideration.</p> <p>The EIR should state as policy that future growth shall be city-centered.</p> <p>Cattle ranching should be recognized as prime agriculture</p> <p>The EIR should explore farmland conversion mitigation measures</p> <p>Biological diversity should be protected.</p> <p>Principles of smart growth should become a policy and goal statement of the EIR.</p> <p>There should be a consideration of solar panel and other alternative energy sources.</p> <p>There should be consideration of green building design and energy efficient buildings.</p> <p>Air pollution associated with project should be completely mitigated.</p> <p>The EIR should address the cumulative impacts, based on different scenarios.</p>
May 30, 2006	Department of Transportation: District 6	<p>The EIR should identify any improvements to State facilities that would need to be made as a result of the increased traffic volume generated by the proposed change.</p> <p>The County should adopt the Transportation Concept Report in order to give guidance to the developer to insure orderly development and private property rights.</p> <p>The County should adopt future Caltrans improvement plans when available.</p> <p>A traffic and financial study will be needed to determine the ultimate configuration of each of the interchanges needing improvements.</p> <p>An encroachment permit must be obtained for all proposed activities for placement of encroachments within, under or over the State highway right-of-ways.</p> <p>The County should consider a Development Impact Mitigation Program.</p>
May 30, 2006	Margaret Schottler	<p>The county should concentrate on city focused growth.</p> <p>The EIR should include mitigation to avoid the merger of communities.</p> <p>Air quality should be analyzed from a cumulative perspective instead of a project by project perspective.</p> <p>Analysis of new town criteria should include population and housing need and the impact of the additive population.</p>
May 30, 2006	Carole Clum	<p>The General Plan should include a stronger, permanent open space designation.</p>

**TABLE 1-2
SUMMARY OF KEY ISSUES FROM COMMENTS RECEIVED
DURING THE PUBLIC REVIEW PERIOD**

Date	Commenter	Summary of Key Issues
May 31, 2006	City of Dinuba	<p>The EIR should include mitigation to avoid the merger of communities.</p> <p>Air quality should be analyzed from a cumulative perspective instead of a project by project perspective.</p> <p>The General Plan should include analysis of habitat buffers around riparian zones, vernal pools and other sensitive zones.</p> <p>"Ability to farm" instead of "right to farm" should be the basis of ag/urban interface.</p> <p>Open Space should be analyzed under both agriculture as well as economic development via tourism.</p> <p>The EIR should include stringent water conservation consideration.</p> <p>Analysis of new town criteria should include population and housing need and the impact of the additive population.</p> <p>Global warming and future drought should be taken into consideration</p> <p>(page 16) The EIR should include discussions of other significantly traveled east-west and north-south country roads.</p> <p>(pages 16 and 17) the EIR should investigate the possibility of using land trusts, conservation contracts, and conservation easements to protect agricultural resources as well as provide a physical buffer between cities or other uses.</p> <p>(page 17) the EIR should contain a discussion on other air quality impacts not related to the Federal Clean Air Act's criteria pollutants.</p> <p>(page 17) The General Plan Update should include updates to the county's Habitat Conservation Plan, and should contain a discussion and/or maps of critical habitat areas near incorporated cities' growth paths.</p> <p>(page 18) the EIR should contain a discussion on urban development boundaries and the physical impacts of land use decisions within proximity of incorporated cities.</p> <p>(page 19) Public safety should also be evaluated as increasing traffic along major thoroughfares.</p>
June 1, 2006	California Regional Water Quality Control Board: Central Valley Region	<p>The General Plan should include a map at a regional scale of all waters of the State potentially affected by the development proposed to be authorized by the General Plan.</p> <p>In order to fulfill permitting requirements, the Regional Water Board needs to understand how projects conducted under the General Plan will avoid or minimize potential causes of water degradation.</p> <p>Measures to maintain the pre-project hydrograph should be included in the alternatives analyses for the EIR.</p> <p>The EIR should also document potential cumulative impacts to watershed hydrology from existing and planned development in the area.</p> <p>The alternatives analysis of the EIR should include a low-impact approach as suggested by the Regional Water Board.</p>

**TABLE 1-2
SUMMARY OF KEY ISSUES FROM COMMENTS RECEIVED
DURING THE PUBLIC REVIEW PERIOD**

Date	Commenter	Summary of Key Issues
June 1, 2006	The County of Fresno	<p>The EIR should analyze the regional importance of movement corridors in and along waterbodies, the potential effect of disrupting such corridors, and the potential for enhancing such corridors.</p> <p>The EIR should include information regarding any sensitive plant and animal species likely to use the corridors.</p> <p>The EIR should identify any impacts to riparian or other waters that could compromise future remediation of existing connectivity barriers.</p> <p>Fresno County's Design Division would like to have an opportunity to review a Traffic Impact Study for this project.</p>
June 5, 2006	Department of Conservation	<p>The EIR should describe the project setting in terms of the actual and potential agricultural productivity of the land, including mapping resources of agricultural use areas, and the use of economic multipliers to assess the total contribution to local and state economies.</p> <p>The EIR should discuss the project's impact on agricultural land, including farmland conversion, impacts on current and future agricultural operations, and cumulative impacts on agricultural land.</p>
June 5, 2006	California Regional Water Quality Control Board: Central Valley Region	<p>The EIR should provide more information and discussion regarding Williamson Act Lands that would be impacted by the project.</p> <p>The EIR should discuss any feasible alternatives to the project that would lessen or avoid farmland conversion impacts.</p> <p>The County should require existing and proposed developments to be connected to a regional waste water treatment facility, or connect to the WTTTF when feasible, instead of onsite wastewater treatment systems.</p> <p>The County needs to regulate onsite wastewater treatment systems in a manner that fully consistent with Regional Board guidelines, and is also protective of ground and surface water quality.</p>

Note: EIR = environmental impact report

Draft EIR

This document constitutes the Draft EIR. The Draft EIR contains a description of the project, discusses potential project impacts, discusses measures (draft general plan policies and/or revisions to draft general plan policies) to be implemented to mitigate impacts found to be significant, as well as analyzes several project alternatives. A full description of the environmental setting for the project is provided in the General Plan Background Report (see Appendix B of this EIR).

As required by CEQA, this Draft EIR focuses on significant or potentially significant environmental effects (CEQA Guidelines Section 15143). Comments received on the NOP helped to further refine the list of environmental issues to be evaluated in this EIR. Please see Section 1.5, Reader's Guide to the EIR for additional information related to the scope and organization of the Draft EIR.

The impacts analyzed in this EIR, including those considered to be less than significant, are summarized in Table ES-1 of the Executive Summary.

Public Review of the Draft EIR

This document will be circulated to numerous agencies, organizations, and interested groups and persons for comment during the 60-day public review period for the Draft EIR. A public notice will be posted at the Tulare County Resource Management Agency, Tulare County public libraries (listed below), and on the General Plan website. The Draft EIR, along with copies of documents referenced herein, is also available for public review at the following locations during the review period:

Tulare County Resource Management Agency
Government Plaza
5961 South Mooney Boulevard
Visalia, CA 93277

Tulare County Website
<http://www.co.tulare.ca.us/>

Alpaugh Library
3816 Avenue 54
Alpaugh, CA 93201

Dinuba Library
150 South " I " Street
Dinuba, CA 93618

Earlimart Library
780 East Washington St.
Earlimart, CA 93219

Exeter Library
230 East Chestnut
Exeter, CA 93221

Ivanhoe Library
15964 Heather
Ivanhoe, CA 93235

Lindsay Library
165 North Gale Hill Street
Lindsay, CA 93247

Cutler/Orosi Library
12646 Avenue 416
Orosi, CA 93647

Pixley Library
Pixley Union Elementary School
300 North School
Pixley, CA 93256

Springville Library
35800 Highway 190
Springville, CA 93265

Strathmore Library
19646 Road 230
Strathmore, CA 93267

Terra Bella Library
23825 Avenue 92
Terra Bella, CA 93270

Three Rivers Library
42052 Eggers Dr.
Three Rivers, CA 93271

Tipton Library
301 East Woods Avenue
Tipton, CA 93272

Visalia Library
200 West Oak Avenue
Visalia, CA 93291

Woodlake Library
400 West Whitney
Woodlake, CA 93286

To obtain a copy of the EIR, please contact the Resource Management Agency at 559-773-6291 or by email at DPBryant@co.tulare.ca.us.

The County will receive public input on the Draft EIR at one or more public hearing(s) by the Planning Commission and Board of Supervisors before the Board of Supervisors makes a final decision on the General Plan Update. The public hearing(s) will be held on various dates to be separately noticed. Public comment is encouraged during the 60-day public review period and at all public hearings before the County of Tulare Planning Commission and Board of Supervisors.

Final EIR, EIR Certification, and Project Approval

Written and oral comments received during the statutory public comment period in response to the Draft EIR will be addressed in a response to comments document, which, together with the Draft EIR, will constitute the Final EIR. County of Tulare staff will make recommendations to the Planning Commission and to the Board of Supervisors. The Board of Supervisors will review the Final EIR for adequacy and consider it for certification, pursuant to the requirements of Section 15090 of the CEQA Guidelines. Certification consists of three separate but related findings:

- The Final EIR has been completed in compliance with CEQA.
- The Final EIR was presented to the decision-making body of the lead agency, and the decision-making body reviewed and considered the information contained in the Final EIR prior to approving the project.
- The Final EIR reflects the lead agency's independent judgment and analysis.

If the Board of Supervisors certifies the Final EIR and chooses to approve the project, the Board will then be required to adopt findings on the feasibility of reducing or avoiding significant environmental effects (CEQA Guidelines, Section 15091, subd. (a)) and to adopt a statement of overriding considerations that identifies the project benefits that outweigh the project's significant unavoidable effects (CEQA Guidelines, Section 15093).

The findings required by Section 15091, subdivision (a), will require the Board of Supervisors to make one or more of the following three findings with respect to each significant effect identified in this EIR:

- Changes or alterations have been required in, or incorporated into, the project that avoid or substantially lessen the significant environmental effect as identified in the Final EIR.
- Such changes or alterations are within the responsibility and jurisdiction of another public agency and not the agency making the finding. Such changes have been adopted by such other agency or can and should be adopted by such other agency.
- Specific economic, legal, social, technological, or other considerations, including provision of employment opportunities for highly trained workers, make infeasible the mitigation measures or project alternatives identified in the Final EIR.

According to CEQA Guidelines Section 15093, which sets forth the requirements for statements of overriding considerations:

- CEQA requires the decision-making agency to balance, as applicable, the economic, legal, social, technological, or other benefits of a General Plan Update against its unavoidable environmental risks when determining whether to approve the project. If the specific economic, legal, social, technological, or other benefits of a General Plan Update outweigh the unavoidable adverse environmental effects, the adverse environmental effects may be considered “acceptable.”
- When the lead agency approves a project that will result in significant effects identified in the Final EIR that are not avoided or substantially lessened, the agency shall state in writing the specific reasons to support its action, based on the Final EIR and/or other information in the record. The statement of overriding considerations shall be supported by substantial evidence in the record.

Public Resources Code Section 21081.6(a)(1), requires lead agencies to “adopt a reporting or monitoring program for the changes made to the project or conditions of project approval, adopted in order to mitigate or avoid significant effects on the environment.” This mitigation monitoring and reporting program (MMRP) will be adopted when the Board adopts the findings described above. Monitoring Reports regarding the MMRP will be consolidated with the annual report required in state law and in Policy PF 7.1 of the Goals and Policies Report. Throughout this Draft EIR, mitigation measures have been clearly identified and presented in language that will facilitate the establishment of an MMRP. Any mitigation measures adopted by the County may take the form of policies and implementation measures integrated into the General Plan itself. This approach is encouraged by the same statute, which, in subdivision (b), states that “conditions of project approval may be set forth in referenced documents which address required mitigation measures or, in the case of the adoption of a plan, policy, regulation, or other public project, by incorporating the mitigation measures into the plan, policy, regulation, or project design.” Case law gives the County the option of integrating its MMRP directly into the General Plan as well. (See *Rio Vista Farm Bureau Center v. County of Solano* (1992) 5 Cal.App.4th 351, 380-381.)

If and when, the Board of Supervisors certifies the adequacy of the Final EIR and approves the project (with the accompanying findings and statement of overriding considerations), the County will file a Notice of Determination with both the County Clerk of the County of Tulare and the State Clearinghouse. The posting of the Notice of Determination will initiate a 30-day statute of limitations during which any affected party can initiate litigation challenging the General Plan on CEQA grounds.

1.4 Reader's Guide to the Draft EIR

The County's 2030 General Plan (General Plan Update) included the preparation of several major documents. These documents can be divided into two categories: general plan documents that are intended for adoption and supporting documents that are used to assist the decision-making process but are not part of the adopted General Plan itself.

General Plan Update Documents

The General Plan update document is organized into and consists of three parts:

- **Part I** includes the Countywide Goals and Policies Report. This report is the essence of the General Plan. It contains the goals and policies that will guide future decisions within the County. It also identifies a full set of implementation measures that will ensure the goals and policies in the General Plan are carried out.
- **Part II** includes area policies for the valley (Rural Valley Lands Plan), corridors, foothills (Foothill Growth Management Plan) and mountains (Mountain Framework Plan). This part tailors additional goals and policies to specific, unique regions and areas in the County.
- **Part III** consists of previously adopted community plans and Sub-Area Plans. These plans are not being amended at this time and will continue in effect. Newly adopted corridor plans and County adopted City General Plans will also be part of Part III.

In addition, the General Plan includes Chapter 6, the Housing Element, last updated in 2003, and the Animal Confinement Facilities Plan (ACFP), a voluntary element adopted in 2000. The ACFP is part of Chapter 8, Environmental Resources Management.

General Plan Supporting Documents

- **Policy Alternatives Report.** This report discusses the major planning issues facing the County and alternative approaches to address these issues. The report distills the input of the public, members of the Tulare County Board of Supervisors and Planning Commission, the General Plan Technical Advisory Committee (TAC), and County staff, and was prepared in August 2005.
- **Background Report.** This report provides a detailed description of the conditions that existed within the Planning Area during the development of the General Plan. For the Tulare County General Plan and EIR, the Background Report reflects conditions within the Planning Area in 2005.
- **Comments Response Matrix.** This report organizes extensive comments on the November 2006 Draft Goals and Policies Report, received from Tulare County residents, Technical Advisory Committee members, RMA staff, the Tulare County Planning Commission, and the Tulare County Agricultural Advisory Committee. Staff comments also constitute a major part of the matrix comments including issues that were not yet addressed as raised during study sessions with the Board of Supervisors, other County advisory bodies, and as a result of coordination meetings with many County departments and divisions. This document will serve to explain the rationale basis for many of the policies, and will be a valuable tool for users of the General Plan in coming years.

- Environmental Impact Report.** The EIR prepared for the General Plan is designed to meet the requirements of CEQA. The Planning Commission, the Board of Supervisors, the community, and interested public agencies will use the EIR during their review of the draft General Plan to understand the potential environmental implications associated with implementation of the General Plan. As noted above in Section 1.2, the EIR relies in part on both the Background and Goals and Policies Reports for certain information of relevance under CEQA. In this sense, this EIR should be understood to include both of these ostensibly separate documents.

One objective in updating the County’s General Plan, related to this last point about the EIR, is to make the plan user-friendly. To do this, Tulare County General Plan 2030 has been divided into several documents so that its goals and policies can be easily referenced, while detailed background (i.e., environmental and regulatory setting) information is also easily available when needed. Two of the three documents of the General Plan—the Goals and Policies Report and the EIR—use a similar formatting system so that readers can easily find corresponding discussions in each of the reports. For example, if someone wanted information on agricultural resources that exist in the County today, they can turn to Component B. “Prosperity”, Element 4 of the Goals and Policies Report to learn about policies related to agriculture. Consequently, if they want to learn about the impacts associated with agriculture, they can refer to Chapter 3.0 “General Plan Framework and Prosperity”, Section 3.4 of the EIR. The interrelationship between the sections of the Goals and Policies Report and the sections of the EIR are shown below, in Table 1-3.

**TABLE 1-3
 FORMATTING OF THE GOALS AND POLICIES REPORT AND EIR**

Goals and Policies Report	EIR
	<i>Executive Summary</i>
Part I Goals and Policies	
Component A. General Plan Framework	
Element 1. Introduction	Chapter 1. Introduction and Reader's Guide
Element 2. Planning Framework	
Component B. Prosperity	Chapter 2. Project Description
	Chapter 3. General Plan Framework and Prosperity
	3.1 Introduction
	3.2 Planning Framework
Element 3. Economic Development	3.3 Economic Development
Element 4. Agriculture	3.4 Agriculture
Element 5. Land Use	3.5 Land Use
Element 6. Housing	3.6 Housing
Component C. Environment	Chapter 4. Environment
Element 7. Scenic Landscapes	4.1 Introduction
Element 8. Environmental Resources Management	4.2 Scenic Landscapes
Element 9. Air Quality	4.3 Environmental Resources Management
Element 10. Health and Safety	4.4 Air Quality
Element 11. Water Resources	4.5 Health and Safety
	4.6 Water Resources
Component D. Infrastructure	Chapter 5. Infrastructure
Element 12. Transportation and Circulation	5.1 Introduction
Element 13. Public Facilities and Services	5.2 Transportation and Circulation
	5.3 Public Facilities and Services
Part II Area Plan Policies	Chapter 6. Area and Community Plans
Chapter 1. Rural Valley Lands Plan	6.1 Rural Valley Lands Plan

**TABLE 1-3
FORMATTING OF THE GOALS AND POLICIES REPORT AND EIR**

Goals and Policies Report	EIR
Chapter 2. Corridor	6.2 Corridor
Chapter 3. Foothill Growth Management Plan	6.3 Foothill Growth Management Plan
Chapter 4. Mountain Framework Plan	6.4 Mountain Framework Plan
Part III. Community Plans	6.5 Community Plans
	Chapter 7. Alternatives
	Chapter 8. CEQA Statutory Considerations
	Chapter 9. Report Preparers

EIR Organization

Because the key documents share a similar formatting system, Table 1-4 highlights the organization of the EIR. This draft EIR includes all of the sections required by CEQA as identified in the same table

As shown in Table 1-3, above, and Table 1-4, the EIR is organized into the following chapters so that the reader can easily obtain information about the project and its specific issues:

- **Chapter 1.0, Introduction and Reader’s Guide**, provides an overview of the purpose and use of an EIR and the EIR process. This chapter also provides a detailed description of the project objectives and the components of the project.
- **Chapter 2.0, Project Description**, provides a detailed description of the project objectives and the components of the project.
- **Chapter 3.0, General Plan Framework and Prosperity**, provides an analysis and discussion of the Planning Framework and the projects impacts on each of the following resource topics: Economic Development, Agriculture, Land Use and Housing. Mitigation measures (General Plan policies) that would eliminate or reduce significant impacts are also included.
- **Chapter 4.0, Environment**, provides an analysis and discussion of the projects impacts on each of the following resource topics: Scenic Landscapes, Environmental Resource Management (including Biological Resources, Mineral Resources, Energy Resources, Recreation and Open Space Resources, Cultural Resources and Soil Resources), Air Quality and Global Climate Change, Health and Safety (including Geologic and Seismic Hazards, Airport Hazards, Hazardous Materials, Flood Hazards, Urban and Wildland Fire Hazards, Emergency Response, and Noise), and Water Resources (including Water Quality and Water Supply). Mitigation measures (General Plan policies) that would eliminate or reduce significant impacts are also included.
- **Chapter 5.0, Infrastructure**, provides an analysis and discussion of the projects impacts on each of the following resource topics: Transportation & Circulation and Public Facilities & Services. Mitigation measures (General Plan policies) that would eliminate or reduce significant impacts are also included.
- **Chapter 6.0, Area and Community Plans**, provides an analysis and discussion of the projects impacts on each of the County’s Area Plans: Rural Valley Lands Plan, Corridor, Foothill Growth Management Plan, and the Mountain Framework Plan.
- **Chapter 7.0, Alternatives to the Project**, evaluates the environmental effects of the alternatives to the project, including the No Project Alternative and the environmentally superior alternative.

- **Chapter 8.0, Additional Statutory Considerations**, provides a discussion of issues required by CEQA that are not covered in other chapters. This includes unavoidable adverse impacts, irreversible environmental changes, growth inducement, and cumulative impacts.
- **Chapter 9.0, Report Preparation**, lists the individuals involved in preparing this EIR.
- **Chapter 10.0, Bibliography**, identifies the documents (printed references) and individuals (personal communications) consulted in preparing this EIR.

**TABLE 1-4
REQUIRED ENVIRONMENTAL IMPACT REPORT CONTENTS AND ORGANIZATION**

Location in the Environmental Impact Report	Requirement (CEQA Section)
Table of Contents	Table of Contents (Section 15122)
Executive Summary	Summary (Section 15123)
Chapter 1.0 Introduction and Reader's Guide to the EIR	
Chapter 2.0 Project Description	Project Description (Section 15124)
Chapter 3.0 General Plan Framework and Prosperity: Planning Framework, Economic Development, Agriculture, Land Use, Housing	Significant Environmental Effects of the Project (Section 15126[a])
Chapter 4.0 Environment: Scenic Landscapes, Environmental Resource, Air Quality and Global Climate Change, Health and Safety, and Water Resources.	Unavoidable Significant Environmental Effects (Section 15126[b]) Mitigation Measures (Section 15126[e])
Chapter 5.0 Infrastructure: Transportation and Circulation, Public Facilities and Services	
Chapter 6.0 Area and Community Plans: Rural Valley Lands Plan, Corridors, Foothill Growth Management Plan, Mountain Framework Plan, and Community Plans.	
Chapter 7.0 Alternatives to the Project	Alternatives to the Project (Section 15126[f])
Chapter 8.0 Additional Statutory Considerations	Cumulative Impacts (Section 15130) Growth-Inducing Impacts (Section 15126[d]) Effects Found Not To Be Significant (Section 15128)
Chapter 9.0 Report Preparation	List of Preparers (Section 15129)
Chapter 10.0 Bibliography	Organization and Persons Consulted (Section 15129)

Note: CEQA = California Environmental Quality Act

Issues Addressed in the EIR

As part of the CEQA process for the project, a detailed NOP was prepared and circulated for public comment (see Appendix A). Using the environmental criteria presented in Appendix G "Environmental Checklist Form", of the CEQA Guidelines, the NOP established the preliminary scope of environmental resources and issues to be addressed in the EIR. Table 1-5 provides a description of how the environmental criteria were presented in the NOP using the "Aesthetics" section as an example. The NOP provided similar preliminary scope information for all 17 environmental topics identified in Appendix G "Environmental Checklist Form" of the CEQA

Guidelines. All potential environmental impacts related to implementation of the General Plan Update identified in the NOP were based on information known at the time of its preparation. To help ensure that this EIR evaluates all topics that may be significantly affected by the project, the comments received during the NOP comment period (see Table 1-2 above) were reviewed and considered during preparation of the EIR.

**TABLE 1-5
SUMMARY OF ENVIRONMENTAL CRITERIA FOR AESTHETICS**

Environmental Topic	Criteria
Aesthetics	<p>Impact SL-1: The General Plan Update would substantially degrade the existing visual character or quality of the site and its surroundings.</p> <p>Impact SL-2: The General Plan Update would have a substantial adverse effect on a scenic vista or substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway.</p> <p>Impact SL-3: The General Plan Update would create a new source of substantial light or glare which would adversely affect day or nighttime views in the area.</p>

Terminology Used in the EIR

For each impact identified in this EIR, a statement of the level of significance of the impact is provided. Impacts are categorized in one of the following categories:

- A project impact is considered **beneficial** if it will result in the improvement of a physical condition in the environment (no mitigation required).
- A project impact is considered **less than significant** when it does not reach the standard of significance and, therefore, would cause no substantial change in the environment. No mitigation is required for less-than-significant impacts.
- A **significant impact** is a substantial, or potentially substantial, adverse change in the environment. Physical conditions in the area will be directly or indirectly affected by the General Plan Update. Impacts may be direct or indirect and short-term or long-term. A project impact is considered significant if it reaches or exceeds the threshold of significance identified in the EIR. Mitigation measures may reduce a potentially significant impact to a less-than-significant impact.
- A **significant unavoidable impact** occurs when even with the adoption of all feasible mitigation measures a significant impact cannot be avoided or mitigated to a less-than-significant level should the project be implemented.

The impact assessment provided in this EIR is divided into a number of individual impact statements that deal with specific topics. For example:

- **Impact ERM-15:** The General Plan Update would cause a substantial adverse change in the significance of a unique archaeological resource as defined in Section 15064.5 and/or disturb any human remains, including those interred outside of formal cemeteries.

Following each impact statement is a discussion of the potential impact and the General Plan policies and implementation measures that would help to mitigate this impact. Following each impact statement, a summary table identifying each impact's level of significance and the key policies that were modified to mitigate the impact is provided (see example below for Impact ERM-15, listed above).

Impact Summary

Level of Significance Before Mitigation : <i>Potentially Significant</i>
Required Mitigation Measures: <i>Add new Policies ERM-6.11 "Archaeological Resource Surveys", ERM-6.12 "Discovery of Archaeological Resources", and ERM-6.13 "Discovery of Human Remains"</i>
Level of Significance After Mitigation: <i>Significant and Unavoidable for "Historical Resources" and Less-than-Significant for other "Archaeological Resources and Human Remains"</i>

The draft EIR also identifies mitigation measures. The CEQA Guidelines (Section 15370) define mitigation as:

- 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 impacted environment.
- Reducing or eliminating the impact over time by preservation and maintenance operations during the life of the action.
- Compensating for the impact by replacing or providing substitute resources or environments.

Overall EIR Approach and Assumptions

This EIR is a complete EIR with updated information on the Study Area's environmental setting from the General Plan Background Report (October 2004, updated July 31, 2007), impact analysis, mitigation measures, and evaluation of a range of project alternatives. The Background Report is provided as Appendix B of this EIR.

As more fully described above under Section 1.3, Type of EIR, this EIR has been prepared as a Program EIR. As a Program EIR, this document focuses on the overall effects of the project. However, the analysis does not examine in detail the localized effects of potential site-specific projects that may occur under the overall umbrella of this program in future years. In fact, this EIR assumes that specific development projects and infrastructure improvement proposals submitted to the County may necessitate an independent environmental analysis in accordance with the requirements of CEQA. (For possible means of streamlining such review, see Section 1.3.) The nature of general plans is such that many proposed policies are intended to be general, with details to be later determined during the implementation phases of the general plan. Consequently, many of the impacts and mitigation measures can only be described in general or qualitative terms.

CEQA mandates that lead agencies adopt MMRPs for projects identified as having significant impacts where mitigation measures have been identified to reduce the impacts to a less-than-significant level. MMRPs are intended to ensure compliance during project implementation. These programs provide the additional advantages of providing staff and decision-makers with feedback as to the effectiveness of mitigation measures, as well as the experience and information to shape future mitigation measures.

The proposed General Plan Update is intended to be self-mitigating, in that the policies and implementation measures are designed to mitigate environmental impacts. This EIR clearly identifies how the impacts of future development in Tulare County will be mitigated through the implementation of the policies and measures of the project. A significance criterion is an identifiable quantitative, qualitative, or performance level of a particular significant environmental effect that, if exceeded, indicates that the impact is considered to be significant.

The analysis provided in the EIR is based on the following key assumptions:

- **Full Implementation.** This EIR assumes that all policies in the proposed General Plan will be fully implemented and all future development will be consistent with the population/employment projections used in developing the future growth scenario for the County's various area plans (i.e., Valley, Corridor, Foothill, and Mountain areas). The County's overall planning area also includes land within the Kings River and Mountain Sub-Area plans and the various community plans. However, no changes are proposed for these plans as part of the General Plan Update.
- **Buildout in 2030.** This EIR assumes that overall buildout of the project will occur by 2030. It is assumed that a majority of the development will occur within cities and, to a much lesser extent, within unincorporated communities and hamlets. Development under the project will be incremental and timed in response to market conditions dependent upon infrastructure capabilities. While the proposed General Plan Update includes policies intended to guide the amount and location of new growth, it does not include interim phases (development scenarios) because any attempt to predict the exact pace and locations of market-driven growth is considered unreasonably speculative.

Documents Incorporated By Reference

Section 15150 of the CEQA Guidelines permits documents of lengthy technical detail to be incorporated by reference in an EIR. Specifically, Section 15150 states that an EIR may "incorporate by reference all or portions of another document which is a matter of public record

or is generally available to the public” Incorporated documents are to be briefly summarized in the EIR and made available to the public for inspection or reference. The General Plan Update EIR incorporates by references the documents noted below, several of which are provided as appendices to this EIR or are available at the County of Tulare, Resource Management Agency, 5961 South Mooney Boulevard, Visalia, CA 93277. Summaries of important parts of these documents will be provided throughout this EIR in appropriate places.

- **Background Report.** This report provides a detailed description of the conditions that existed within the Planning Area during the development of the General Plan. For the Tulare County General Plan, the Background Report reflects conditions within the Planning Area in 2005.
- **General Plan Goals and Policies Report.** This report contains the current set of goals, policies, and implementation measures that will guide future land use decisions within the County. This goals and policies report has been updated to include several additional policies or suggestions received from County stakeholders.
- **Comment Response Matrix.** This report organizes extensive comments on the November 2006 Draft Goals and Policies Report, received from Tulare County residents, Technical Advisory Committee members, RMA staff, the Tulare County Planning Commission, and the Tulare County Agricultural Advisory Committee. Staff comments also constitute a major part of the matrix comments including issues that were not yet addressed as raised during study sessions with the Board of Supervisors, other County advisory bodies, and as a result of coordination meetings with many County departments and divisions. This document will serve to explain the rationale basis for many of the policies, and will be a valuable tool for users of the General Plan in coming years.
- **Policy Alternatives Report.** This report discusses the major planning issues facing the County and alternative approaches to address these issues. The report distills the input of the public, members of the Tulare County Board of Supervisors and Planning Commission, the General Plan Technical Advisory Committee (TAC), and County staff, and was prepared in August 2005.

1.5 EIR Preparation

This EIR has been prepared by a consulting team led by staff from Environmental Science Associates, under contract to the County of Tulare. The Draft EIR has been prepared for the County of Tulare in accordance with CEQA (Public Resources Code Section 21000 *et seq.*) and the State CEQA Guidelines (14 CCR 15000 *et seq.*). Staff members from the County of Tulare and the consulting team who helped prepare this EIR, including ESA and Omni Means, are identified in Chapter 9.0, Report Preparation.

Chapter 2

Project Description



CHAPTER 2.0

Project Description

2.1 Introduction

The project analyzed in this EIR is the proposed Tulare County General Plan 2030. The Tulare County General Plan is a comprehensive update of the policies of the County's current General Plan, and will provide for the continuation of many existing policies, modifications of others, and the addition of new policies. This chapter provides background information regarding the regional location of the County; describes what comprises a General Plan in California; outlines the proposed General Plan 2030 objectives and the policy development process; and identifies the key themes/components of the General Plan Update. Additional details are provided in the Notice of Preparation (Appendix A), the Background Report, dated July 31, 2007 (Appendix B) and the Draft Goals and Policies Report, dated July 2007 (Appendix C). Alternatives to the General Plan Update are described in Chapter 7.0 of this EIR.

2.2 Project Setting

Tulare County is located in a geographically diverse region with the majestic peaks of the Sierra Nevada framing its eastern region, while its western portion includes the San Joaquin Valley floor, which is very fertile and extensively cultivated. Tulare County consistently ranks amongst the top two leading agricultural-producing counties in the U.S., sharing this recognition with its larger neighbor to the north, Fresno County. In addition to agricultural production, the County's economic base also includes agricultural packing and shipping operations. Small and medium size manufacturing plants are located in the western part of the County and are increasing in number. Tulare County also contains Mt. Whitney, the tallest mountain in the 48 contiguous states, as well various well known parks and open space areas including portions of Sequoia National Forest, Giant Sequoia National Monument, Inyo National Forest, and Kings Canyon National Park. Sequoia National Park is entirely contained within the County. Tulare County contains more than 4,935 square miles (3,158,400 acres) within its' borders and can be divided into three general topographical zones: a valley region; a foothill region east of the valley area; and a mountain region just east of the foothills. The eastern half of the County is generally comprised of public lands, which include not only the parks and forests listed above, but also the Mountain Home State Forest, Golden Trout Wilderness Area, and portions of the Dome Land and South Sierra Wilderness Areas. The County also contains one State park and one wildlife refuge. The Colonel Allensworth Historic State Park, located in the southwestern corner of the County, provides picnic and camping areas and an interpretive museum. The Pixley National Wildlife Refuge provides a wintering area for migratory waterfowl as part of the Pacific Flyway, and provides habitat for the endangered blunt-nosed leopard lizard, the San Joaquin kit fox and the Tipton kangaroo rat.

The main transportation network in the County includes State Highway 99, which is the main north-south highway in the County, and State Highways 63 (N/S), 65 (N/S), 190 (E/W), and 198 (E/W), which connect the major cities and public lands in the County. Table 2-1 provides current population and housing estimates for the County. As shown in the table, the majority (63%) of the County’s total population resides within the jurisdictional areas of the cities, while 37% resides in unincorporated areas. The current distribution of population within unincorporated areas is described on page 2-40 of the Background Report. The County also contains the Tule River Indian Reservation.

**TABLE 2-1
TULARE COUNTY POPULATION AND HOUSING ESTIMATES (2006)**

Jurisdictional Area	Total Population	Housing Units	Percent Vacant (Housing)	Persons Per Household	Percentage of Population¹
City of Dinuba	19,580	5,240	3.76	3.85	5%
City of Exeter	10,630	3,550	5.27	3.14	3%
City of Farmersville	10,420	2,610	5.17	4.20	3%
City of Lindsay	11,190	3,010	5.12	3.87	3%
City of Porterville	45,220	14,080	6.36	3.31	11%
City of Tulare	51,480	16,110	4.98	3.33	12%
City of Visalia	111,170	38,430	5.47	3.02	27%
City of Woodlake	7,310	1,990	5.19	3.88	2%
Unincorporated Areas	153,640	47,440	11.62	3.62	37%
County Total	410,640	132,460	7.62	3.39	100%

¹Due to rounding, total will not equal %100
Source: California Department of Finance, 2007

County Boundaries

The County of Tulare is bordered by Fresno County to the north and Kern County to the south. Kings County is located on the west side of Tulare County while Inyo County borders the County to the east. The crest of the Sierra Nevada mountain range forms the boundary with Inyo County. The northern border of Tulare County is an irregular line that passes just south of the City of Reedley and State Highway 180. The southern border is a consistent east-west trending line, comprising the south standard parallel south of Mount Diablo, located north of the City of Delano. The western border generally trends north-south in a straight-line north and south just east of Corcoran.

2.3 Project Description

General Plans in California

State law requires each county and city to prepare and adopt a comprehensive and long-range General Plan for its physical development (Government Code Section 65300). Each General Plan must address the seven topics (referred to as “elements”) of land use, circulation, housing, open-

space, conservation, safety, and noise as identified in State law (Government Code Section 65302), to the extent that the topics are locally relevant. Cities and counties in the San Joaquin Valley must also address air quality matters as specified by Government Code Section 65302.1. Cities and counties may also include other topics of local interest, as they choose (Government Code Section 65303).

Together, these elements of a General Plan form a comprehensive set of planning policies. These required elements, along with a summary of the primary objectives addressed within the elements, are identified in Table 2-2.

**TABLE 2-2
SUMMARY OF THE MANDATED ELEMENTS OF THE GENERAL PLAN**

General Plan Element	Primary Objectives
Land Use Element	Provides the general distribution and intensity of land uses within the planning area.
Air Quality Circulation Element	Describes requirements for San Joaquin Valley in accordance with Government Code 65302.1. Identifies the general location and extent of existing and proposed transportation facilities and utilities.
Housing Element	Includes a comprehensive assessment of current and future housing needs for all segments of the County population, as well as a program for meeting those needs.
Open Space Element	Provides measures for the preservation of open space, for the protection of natural resources, the managed production of resources, and for public health and safety.
Conservation Element	Addresses the conservation, development, and use of natural resources.
Safety Element	Establishes policies to protect the community from risks associated with natural and human-made hazards such as seismic, geologic, flooding, wildlife hazards, and air quality.
Noise Element	Identifies major noise sources and contains policies intended to protect the community from exposure to excessive noise levels.

A comprehensive General Plan provides the jurisdiction, whether a city or a county with a consistent framework for land use decision making. The General Plan has been called the “constitution” for land use development to emphasize its importance to land use decisions. Once a General Plan is adopted, its maps, diagrams, and development policies form the basis for the jurisdictions zoning, subdivision, and public works actions. Under California law, no specific plan, area plan, community plan, re-zoning, subdivision map, nor public works project may be approved unless a jurisdiction finds that it is consistent with its adopted General Plan.

The County may adopt a General Plan in the format that best fits its unique circumstances (Government Code Section 65300.5). In doing so, the County must ensure that the General Plan and its component parts comprise an integrated, internally consistent and compatible statement of development policies. The County has chosen to adopt a General Plan that includes all of the mandatory elements (identified above in Table 2-3) and several optional elements (including Economic Development, Scenic Landscapes and Water Resources Elements). Table 2-4 illustrates how these various elements (left column of table) relate to the mandatory elements identified in State law. For County elements with no check mark, this is considered an optional element. In addition to the various elements identified in Table 2-3, the Tulare County General Plan contains a number of Area Plans, Sub-Area Plans, Community Plans, County adopted City General Plans, and will also contain future adopted Corridor Plans. The overall structure of the Tulare County General Plan is described in greater detail below.

**TABLE 2-3
RELATIONSHIP BETWEEN COUNTY’S GENERAL PLAN PART I GOALS AND POLICIES REPORT AND
THE STATE-MANDATED ELEMENTS**

Tulare County Element	State-Mandated Elements							
	Land Use	Air Quality	Circulation	Housing	Open Space	Conservation	Safety	Noise
Part 1								
Planning Framework	■							
Economic Development								
Agriculture					■	■		
Land Use	■	■						
Housing				■				
Scenic Landscapes								
Environmental Resources Management					■	■		
Air Quality		■					■	
Health & Safety		■					■	■
Water Resources						■	■	
Transportation & Circulation		■	■					
Public Services & Facilities			■					
Part 2								
Area & Corridor Plans	■		■					
Part 3								
Community, Sub Area, Corridor and County Adopted General Plans	■		■					

Purpose of the General Plan Update

The General Plan Update establishes a planning framework and policies for the planning period to 2030 and serves the following additional important purposes:

- Creates opportunities for meaningful public participation in the planning and decision-making process,
- Addresses current conditions and trends impacting the County,
- Identifies planning issues, opportunities, and challenges that should be addressed through the General Plan,
- Explores and evaluates the implications of land use and policy alternatives,
- Ensures that the proposed General Plan is current, internally consistent, and easy to use,
- Provides guidance in the planning and evaluation of future land and resource decisions, and
- Serves as a vision and framework for the coordinated future growth in Tulare County.

Objectives of the General Plan Update

Although the General Plan Update was developed to meet several fairly broad objectives (i.e., the requirements of State law, etc.) the proposed General Plan was also developed through an extensive public outreach process to reflect the specific policy needs of Tulare County. To help determine what these specific policy needs are, the Tulare County Board of Supervisors considered input received from the many community workshops, the Technical Advisory Committee, and the Planning Commission, on the fundamental values that would guide the preparation of the proposed General Plan update. As a result of this input the following five value statements were identified:

- The beauty of the County and the health, safety and welfare of its residents will be protected and enhanced.
- The County will create and facilitate opportunities to improve the lives of all County residents.
- The County will protect its agricultural economy while diversifying employment opportunities.
- Every community will have the opportunity to prosper from economic growth.
- Growth will pay its own way providing sustainable, high quality infrastructure and services.

From these value statements, four framework concepts (see Table 2-4 below) were developed for the General Plan.

**TABLE 2-4
TULARE COUNTY GENERAL PLAN FRAMEWORK CONCEPTS**

Concept 1: Agriculture

One of the most identified assets in Tulare County is the rich agricultural land on the Valley floor and in the foothills. The General Plan identifies agriculture not only as an economic asset to the County but also as a cultural, scenic, and environmental element to be protected.

Concept 2: Land Use

Tulare County has a number of communities and hamlets that will grow and develop and natural resource lands (agriculture and open space) that will be preserved. It is anticipated that much of the projected population growth will require a range of housing choices, neighborhood support services, and employment producing uses that are centrally located in cities and communities. The County will also limit the conversion of agricultural and natural resource lands to urban uses.

Concept 3: Scenic Landscapes

The scenic landscapes in Tulare County will continue to be one of its most visible assets. The Tulare County General Plan emphasizes the enhancement and preservation of these resources as critical to the future of the County. The County will continue to assess the recreational, tourism, quality of life, and economic benefits that scenic landscapes provide and implement programs that preserve and use this resource to the fullest extent.

Concept 4: Natural and Cultural Resources

As Tulare County develops its communities and hamlets, the County will ensure that development occurs in a manner that limits impacts to natural and cultural resources through proper site planning and design techniques. Development will be avoided in naturally and culturally sensitive areas wherever possible.

From these framework concepts several guiding principles were identified, which set the foundation for the various goals, policies, and implementation measures that comprise the various elements of the proposed General Plan. These guiding principles also serve as the objectives of the General Plan Update. These objectives consist of the following:

- Provide opportunities for small unincorporated communities to grow or improve quality of life;
- Promote reinvestment in existing communities and hamlets in a way that enhances the quality of life in these locations;
- Protect the County's important agricultural resources and scenic natural lands from urban encroachment;
- Strictly limit rural residential development in important agricultural areas outside of communities, hamlets, and cities (i.e., avoid rural residential sprawl);
- Allow existing, outdated agricultural facilities in rural areas to be used for new businesses (including non-agricultural uses) if they provide employment; and
- Enhance planning coordination and cooperation with the agencies and organizations with land management responsibilities in and adjacent to Tulare County.

Description of the General Plan Update

The General Plan Update consists of a comprehensive update of Tulare County's existing General Plan. Key General Plan documents include the Goals and Policies and the Background Reports. The Goals and Policies Report contains the goals and policies that will guide future decisions within the County. It also identifies implementation measures that will ensure the goals and policies of the General Plan Update are carried out. This section identifies how the Goals and Policies Report is organized and provides a summary of its content.

General Plan Organization

The Goals and Policies Report sets out a hierarchy of goals, policies, and implementation measures designed to guide future development in the County. To provide a comprehensive and easy-to-use format, the Goals and Policies Report is divided into four components. Each component contains a set of related elements that have been grouped together based on the close relationship of those elements.

Each component will start with an overview of the elements contained in that component and present the guiding principles used in the preparation of these elements. The individual elements will build on these guiding principles, with each element containing a set of goals, policies, and implementation measures that will be used to guide the future of the County. All four components and the various elements that comprise each component are summarized below in Table 2-5.

**TABLE 2-5
COMPONENTS OF THE GOALS AND POLICIES REPORT, PART I**

Component	Chapter and Element
Component A. General Plan Framework	This component introduces the Goals and Policies Report, provides a profile of Tulare County and establishes a Planning Framework Element for the County. Contents include: Introduction Chapter 1 Tulare County Overview Chapter 2 Planning Framework Element
Component B. Prosperity	This component includes the elements that shape the County's land use and economic futures. Contents include: Chapter 3 Economic Development Element Chapter 4 Agriculture Element Chapter 5 Land Use Element Chapter 6 Housing Element
Component C. Environment	This component covers topics related to natural and cultural resources and public health and safety. Contents include: Chapter 7 Scenic Landscapes Element Chapter 8 Environmental Resources Management Element Chapter 9 Air Quality Element Chapter 10 Health and Safety Element Chapter 11 Water Resources Element
Component D. Infrastructure	This component covers the infrastructure systems necessary to ensure adequate services and capacity of desired growth. Contents include: Chapter 12 Transportation and Circulation Chapter 13 Public Facilities and Services

Section 1.2, "Tulare County General Plan", of the Goals and Policies Report contains detailed information relating to the hierarchy and format of components, elements, topics, goals, policies and implementation measures within the elements.

Population Growth Assumptions

Future development in Tulare County will be driven by population growth and the market distribution of that growth throughout the County. Based on projections provided by the Tulare County Association of Governments (TCAG 2003 Databook) and the State Department of Finance (California Department of Finance 2004), the population of Tulare County is expected to reach 621,549 in 2030. The General Plan Update assumes that a majority of the future population growth in the County will occur within the incorporated cities (established Urban Development Boundaries). To a lesser degree, there will also be projected population growth in the unincorporated communities and hamlets. Table 2-6 outlines the expected population growth in Tulare County and the percentages of population growth expected to occur as split between the cities and County jurisdiction. Approximately 75% of the population growth is expected to occur within the Urban Development Boundaries of incorporated cities throughout the County. The remaining population growth is expected to occur mainly within unincorporated communities and hamlets and foothill development corridors. These future growth assumptions are consistent with several of the General Plan objectives specific to growth issues.

**TABLE 2-6
POPULATION GROWTH AND DISTRIBUTION**

City/County	Percentage of Population (2006)	Percent of Net New Growth	2000-2003 Net New Growth	2030 Population Estimate	2030 Population Distribution
Cities (UDB)	63%	75.0%	190,545	450,934	72.5%
Unincorporated County	37%	25.0%	63,564	170,615	27.5%
Total		100.0%	254,109	621,549	100.0%

Source: TCAG 2003 Databook; CA DOF, 2004; Mintier & Associates; Matrix Design Group

Key Policy Changes

The General Plan Update is a policy plan that relies on individual policies to direct growth to preferred locations in response to market forces.

The most significant changes to the policies of the Tulare General Plan include:

- **Consolidate the seven required general plan elements.** The required elements are: Land Use, Circulation, Housing, Open Space, Conservation, Safety and Noise.
- **Add new optional elements to address key issues identified during public workshops.** Those new optional elements are: Economic Development, Agriculture, Scenic Landscapes, Air Quality and Water Resources.
- **Identify Hamlet Development Boundaries for 11 unincorporated areas.** The lands within the boundaries are exempt from the Rural Valley Lands Plan (RVLP). The 11 hamlets would be: Allensworth, Delft Colony, East Tulare Villa, Lindcove, Monson, Seville, Teviston, Tonyville, Waukena, West Goshen, Yette. The provision for hamlets would allow compatible infill development other than that provided by the RVLP, including mixed use and commercial opportunities.
- **Support planning for regional growth corridors at select locations.** These lands will also be exempt from the Rural Valley Lands Plan. This provision allows the County to adopt regional growth corridors to maximize the economic development potential of areas located along major transportation routes for uses such as industrial, regional retail, office parks, and highway commercial.
- **Consolidate Mountain Framework Plan.** This provides unified planning policies and sub-area planning requirements for unincorporated mountain areas under County jurisdiction.
- **Establish consistent content requirements for Community Plans.** This would include greater emphasis on community design, infrastructure provision and

financing. The new general plan would also require updated and enhanced development standards.

- **Provide clear criteria for when and how unincorporated communities and hamlets can grow.** Expansions to Community Plan Urban Development Boundaries order to grow are not proposed. Communities would have to fulfill specific conditions for expansion as defined by the general plan. The County would require that infrastructure exists before new development can take place.
- **Expand upon the existing new town policy.** New criteria for evaluating proposals would include: the new town must demonstrate a fiscally neutral or positive impact on the County, an infrastructure Master Plan must be prepared, the applicant must demonstrate access to water, and the project must strive to have a balanced mix of land uses.
- **Require new development to pay its own way.** Policies provide for use of a variety of financing mechanisms to construct, operate and maintain public services and facilities to support new development. These mechanisms include impact fees, formation of assessment districts, new or reorganized special districts, homeowners associations and grants.
- **Regulate County water resources.** The County would develop a ground water exportation ordinance, discourage conversion of agricultural water for urban development, and seek opportunities for ground water recharge.
- **Ensure a sustainable long term water supply.** The County will participate in integrated regional water management planning efforts, establish critical water supply areas, and protect existing water quality.

Buildout under the Proposed General Plan

This EIR assumes that overall buildout of the County will occur by 2030. It is assumed that a majority of the development will occur within cities and, to a much lesser extent, within unincorporated communities, hamlets, and development corridors. Development under the General Plan Update will be incremental and timed in response to market conditions in a climate where major infrastructure investments by the public and private sectors are a necessary precursor to enable growth. While the proposed General Plan Update includes policies intended to control the amount and location of new growth (for example encouraging a re-orientation of new agricultural related industrial and commercial uses to within Urban and Hamlet Development Boundaries), it does not solidly advocate, promote or represent any one development scenarios because any attempt to predict the exact pace and locations of future market-driven growth is considered speculative. Appropriate locations for market driven growth may be considered appropriate within the County, as guided by the policies established by this General Plan.

Implementation of the Proposed General Plan

Following approval of the project, County staff will prepare an implementation plan for Board of Supervisor review and approval that will be used for future planning and budgeting efforts. This implementation plan and schedule will be updated annually as part of the budget review process. For each implementation measure, the County will develop a schedule for its implementation that will identify when it would be implemented and who would be responsible for its implementation.

Chapter 3

General Plan Framework and Prosperity



CHAPTER 3.0

General Plan Framework and Prosperity

Introduction

As noted in Chapter 1, “Introduction and Reader’s Guide to the EIR,” Section 15150 of the CEQA Guidelines permits documents of lengthy technical detail to be incorporated by reference in an EIR. Specifically, Section 15150 states that an EIR may “incorporate by reference all or portions of another document which is a matter of public record or is generally available to the public...” Consequently, the General Plan Background Report is incorporated by reference.

Additionally, Section 15146(b) of the CEQA Guidelines states that an EIR on a project such as the adoption or amendment of a local general plan “should focus on the secondary effects that can be expected to follow from the adoption or amendment, but the EIR need not be as detailed as an EIR on the specific construction projects that might follow.” The purpose of this EIR is to provide analysis on the effects that can be expected from implementation of the General Plan Update, but will not provide detail on the impacts of specific construction projects that might follow.

In preparing the proposed General Plan and its supporting documents, a similar organization system was used to allow readers to easily find related information in one of the other key documents (i.e., Background Report, Goals and Policies Report, etc.). Under the proposed General Plan, the Tulare County General Plan Framework is titled Component A. This component describes the Planning framework for the General Plan Update. Component B is the Tulare County Prosperity component which includes a number of topics (or elements) that address future County land use and economic conditions. This chapter addresses the following elements from both Component A and Component B of the General Plan Update:

- Section 3.1 Planning Framework;
- Section 3.2 Economic Development (ED);
- Section 3.3 Agriculture (AG);
- Section 3.4 Land Use (LU); and
- Section 3.5 Housing (H).

3.1 Planning Framework

Under the Goals and Policies Report, Component A describes the overall General Plan Framework. This component provides an overview of the General Plan’s development and organization and the geographic policies that will shape the future of the communities, hamlets,

cities, and unincorporated areas in the county. In keeping with the Value Statements and Guiding Principles developed for the General Plan, this component is designed to focus new unincorporated growth into the county's communities and hamlets, encouraging economic development and protecting the county's extensive agricultural, scenic, cultural, historic, and natural resources.

Component A, "Planning Framework" identifies seven goals as well as numerous policies and implementation measures to guide future growth and development within the County. The goals listed within this component include the following:

- **Goal PF-1.** To provide a planning framework that promotes the viability of communities, hamlets, and cities while protecting the agricultural, and open space, scenic, cultural, historic and natural resources heritage of the County.
- **Goal PF-2.** To provide a realistic planning area around each unincorporated community that clearly delineates the boundaries of each community and provides a framework for economic development, the provision of public services, and an outstanding quality of life.
- **Goal PF-3.** To provide a realistic planning area around each unincorporated hamlet to clearly delineate the boundaries of each hamlet, provide a framework for economic development, the provision of public services, and an outstanding quality of life.
- **Goal PF-4.** To direct urban development within UDBs of existing incorporated cities and ensure that all development in city fringe areas is well planned and adequately served by necessary public facilities and infrastructure and furthers Countywide economic development goals.
- **Goal PF-5.** To provide for the orderly expansion of the County when new development areas are appropriate to meeting the social and economic needs of current and future residents, consistent with the goals and policies of the Tulare County General Plan.
- **Goal PF-6.** To work with agencies, districts, utilities, and Native American tribes to promote consistency with the County's General Plan.
- **Goal PF-7.** To provide for the ongoing administration and implementation of the Tulare County General Plan.

For the purposes of this General Plan EIR, many of the policies noted in the Planning Framework are identified as measures that will help prevent potential impacts associated with the General Plan Update. Consequently, the assessment of environmental impacts associated with this topic consists of a variety of topics that have been more appropriately analyzed in other chapters or sections of the EIR (i.e., "Land Use" or "Health and Safety"). For example, Policies PF-2.9 "Interpretation of Boundaries" and PF-4.16 "Coordination with Cities in Adjacent Counties" are

key policies described to reduce or prevent Impact LU-1 (divide the physical arrangement of an established community) on page 3-10 of the EIR. As another example, to reduce the impact of wildland fire hazards, Policy PF-5.2 “Criteria for New Towns” is noted in the discussion for Impact HS-11 on page 4-65 of the EIR. Other Planning Framework policies are noted throughout the EIR to provide prevention or reduction of potential environmental impacts associated with the General Plan Update. In this manner, the Planning Framework not only provides guidance as to the future development of the County, but also provides environmental protection through policies and implementation measures.

As noted above, the Planning Framework provides direction for the planning and development of hamlets, cities and communities within the County. Based on current population and developable land acreage estimates, the County has estimated that the remaining UDB development capacity for the entire County is in the range of 210,848 to 300,930 additional residents. This General Plan Update estimates an increase in population by approximately 262,000 by year 2030, which falls within the estimated capacity range. A breakdown of estimated capacity is shown below, in Table 3-1.

**TABLE 3-1
CAPACITY ESTIMATES**

		Density		
		Low	Medium	High
Cities	<i>Total Capacity</i>	373,499	409,143	444,788
	<i>Remaining Capacity</i>	146,628	182,272	217,917
Hamlets	<i>Total Capacity</i>	12,541	14,685	16,829
	<i>Remaining Capacity</i>	8,102	10,246	12,390
Communities	<i>Total Capacity</i>	121,500	131,459	140,292
	<i>Remaining Capacity</i>	64,221	74,180	83,013
Total Remaining Capacity	<i>Existing UDBs</i>	210,848	256,452	300,930
	<i>HDBs and New UDB</i>	8,102	10,246	12,390
	<i>TOTAL</i>	218,950	266,698	313,320

Note. The following cities, hamlets and communities are included in the calculations in this table:

Cities: Dinuba, Exeter, Farmersville, Lindsay, Porterville, Tulare, Visalia and Woodlake.

Hamlets: Allensworth, Delft Colony, E. Tulare Villa, Lindcove, Monson, Seville, Sultana, Teviston, Tonyville, Waukena, West Goshen and Yettem.

Communities: Alpaugh, Cutler-Orosi, Ducor, Earlimart, East Orosi, East Porterville, Goshen, Ivanhoe, Lemon Cove, London, Pixley, Plainview, Poplar, Richgrove, Springville, Strathmore, Terra Bella, Three Rivers, Tipton, Traver and Woodville.

3.2 Economic Development

The first element of the Prosperity Component is the Economic Development Element. The Economic Development Element focuses on several areas related to the current and future economic conditions of the County, including employment trends, commercial development, business attraction/retention, and workforce training.

As described in the State CEQA Guidelines (Section 15382), this EIR does not evaluate economic impacts. Section 15382 of the State CEQA Guidelines states the following:

“Significant effect on the environment” means a substantial, or potential substantial, adverse change in any of the physical conditions within the area affected by the project, including land, air, water, minerals, flora, fauna, ambient noise, and objects of historic or aesthetic significance. *An economic or social change by itself shall not be considered a significant effect on the environment.* A social or economic change related to a physical change may be considered in determining whether the physical change is significant.

All physical changes to the environment that may result from economic or social change created by the General Plan Update are discussed within the appropriate resource sections of this EIR. Based on a review of the Economic Development policies these goals and policies would not trigger a physical impact that is not otherwise addressed in the EIR.

3.3 Agriculture

The second element of the Tulare County Prosperity section is the Agriculture Element. This section of the EIR describes the potential impacts of the General Plan Update on a variety of agricultural resources issues.

As a result of comments (see Table 1-2 of Chapter 1.0 “Introduction”) received during the NOP public scoping phase of the General Plan Update, specific effects from the project on agricultural resource issues have been considered as part of the impact analysis. Due to the importance of the resource topic, a large number of comments were received specific to this topic. For example, Carole Clum suggested that the proposed General Plan include a stronger, permanent open space designation and that the term “ability to farm” rather than “right to farm” should be the basis for agricultural/urban interface. The Center on Race, Poverty, and the Environment suggested that the EIR impact analysis should discuss the possibility of conservation easements to mitigate the loss of farm land. The Sierra Club also suggested that the EIR explore various farmland conversion mitigation measures and recognize cattle ranching as prime agriculture. The City of Dinuba suggested that the EIR investigate the possibility of using land trusts and conservation easements to protect agricultural resources and provide buffers between urban uses. Additionally, the California Department of Conservation identified a variety of agriculture-related issues including the need to provide more information specific to Williamson Act Lands and the use of economic multipliers to assess the County’s total contribution to local and State economies. Maya Ricci and Wildplaces provided similar comments to those provided above.

Environmental and Regulatory Setting

The General Plan Update included the preparation of several major documents including preparation of a very detailed Background Report, which serves to chronicle the existing environmental and regulatory setting conditions applicable to the County. A detailed discussion of County-wide agricultural and open space resources can be found in the General Plan Background Report (see Appendix B, Chapter 4.0 “Agriculture, Recreation, and Open Space”).

Section 15150 of the CEQA Guidelines permits documents of lengthy technical detail to be incorporated by reference in an EIR. Specifically, Section 15150 states that an EIR may “incorporate by reference all or portions of another document which is a matter of public record or is generally available to the public...” Consequently, the General Plan Background Report is incorporated by reference.

In addition to the information provided in the General Plan Background Report, the following information regarding important farmland and land under Williamson Act Contract within the County is described below:

- **Important Farmland**
 - Total area of important farmland in the entire County is 756,474 acres.
 - Total area of important farmland within Urban Boundaries is 81,864 acres, of which
 - 60,181 acres are classified Prime Farmland,
 - 2,159 acres are classified as Unique Farmland, and
 - 19,524 acres are classified as Farmland of Statewide Importance.
 - Total area of important farmland outside Urban Boundaries is 674,610 acres.

This information shows that 10.8% of Important Agricultural Land is located within a County Boundary, which includes UDBs, UABs, HDBs, and Foothill Development Corridors.

- **Williamson Act Contracts**
 - Total area of land in the entire County under Williamson Act Contract is 1,083,641 acres, of which
 - 66,510 acres are within Urban Boundaries.
 - Total area of land in the entire County under non-renewed Williamson Act Contract is 23,858 acres, of which
 - 5,145 acres are within Urban Boundaries.

Methodology

Agricultural resource impacts include those to existing agricultural uses, Important Farmlands (those lands classified and mapped by the Farmland Mapping and Monitoring Program of the California Department of Conservation), and Williamson Act contract lands.

As more fully described in Chapter 2.0, “Project Description”, future development in Tulare County will be driven by population growth needs and the manner in which the distribution of growth will be directed and managed. The General Plan Update assumes that a majority of this growth will occur within the incorporated cities (established Urban Development Boundaries); with a lesser amount (up to 170,615 people) occurring within the County’s unincorporated communities and hamlets. Although these future population distribution patterns form one of the key assumptions behind the General Plan Update, the specific location as to where this development would occur within these unincorporated communities is currently not known and would only be available as future development proposals are brought forward for consideration by the County. Consequently, the specific impacts to existing or future agricultural resources cannot be quantified at this time. Because of this uncertainty, this analysis assumes that future growth and development within the County would result in some limited conversion of existing agricultural resources to developed uses. This assessment of impacts to agricultural resources represents a qualitative review of the existing agricultural conditions within the County and a determination of whether the General Plan Update includes adequate provisions to ensure continued protection of these resources.

Consistent with the objectives of a program-level EIR and CEQA guidelines Section 15146 for General Plan EIRs, this EIR functions as a first-tier environmental document that assesses and documents the broad environmental impacts of a program with the understanding that a more detailed site-specific review may be required to assess future projects implemented under the program. Consequently, this analysis assumes that when a more detailed site-specific review occurs (such as that provided for future specific plans, infrastructure improvements, and/or other development proposals within the County) a more detailed assessment (including a quantification of impacts) of the land uses affected by the specific development proposal would occur.

Standards of Significance

The General Plan Update will establish development guidelines against which future projects will be reviewed for consistency. The significance criteria for this analysis were developed from criteria presented in Section 15065 and Appendix G “Environmental Checklist Form” of the CEQA Guidelines and based on the professional judgment of the County of Tulare and its consultants. The project (or the project alternatives) would result in a significant impact if it would:

- Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland) as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use;
- Conflict with existing zoning for agricultural use, or conflict with a Williamson Act contract; or
- Involve other changes in the existing environment that, due to their location or nature, could result in conversion of Important Farmland, to non-agricultural uses.

Impacts and Mitigation Measures

Impact AG-1: The General Plan Update could result in the substantial conversion of important farmland to non-agricultural uses.

Impact Summary

Level of Significance Before Mitigation: <i>Potentially Significant</i>
Required Mitigation Measures: <i>Revised Policy AG-1.6. Conservation Easements</i>
Level of Significance After Mitigation: <i>Significant and Unavoidable</i>

Impact Analysis

Future growth resulting from implementation of the General Plan Update could result in both the direct and indirect conversion of agricultural lands to urban and other non-farming uses. These converted lands could include a variety of important farmlands (i.e., prime, unique, farmland of statewide importance, etc.) as defined by the Farmland Mapping and Monitoring Program of the California Resources Agency. Currently the County has 756,474 acres of important farmland within the entire County, of which 81,864 acres are within Boundaries (UDBs, UABs, HDBs and Foothill Growth Boundaries). The majority of impacts to important farmlands will occur as a result of project-specific activities developed subsequent to the General Plan Update.

The preservation of agricultural resources is a key goal of the General Plan Update, with the inclusion of several policies (see Policies AG-1.1 through AG-1.5 and AG-1.7 through AG-1.14) in the Agriculture Element and Land Use Element (see Policy LU-2.6A) that have been designed to conserve the County's existing agricultural resources. These policies call for the continued recognition of agriculture as the primary land use in the Valley and Foothill region of the County and the continued use of preservation programs (i.e., the California Land Conservation Act/Williamson Act) to protect existing agricultural lands. Other policies in both the Agriculture and Economic Development Elements (see Policies AG-2.1 through AG-2.6, AG-2.8 through AG-2.11, and ED-2.10) have been designed to support the increased viability of agricultural production in Tulare County. These policies call for the continued cooperation with a variety of entities (including the UC Cooperative Extension, Agricultural Commission, etc.) to promote the diversification of the local agricultural economy, expansion of global marketing opportunities, education, and support for biotechnology research and development opportunities designed to enhance the County's agricultural sector. Other policies in the Agriculture, Land Use and Environmental Resource Management Elements (see Policies AG-1.11, AG-1.15A, LU-1.8, LU-2.1, LU-2.2, LU-2.5, LU-2.6, LU-2.7, LU-2.8 and ERM-5.15) promote future development patterns within areas of existing development including buffers and other resources to help minimize the conversion or fragmentation of existing agricultural lands. Additional policies have been developed for each of the County's planning areas (i.e., Corridors, Valley, Foothills, etc.) to address their own unique agricultural-related issues. However, even with implementation of the above mentioned policies and implementation measures, the potential conversion of existing important farmlands to developed uses resulting from development anticipated under the General Plan Update is still considered *potentially significant*.

Agriculture and Economic Development Elements	
Policies designed to conserve agricultural resources within the County include the following:	
AG-1.1 Primary Land Use AG-1.2 Coordination AG-1.3 Williamson Act AG-1.4 Williamson Act in UDBs and HDBs AG-1.5 Substandard Williamson Act Parcels AG-1.7 Preservation of Agricultural Lands	AG-1.8 Agriculture Within Urban Boundaries AG-1.9 Agricultural Preserves Outside Urban Boundaries AG-1.10 Extension of Infrastructure Into Agricultural Areas AG-1.11 Agricultural Buffers AG-1.12 Ranchettes AG-1.13 Agricultural Related Uses AG-1.14 Right-to-Farm Noticing
Policies designed to promote the continued productivity and employment of agricultural resources within the County include the following:	
AG-2.1 Diversified Agriculture AG-2.2 Market Research AG-2.3 Technical Assistance AG-2.4 Crop Care Education AG-2.5 High-Value-Added Food Processing	AG-2.6 Biotechnology and Biofuels AG-2.8 Agricultural Education Programs AG-2.9 Global Marketing AG-2.10 Regional Transportation AG-2.11 Energy Production ED-2.10 Supporting Agricultural Industry
Implementation measures designed to protect and conserve agricultural resources within the County include the following:	
Agriculture Implementation Measure #1 (and 1A & 1B) Agriculture Implementation Measure #2 (and 2A) Agriculture Implementation Measure #3 Agriculture Implementation Measure #4 (and 4A-4C) Agriculture Implementation Measure #5 Agriculture Implementation Measure #6	Agriculture Implementation Measure #7 Agriculture Implementation Measure #8 ED Implementation Measure #4 ED Implementation Measures #4A ED Implementation Measure #4B
Agriculture, Land Use and Environmental Resource Management Elements	
Policies designed to promote future development patterns within areas of existing development include the following:	
AG-1.15A Schools in Agricultural Zones LU-1.8 Encourage Infill Development LU-2.1 Agricultural Lands LU 2.2 Agricultural Parcel Splits	LU-2.5 Residential Agriculture Uses LU-2.6 Agricultural Support Facilities LU-2.6A Industrial Development LU-2.7 Timing of Conversion from Urban Reserve LU-2.8 Merger of Sub Standard Agricultural Parcels ERM-5.15 Open Space Preservation
Corridors, Rural Valley Lands Plan, Foothill Growth Management Plan, and Mountain Framework Plan	
Similar policies designed to conserve and encourage the continued economic value of agricultural resources within the various planning areas include the following:	
RVLP-1.1 Development Intensity RVLP-1.2 Existing Parcels and Approvals RVLP-1.4 Determination of Agriculture Land	C-1.5 Agricultural Enterprises F-1.12 Development in Success Valley F-6.1 Protect Agricultural Lands M-1.9 Agricultural Preserves

Required Mitigation Measures

County policies will (1) support continued agricultural uses, (2) seek to reduce conflicts between agricultural and urban uses (“right to farm” ordinance); and (3) coordinate regional efforts to preserve farmland within Tulare County. Additionally, revised Policy AG-1.6, “Conservation Easements” (described below) would require the County to utilize a conservation easement program to help preserve agricultural lands. However, while these policies would continue to promote the continued conservation of agricultural resources (including important farmlands), it would not prevent an overall net loss of important farmlands within the County associated with future development within existing agricultural areas. Therefore, implementation of the General Plan Update including the adoption of the policies and implementation measures listed above would still result in a *significant* impact.

The following revised policy, AG-1.6 would be required:

- AG-1.6. Conservation Easements.** The County shall develop an Agricultural Conservation Easement Program to help protect and preserve agricultural lands, as defined in this Element. This program shall require payment of an in-lieu fee sufficient to purchase a farmland conservation easement, farmland deed restriction, or other farmland conservation mechanism as a condition of approval for conversion of important agricultural land to nonagricultural use. The in-lieu fee or other conservation mechanism shall recognize the importance of land value and shall require equivalent mitigation.
[New Policy – Modified Draft EIR Analysis]

Significance after Implementation of Mitigation for Impact AG-1

Outside of the policies included in the Goals and Policies Report and revised Policy AG-1.6, no additional feasible mitigation measures are currently available to reduce this impact to a less than significant level. Consequently, this impact is considered *significant and unavoidable*.

Impact AG-2: The General Plan Update could conflict with existing zoning for agricultural use, or conflict with existing Williamson Act contracts.

Impact Summary

Level of Significance Before Mitigation: <i>Less-than- Significant</i>
Required Mitigation Measures: <i>No Mitigation Required</i>
Level of Significance After Mitigation: <i>Not Applicable</i>

Impact Analysis

Similar to Impact AG-1, conflicts with the Williamson Act are difficult to quantify at the general plan level. It can be assumed that some future development will occur on lands currently subject to a Williamson Act contract. It is further assumed that the proper procedures, contained within the Williamson Act itself, will be followed as development within the County occurs. Currently the County has 1,083,641 acres of land under Williamson Act Contract and 23,858 acres under non-renewed Williamson Act Contract. Of the land under Williamson Act Contract, 66,510 acres are within Boundaries (UDBs, UABs, HDBs, and Foothill Growth Corridors). Of the land under non-renewed Williamson Act Contract, 5,145 acres are within Boundaries.

One of the functions of the Williamson Act is to encourage orderly development while discouraging premature development of farmlands. This purpose is also reflected in the General Plan Update, which contains policies that encourage orderly development (see Policies AG-1.15A, LU-1.8, LU-2.1, LU-2.2, and LU-2.5), discourage premature conversion (see Policies AG-1.1 through AG-1.14, LU-2.6A, LU-2.7 and LU-2.8) and support the continued use of preservation programs (i.e., conservation easements and the California Land Conservation Act) to protect existing agricultural lands. Therefore, compatibility issues with agricultural zoning and Williamson Act contracts are

considered *less-than-significant* for the General Plan Update. However, these issues may need to be evaluated in the site-specific environmental review for future development proposals.

Agriculture and Economic Development Elements	
Policies designed to conserve agricultural resources within the County include the following:	
AG-1.1 Primary Land Use AG-1.2 Coordination AG-1.3 Williamson Act AG-1.4 Williamson Act in UDBs and HDBs AG-1.5 Substandard Williamson Act Parcels AG-1.6 Conservation Easements AG-1.7 Preservation of Agricultural Lands	AG-1.8 Agriculture Within Urban Boundaries AG-1.9 Agricultural Preserves Outside Urban Boundaries AG-1.10 Extension of Infrastructure Into Agricultural Areas AG-1.11 Agricultural Buffers AG-1.12 Ranchettes AG-1.13 Agricultural Related Uses AG-1.14 Right-to-Farm Noticing
Implementation measures designed to protect and conserve agricultural resources within the County include the following:	
Agriculture Implementation Measure #1 (and 1A & 1B) Agriculture Implementation Measure #2 (and 2A) Agriculture Implementation Measure #3 Agriculture Implementation Measure #4 (and 4A-4C) Agriculture Implementation Measure #5 Agriculture Implementation Measure #6	Agriculture Implementation Measure #7 Agriculture Implementation Measure #8 ED Implementation Measure #4 ED Implementation Measures #4A ED Implementation Measure #4B
Agriculture, Land Use and Environmental Resource Management Elements and Rural Valley Lands Plan	
Policies and Implementation Measures designed to promote future development patterns within areas of existing development include the following:	
AG-1.15A Schools in Agricultural Zones LU-1.8 Encourage Infill Development LU-2.1 Agricultural Lands LU-2.2 Agricultural Parcel Splits LU-2.5 Residential Agriculture Uses LU-2.6 Agricultural Support Facilities LU-2.6A Industrial Development LU-2.7 Timing of Conversion from Urban Reserve LU-2.8 Merger of Sub Standard Agricultural Parcels	ERM-5.15 Open Space Preservation RVLP-1.1 Development Intensity RVLP-1.2 Existing Parcels and Approvals RVLP-1.3 Tulare County Agricultural Zones RVLP-1.4 Determination of Agricultural Land RVLP-1.5 Non Conforming Uses RVLP Implementation Measure 1 RVLP Implementation Measure 2

Required Mitigation Measures

This impact is considered *less-than-significant*. No additional mitigation measures are required.

Impact AG-3: The General Plan Update could involve other changes in the existing environment that, due to their location or nature, could result in conversion of important farmland, to non-agricultural uses.

Impact Summary

Level of Significance Before Mitigation: <i>Potentially Significant</i>
Required Mitigation Measures: <i>No feasible mitigation available</i>
Level of Significance After Mitigation: <i>Significant and Unavoidable</i>

Impact Analysis

Direct impacts to agricultural resources include the conversion of farmland to non-agricultural uses, discussed above. The General Plan Update could include development in areas currently identified as important farmland. Indirect changes caused by this development may include nuisance effects resulting from urban expansion into agricultural areas—also known as “edge effects.” These nuisance effects include noise (from farm equipment and crop dusting), dust, odors, and drift of agricultural chemicals. From the agricultural perspective, conflicts with urban development include restrictions on the use of agricultural chemicals, complaints regarding noise and dust, trespass, vandalism, and damage from domestic animals (such as dogs). These conflicts may increase costs to the agricultural operation, and combined with rising land values for residential development, encourage conversion of additional Important Farmland to urban uses. The potential for “edge effects” may be greater adjacent to developed areas such as UDBs, Hamlet Plan areas, and communities.

As previously described above under Impact AG-1, the preservation of agricultural resources is a key goal of the General Plan Update, with the inclusion of several policies (see Policies AG-1.1 through AG-1.14 and AG-1.15A) in the Agriculture Element and Land Use Element (Policies LU-2.6, LU-2.6A, LU-2.7 and LU-2.8) that have been designed to conserve the County’s existing agricultural resources. These policies call for the continued recognition of agriculture as the primary land use in the Valley region of the County and the continued use of preservation programs (i.e., conservation easements and the California Land Conservation Act) to protect existing agricultural lands. Policy AG-1.1 specifically states that the County shall maintain agriculture as the primary land use in the valley region of the County and Policy AG-1.11 describes how the County will employ agricultural buffers between agricultural and non-agricultural uses. Additionally, the General Plan Update does not include a change in existing UDBs. However, even with implementation of the above mentioned policies and implementation measures, the potential conversion (both direct and indirect) of existing important farmlands to developed uses resulting from development anticipated under the General Plan Update is still considered *potentially significant* due to the potential for “edge effects” adjacent to UDBs as well as changes in Hamlet Plan area boundaries.

Agriculture and Economic Development Elements	
Policies designed to conserve agricultural resources within the County include the following:	
AG-1.1 Primary Land Use AG-1.2 Coordination AG-1.3 Williamson Act AG-1.4 Williamson Act in UDBs and HDBs AG-1.5 Substandard Williamson Act Parcels AG-1.6 Conservation Easements AG-1.7 Preservation of Agricultural Lands	AG-1.8 Agriculture Within Urban Boundaries AG-1.9 Agricultural Preserves Outside Urban Boundaries AG-1.10 Extension of Infrastructure Into Agricultural Areas AG-1.11 Agricultural Buffers AG-1.12 Ranchettes AG-1.13 Agricultural Related Uses AG-1.14 Right-to-Farm Noticing
Policies designed to promote the continued productivity and employment of agricultural resources within the County include the following:	
AG-2.1 Diversified Agriculture AG-2.2 Market Research AG-2.3 Technical Assistance AG-2.4 Crop Care Education AG-2.5 High-Value-Added Food Processing	AG-2.6 Biotechnology and Biofuels AG-2.8 Agricultural Education Programs AG-2.9 Global Marketing AG-2.10 Regional Transportation AG-2.11 Energy Production ED-2.10 Supporting Agricultural Industry

Implementation measures designed to protect and conserve agricultural resources within the County include the following:	
Agriculture Implementation Measure #1 (and 1A & 1B) Agriculture Implementation Measure #2 (and 2A) Agriculture Implementation Measure #3 Agriculture Implementation Measure #4 Agriculture Implementation Measure #5 Agriculture Implementation Measure #6	Agriculture Implementation Measure #7 Agriculture Implementation Measure #8 ED Implementation Measure #4 ED Implementation Measures #4A ED Implementation Measure #4B
Agriculture, Land Use and Environmental Resource Management Elements	
Policies designed to promote future development patterns within areas of existing development include the following:	
AG-1.15A Schools in Agricultural Zones LU-1.8 Encourage Infill Development LU-2.1 Agricultural Lands LU 2.2 Agricultural Parcel Splits	LU-2.5 Residential Agriculture Uses LU-2.6 Agricultural Support Facilities LU-2.6A Industrial Development LU-2.7 Timing of Conversion from Urban Reserve LU-2.8 Merger of Sub Standard Agricultural Parcels ERM-5.15 Open Space Preservation
Corridors, Rural Valley Lands Plan, Foothill Growth Management Plan, and Mountain Framework	
Similar policies designed to conserve and encourage the continued economic value of agricultural resources within the various planning areas include the following:	
RVLP-1.1 Development Intensity RVLP-1.2 Existing Parcels and Approvals RVLP-1.4 Determination of Agriculture Land	C-1.5 Agricultural Enterprises F-1.12 Development in Success Valley F-6.1 Protect Agricultural Lands M-1.9 Agricultural Preserves

Required Mitigation Measures

As stated above, County policies will (1) support continued agricultural uses, (2) seek to reduce conflicts between agricultural and urban uses (“right and ability to farm”); and (3) coordinate regional efforts to preserve farmland within Tulare County. However, while these policies would continue to promote the continued conservation of agricultural resources (including important farmlands), it would not prevent an overall net loss of important farmlands within the County associated with future development within existing agricultural areas. Therefore, implementation of the General Plan Update including the adoption of the policies and implementation measures listed above would still result in a *significant* impact. No additional feasible mitigation is currently available.

Significance after Implementation of Mitigation for Impact AG-3

As stated above, no additional feasible mitigation measures are currently available to reduce this impact to a less than significant level. Consequently, this impact is considered *significant and unavoidable*.

3.4 Land Use

This section addresses the two primary issues related to land use compatibility and plan consistency. This section also examines whether the General Plan Update has the potential to physically divide the arrangement of any established urban areas within the County.

As a result of comments (see Table 1-2 of Chapter 1.0 “Introduction”) received during the NOP public scoping phase of the General Plan Update, the following land use issues have been considered as part of the impact analysis. For example, the Airport Land Use Commission staff suggested that the proposed General Plan should incorporate and be consistent with the planned update for the Tulare County Comprehensive Airport Land Use Plan. The Center on Race,

Poverty and the Environment stated that the EIR should address land use impacts related to the physical division of an established community or conflict with an applicable habitat conservation plan. They also stated that the EIR should address population and housing impacts, such as the potential displacement of substantial numbers of people or houses, which could result in the construction of replacement housing elsewhere. The City of Dinuba suggested that the EIR provide a discussion on urban Development Boundaries and the physical impacts of land use decisions within proximity of incorporated cities.

General Plan Land Use Designations

As of 2006, Tulare County encompasses over 4,661 square miles of classified lands (lands with identified uses). Resource conservation areas, which include wilderness, national forests, monuments and parks, along with County parks, make up 52 percent of the County, the largest classification found in the County. Agricultural uses, which include row crops, orchards, dairies, and grazing lands on the Valley floor and in the foothills total over 2,071 square miles or about 43 percent of the entire county. Urban uses such as incorporated cities, communities, hamlets, other unincorporated urban uses, and infrastructure rights-of-way make up the remaining land in the County.

One of the changes that will occur as a result of implementation of the General Plan Update is an update and consolidation of the general plan land use designations. This change is intended to broaden the range of planning and redevelopment tools available to the County, and to create a more simplified, common set of land use designations that will be consistently applied in all future County planning efforts. The revised, uniform set of land use and development standards will be used in all updates and new planning efforts including the General Plan, Area Plans, Community Plans, Hamlet Plans, County adopted City General Plans, and future adopted Corridor Plans

The following land use classifications and designations were developed for the General Plan Update:

Resource Land Use Designations

Valley Agriculture (VA)

This designation establishes areas for intensive agricultural activities on prime valley agricultural soils and other productive or potentially productive valley lands where commercial agricultural uses can exist without conflicting with other uses, or where conflicts can be mitigated. Uses typically allowed include irrigated crop production, orchards and vineyards; livestock; resource extraction activities and facilities that directly support agricultural operations, such as processing, and other necessary public utility and safety facilities. Allowable residential development includes one principal and one secondary dwelling unit per parcel, for relative, caretaker/employee, and farmworker housing. This designation is located primarily outside Urban Development Boundaries on the Valley floor. The Rural Valley Lands Plan applies to all lands designated Valley Agriculture.

- Minimum Parcel Size: 10-80 Acres.
- Maximum Density: 1 dwelling unit per 10 acres. (One additional unit may be allowed for every 20 additional acres over the minimum parcel size).
- Maximum Intensity: 0.02 FAR¹

1. FAR = Floor Area Ratio, defined as gross floor area of all buildings permitted on a lot divided by the area of the lot.

Foothill Agriculture (FA)

This designation establishes areas for agricultural activities primarily located in the foothill and mountain regions where extensive commercial agricultural uses can exist without conflicting with other uses, or where conflicts can be mitigated. Uses typically allowed include orchards and vineyards, grazing of cattle, horses, sheep, and goats on grazing lands, resource extraction activities, facilities that directly support agricultural operations, and other necessary public utility and safety facilities. Allowable residential development includes one principal and one secondary dwelling unit per 160 acres, for relative, caretaker/employee, and farmworker housing. This designation is located primarily outside Urban Development Boundaries and within foothill development corridors, in the foothills. The Foothill Growth Management Plan applies to all lands designated Foothill Agriculture.

- Minimum Parcel Size: 160 Acres
- Maximum Density: 1 dwelling unit per 80 acres. One additional unit may be allowed for every 40 additional acres over 160 acres.
- Maximum Intensity: 0.02 FAR

Resource Conservation (RC)

This designation is intended to identify and protect open space lands including state and national forests and parks, Bureau of Land Management lands, and other public lands specifically preserved for timberland protection (non-TP designated), watershed preservation, outdoor recreation, grazing, and wilderness or wildlife/environmental preserves. Uses typically allowed in this designation are those related to resource utilization and resource conservation activities and could include uses that provide a buffer between incompatible types of land use. Resource operations and other facilities such as grazing, hunting and fishing clubs, guest ranches, campgrounds and summer camps on private lands require a special use permit. Residential uses (1 dwelling unit per 40 acres), may be conditionally allowed. This designation is located primarily outside Urban Development Boundaries in the foothill and mountain regions.

- Minimum Parcel Size: 160 Acres
- Maximum Density: 1 dwelling unit per 40 acres
- Maximum Intensity: 0.02 FAR (special use permit required)

Timber Production (TP)

This designation is intended to identify and protect areas that demonstrate that the “highest and best use” is timber production and accompanying accessory uses. The designation is applied to lands that are zoned Timber Production Zone (TPZ) pursuant to the California Timberland Productivity Act of 1982. Public improvements and urban services are prohibited on TP lands except where necessary and compatible with ongoing timber production.

- Minimum Parcel Size: 160 Acres
- Maximum Intensity: 0.02 FAR (special use permit required)

Native American Reserve (NAR)

This designation recognizes tribal trust and reservation lands managed by a Native American Tribe under the United States Department of the Interior's Bureau of Indian Affairs.

- Minimum Parcel Size: N/A
- Maximum Intensity: N/A

Urban Reserve (UR)

This designation establishes a holding zone whereby properties shall remain zoned for agriculture or open space use until such a time as conversion to urban uses is deemed appropriate. The UR designation shall be appended by the intended future land use designation, for example, Urban Reserve – Heavy Industrial (UR-HI). When a rezoning occurs without a General Plan amendment, the UR designation shall be removed from the parcel. This designation applies primarily within Urban Development Boundaries.

- Minimum Parcel Size: Determined by the individual zone
- Maximum Intensity: Determined by the individual zone

Residential Land Use Designations**Rural Residential (RR)**

This designation establishes areas for single family dwellings and farmworker housing located away from cities and communities in agricultural or rural areas where dispersed residential development on 1-5 acre parcels is set forth in community or sub-area plans. Typical allowed uses include: detached single family dwellings and secondary dwellings; agricultural uses such as crop production, orchards and vineyards, grazing, and animal raising; and necessary public utility and safety facilities. This designation is primarily located at the edges of Urban Development Boundaries in the lower foothill and valley regions.

- Maximum Density: 1 DU/5 Acres if average slope is less than 30 percent. 1 DU/10 Acres if average slope is 30 percent or greater.

Mountain Residential (MR)

This designation establishes areas for single family dwellings within the foothill and mountain regions where steep slopes and limited services provide for dispersed residential development on larger parcels. Typical uses allowed include: detached single-family homes and secondary dwellings; agricultural uses such as grazing or animal raising; and limited agricultural support businesses such as roadside produce stands, tourist-related lodging and activities; resource extraction; and public support uses such as churches, schools, libraries, medical facilities, parks, and other necessary public utility and safety facilities. This designation is generally found outside Urban Development Boundaries in the upper foothill and mountain regions.

- Maximum Density: 4 DU/Acre. 1 DU/40 Acres if average slope is 30 percent or greater.

Low Density Residential (LDR)

This designation establishes areas for single-family residences with individual homes on lots typically ranging from 12,500 square feet to one acre. Uses typically allowed include: detached single family homes; secondary dwellings; and residential support uses such as churches, schools, and other necessary public utility and safety facilities. This designation is typically found inside communities or on the outside edge of Urban Development Boundaries.

- Maximum Density 1-3.5 DU/Acre.
 - When areas in this designation are identified as primary recharge areas for a community's water system, acreage minimums should not be below 2 acres.
 - Areas with 30 percent or higher average slopes should have acreage minimums in excess of 3 acres.

Low-Medium-Density Residential (LMDR)

This designation establishes areas suitable for single family neighborhoods at relatively low densities on lots ranging from 5,000 to 12,500 square feet in urbanized areas. Uses typically allowed include detached single-family homes; secondary dwellings; and residential support uses such as churches, schools, parks, medical facilities, and other necessary public utility and safety facilities. This designation is used only within Urban Development Boundaries.

- Maximum Density 3.5-8.7 DU/Acre

Medium Density Residential (MDR)

This land designation establishes areas for single family and low-density multi-family dwellings. Uses typically allowed include single-family dwellings, second units, townhomes, duplexes, triplexes, and mobile home parks. This designation is used only within Urban Development Boundaries.

- Maximum Density 6.1-10.0 DU/Acre

Medium-High-Density Residential (MHDR)

This designation establishes areas for compact single family and multi-family dwellings in urbanized areas. Uses typically allowed include a wide range of living accommodations, including single-family dwellings, duplexes, townhouses, and low-rise apartments. This designation is used only within Urban Development Boundaries.

- Maximum Density: 10.1-16.0 DU/Acre

High Density Residential (HDR)

This designation established areas for multi-family dwellings in urbanized areas. Uses typically allowed include: duplexes, townhouses, and apartments located near schools, parks; and other public services. This designation is used only within Urban Development Boundaries.

- Maximum Density: 16.1-30.0 DU/Acre

Commercial Land Use Designations**General Commercial (GC)**

This designation establishes areas for small-scale, general retail, and service businesses that provide goods to the immediate surrounding area. Uses typically allowed include: food and beverage retail sales; limited personal, medical, professional, and repair services; and retail sales. This designation is found primarily within Urban Development Boundaries.

- Maximum Intensity: 0.5 FAR

Neighborhood Commercial (NC)

This designation establishes areas for small, localized retail, recreational, and service businesses that provide goods and services to the surrounding community. Uses typically allowed include: eating and drinking establishments; food and beverage retail sales; limited personal, medical, professional services; repair services; and retail sales. Such facilities may range from a single use to a cluster of uses such as a shopping center. This designation is found primarily within Urban Development Boundaries.

- Maximum Intensity: 0.5 FAR

Community Commercial (CC)

This designation establishes areas for a full range of commercial retail and service commercial establishments serving multiple neighborhoods or an entire community and surrounding area. Uses typically allowed include: big box retail, eating and drinking establishments; food and beverage sales; hardware stores; gasoline service stations; public buildings; general merchandise stores; and professional and financial offices. Such facilities are typically arranged as a cluster of uses such as a shopping center. This designation is found primarily within Urban Development Boundaries.

- Maximum Intensity: 0.5 FAR

Highway Commercial (HC)

This designation establishes areas for retail, recreational, and service-based businesses which provide goods and services to tourists and commuters along major highways. Uses typically allowed include: big box retail; eating and drinking establishments; food and beverage retail sales; limited repair services; lodging (hotels and motels); and retail sales. Such facilities may range from a single use to a cluster of uses located at a freeway off ramp or major highway intersection. This designation is located primarily within Urban Development Boundaries and pursuant to regional growth corridor plans and policies.

- Maximum Intensity: 0.5 FAR

Town Center (TC)

This designation establishes the commercial core of the community and provides for a concentration of businesses and a central gathering place for social activity, commonly formed around a pedestrian oriented “main street”. Uses typically allowed include: eating and drinking establishments; retail sales; personal, medical and professional services; entertainment venues; civic uses; medium-high-and high density residential dwellings; and mixed use development. These areas may contain a combination of vacant or infill parcels and parcels with the potential to redevelop over time. This designation is found only within Urban Development Boundaries.

- Maximum Intensity: 2.0 FAR
- Maximum Density: 10.0-30.0 DU/Acre

Service Commercial (SC)

This designation establishes areas for service commercial uses in urbanizing areas. Uses typically allowed include: automotive-related or heavy equipment sales and services; building maintenance services; construction sales and services; and warehousing. This designation is found primarily within Urban Development Boundaries.

- Maximum Intensity: 0.5 FAR

Commercial Office (CO)

This designation establishes areas in communities that provide employment opportunities for medical and professional services and limited support retail sales. Uses typically allowed include: offices and office parks; and secondary support uses such as printing, supply stores; and eating establishments. This designation is found primarily within Urban Development Boundaries.

- Maximum Intensity: 0.5 FAR

Commercial Recreation (CR)

This designation establishes areas for a mix of commercial uses oriented toward tourists and other visitors. Uses typically allowed include: recreation activities (e.g., golf courses, archery ranges, theme parks); dining; entertainment services; destination-resort hotels; motels; “dude ranches;” wineries; spas; and on-site employee residential uses. Residential uses would only be allowed in conjunction with resort uses as onsite caretaker or employee housing. This designation is found primarily within the foothill and mountain regions.

- Maximum Intensity: 0.5 FAR

Mixed Use Land Use Designations**Mixed Use (MU)**

This designation establishes areas appropriate for the planned integration of some combination of retail; office; single and multi-family residential; hotel; recreation; limited industrial; public facilities or other compatible use. Mixed Use areas allow for higher density and intensity development, redevelopment or a broad spectrum of compatible land uses ranging from a single use on one parcel to a cluster of uses. These areas are intended to provide flexibility in design and use for contiguous parcels having multiple owners, to protect and enhance the character of the area. The consideration of development proposals in Mixed Use areas should focus on compatibility between land uses, and the development potential of a given area compared to the existing and proposed mix of land uses and their development impacts. Specific plans may be required to assist in the consideration of Mixed Use development proposals. This designation is found within Urban Development Boundaries, Hamlet Development Boundaries and pursuant to regional growth corridor plans and policies.

- Maximum Density: 30.0 DU/Acre
- Maximum Intensity: 0.5 FAR

Foothill Mixed Use (FMU)

This designation establishes areas within the foothill development corridors for residential, commercial, and industrial uses. Uses typically allowed include: single-family and multifamily residential dwellings, eating and drinking establishments; food and beverage retail sales; limited personal, medical, professional services; repair services; retail sales; and agricultural-related industrial uses. Such facilities may range from a single use to a cluster of uses.

- Maximum Density: 15.0 DU/Acre
- Maximum Intensity: 0.25 FAR

Planned Community Area (PCA)

This designation establishes areas suitable for comprehensive planning for long term community development on large tracts of land, typically under unified ownership or development control, and allows for master planning where a community plan does not currently exist. Planned communities have a balance of land uses that support economic growth and promote an exceptional quality of life. Planned communities accommodate mixed use developments that include residential; commercial; administrative; industrial; and other activity. Furthermore, such communities must ensure provision of open space, infrastructure and public services needed to support growth.

- Maximum Density: 30.0 DU/Acre
- Maximum Intensity: 2.0 FAR

Industrial Land Use Designations**Light Industrial (LI)**

This designation establishes areas for a range of nonintensive business park, industrial park, and storage uses that do not have detrimental noise or odor impacts on surrounding urban uses. Uses typically allowed include: warehousing; welding and fabrication shops; manufacturing and processing; and business support uses such as retail or eating establishments that serve adjacent light industrial uses and employees. This designation is found primarily within Urban Development Boundaries and pursuant to regional growth corridor plans and policies.

- Maximum Intensity: 0.5 FAR

Heavy Industrial (HI)

This designation establishes areas for the full range of industrial uses, which may cause noise or odor impacts on surrounding urban uses. Uses typically allowed include: manufacturing; processing; fabrication; ethanol plants; warehouses; asphalt batch plants; mills; wood processing yards; aggregate mining operations; and support uses such as retail or eating establishments that support adjacent heavy industrial uses and employees. This designation is found primarily within Urban Development Boundaries and pursuant to regional growth corridor plans and policies.

- Maximum Intensity: 0.5 FAR

Public Facilities Land Use Designations**Public/Quasi-Public (P/QP)**

This designation establishes areas for public and quasi-public services and facilities that are necessary to maintain the welfare of County residents and businesses. Uses typically allowed include: churches; schools; civic centers; hospitals; fire stations; sheriff stations; liquid and solid waste disposal sites; cemeteries; airports; and public utility and safety facilities. This designation is found primarily within Urban Development Boundaries and pursuant to regional growth corridor plans and policies.

- Density/Intensity: None Specified

Public Recreation (PR)

This designation establishes areas for public recreational/tourist activities. Uses typically allowed include: large community/regional parks; historic sites; boat ramps/marinas; and other recreation related public utility and safety facilities operated by a County, state, or federal agency.

- Density/Intensity: None Specified

Environmental and Regulatory Setting

The General Plan Update included the preparation of several major documents including preparation of a detailed Background Report, which serves to chronicle the existing environmental and regulatory setting conditions applicable to the County. A detailed discussion of County-wide land uses can be found in the General Plan Background Report (see Appendix B, Chapter 3.0 “Land Use”). The chapter also includes a discussion of adjacent city plans and a summary of regional, state, and federal plans that may both affect and/or be affected by land use planning decisions in the County of Tulare.

Methodology

Land use impacts are described qualitatively. Land use changes enabled by the General Plan Update were compared to the existing level of development on lands within the County. The analysis also considered the compatibility of land uses proposed next to each other.

Standards of Significance

The Tulare 2030 General Plan will establish development guidelines against which future projects will be judged for consistency. The significance criteria for this analysis were developed from criteria presented in Appendix G, “Environmental Checklist Form”, of the CEQA Guidelines and based on the professional judgment of the County of Tulare and its consultants. The project (or the project alternatives) would result in a significant impact if it would:

- Physically divide an established community;
- Conflict with any applicable land use plan, policy or regulation of an agency with jurisdiction over the project adopted for the purpose of avoiding or mitigating a significant environmental effect; or
- Conflict with any applicable habitat conservation plan or natural community conservation plan.

The potential compatibility conflicts of the General Plan Update with an applicable habitat conservation or natural community conservation plan are more fully described in Chapter 4.3 “Environmental Resource Management” of this EIR (see the discussion for Impact ERM-6 in Chapter 4.) Consequently we are only addressing the first two standards of significance.

Impacts and Mitigation Measures

Impact LU-1: The General Plan Update would not divide the physical arrangement of an established community.

Impact Summary

Level of Significance Before Mitigation: <i>Less than Significant</i>
Required Mitigation Measures: <i>None</i>
Recommended New Policies: <i>Revised policies LU-7.12 “Historic Buildings and Areas” and PFS-1.7 “Coordination with Service Providers”</i>
Level of Significance After Mitigation: <i>Less than Significant</i>

Impact Analysis

Implementation of the General Plan Update includes planning for a variety of future development proposals (including residential, roadway, and utility infrastructure development) which depending on location could physically divide the existing arrangement of an established UDB or hamlet. However, the General Plan Update has been developed with the primary goal of insuring that future growth will occur in a concise, orderly pattern consistent with the economic, social, and environmental needs of the specific communities that can accommodate future planned population growth. This concept of orderly growth will help future land use planning decisions balance the development of needed infrastructure within existing and proposed community areas so that community continuity is maintained within these areas. The General Plan Update has been developed with the primary goal of insuring that future growth will occur in an orderly manner, which will help to prevent urban sprawl and ensure community-wide compatibility. For example, the General Plan Update promotes the land use principles of smart growth (i.e., creating walkable communities, discouraging sprawl, etc.) and requires the preparation of specific plans for larger develop projects to help minimize future land use conflicts between existing and proposed land uses.

Policies and implementation measures included as part of the General Plan Update that would minimize this impact are summarized below by general plan element. For example, the Draft Land Use and Transportation & Circulation Elements provide guidance on the future development of urban areas and roadways to ensure the orderly placement of compatible land uses near existing similar land uses, while promoting a variety of smart growth land use concepts (see Policies LU-1.1, LU-1.2, LU-1.4, LU-1.8, and LU-1.10). A variety of policies also encourage the clustering of similar land uses to encourage compact and cohesive development. Policy LU-4.1 accomplishes this by encouraging the development of small scale neighborhood convenience and grocery facilities that are designed to meet the everyday shopping needs of local surrounding residents. Other policies from the Transportation & Circulation Element promote the development of cohesive

land uses by encouraging a balanced transportation system (see Policy TC-1.18) that facilitates the use of alternative modes of transportation (see Policies TC-5.1, TC-4.4, and TC-4.5) via a well-connected network of transportation routes that do not physically divide neighborhoods.

Future develop can also physically divide existing neighborhoods through the development of new land uses in a manner that contributes to the abandonment or neglect of older neighborhoods (including central or downtown areas). The Land Use and Environmental Resource Management Elements contain a variety of policies that encourage the preservation of existing historic areas and older neighborhoods (see Policies LU-7.8, LU-7.11 through LU-7.14, ERM-6.6, and ERM-6.7). Additionally, Policy LU-4.5 encourages the development of new commercial areas that are consistent with the existing design (including building facades, landscaping, lighting, etc.) of the surrounding community. Also, Policy LU-7.10 encourages the enhancement of key community entry points to encourage transitional zones between communities that encourage visitation.

A variety of other policies from the Land Use, Scenic Landscapes, Agriculture, Environmental Resource Management, and Public Facilities & Services Elements promote community cohesiveness by encouraging the placement of compatible land uses (see Policies LU-1.3, LU-3.6, LU-3.8 and LU-5.4), the use of buffers to minimize a variety of negative land use impacts (see Policies LU-5.6, LU-6.2, AG-1.11, and ERM-1.8), and the development of environmentally sensitive land uses (i.e., minimal soil erosion, maximum use of beneficial vegetation, etc.) within existing open space areas (see Policies LU-1.1, ERM-1.2, LU-7.2, SL-3.2). Additionally, Policies PFS-9.2, PFS-9.3 and PFS-9.4 call for the future placement of utility corridors that do not affect the economic use of adjacent properties or result in the division of an existing neighborhood area. A variety of other policies have been development to minimize land use conflicts between sensitive land uses, local airport facilities and mineral extraction areas. Further, Policy PF-2.9 requires the County to utilize standardized rules for reviewing and adopting boundaries for community plans, hamlet plans, and various other plans. Policy PF-4.16 also directs the County to coordinate with Cities in adjacent Counties in regards to well planned development.

Overall, new development associated with the General Plan Update would represent a continuation of the existing community areas of the County and would not result in the physical division of an existing community. With implementation of the below mentioned policies, this impact is considered *less-than-significant*.

Land Use Element	Transportation & Circulation Element
Policies are designed to minimize any potential impact of dividing the physical arrangement of an established community by ensuring that growth occurs in an organized manner, including the following:	
LU-1.1 Smart Growth and Healthy Communities LU-1.2 Innovative Development LU-1.4 Compact Development LU-1.8 Encourage Infill Development LU-1.10 Specific Plans LU-4.1 Neighborhood Commercial Uses LU-7.3 Friendly Streets LU-7.4 Streetscape Continuity	TC-1.13 Land Dedication for Roadways and Other Travel Modes TC-1.18 Balance System TC-5.1 Bicycle/Pedestrian Trail System TC-4.4 Nodal Land Use Patterns that Support Public Transit TC-4.5 Transit Coordination

Land Use Element	Environmental Resource Management Element
Policies designed to minimize this impact through the protection of the City's traditional neighborhoods and historic districts include the following:	
LU-4.5 Commercial Building Design LU-7.8 Building Abatement LU-7.10 Gateways/Entry Points LU-7.11 Adaptive Reuse LU-7.12 Historic Buildings and Areas LU-7.14 Contextual and Compatible Design	ERM-6.6 Historic Structures and Sites ERM-6.7 Cooperation of Property Owners ERM Implementation Measure #57 Land Use Implementation Measure #11
Planning Framework, Land Use and Scenic Landscapes Elements	Agriculture, Environmental Resource Management, and Public Facilities & Services Elements
Policies designed to promote compatible land use development and patterns that minimize impacts to surrounding land uses (including open space uses) include the following:	
PF-2.9 Interpretation of Boundaries PF-4.16 Coordination with Cities in Adjacent Counties LU-1.3 Prevent Incompatible Uses LU-3.6 Project Design LU-3.8 Rural Residential Interface LU-5.4 Compatibility with Surrounding Land Use LU-5.6 Industrial Use Buffer LU-6.2 Buffers LU-7.2 Integrate Natural Features SL-3.2 Urban Expansion-Edges SL-3.4 Planned Communities	AG-1.11 Agricultural Buffers ERM-1.2 Development in Environmentally Sensitive Areas ERM-1.3 Encourage Cluster Development ERM-1.8 Open Space Buffers PFS-9.2 Appropriate Siting of Natural Gas and Electric Systems PFS-9.3 Transmission Corridors PFS-9.4 Power Transmission Lines Land Use Implementation Measure #1 (and 1A, 1B, 1C) Land Use Implementation Measure #8 (8A through 8G)
Transportation & Circulation Element	Health & Safety Element
Policies designed to promote compatible development near County airport facilities include the following:	
TC-3.4 Airport Compatibility TC-3.6 Airport Encroachment	HS-3.1 Airport Land Use Compatibility Plan HS-3.2 Compliance with FAA Regulations HS-8.4 Airport Noise Contours
Environmental Resource Management Element	
Policies designed to promote compatible development near mineral extraction resource areas include the following:	
ERM-2.8 Minimize Adverse Impacts ERM-2.9 Minimize Hazards and Nuisances	ERM-2.10 Compatibility ERM-2.11 Incompatible Development ERM-3.2 Limited In-City Mining

Required Mitigation Measures

Although this impact is considered *less-than-significant*, the following revised policies (LU-7.12 “Historic Buildings and Areas” and PFS-1.7 “Coordination with Service Providers”) are recommended to ensure that this impact remains *less-than-significant*:

- PFS-1.7 Coordination with Service Providers.** The County shall work with special districts, community service districts, public utility districts, mutual water companies, private water purveyors, sanitary districts, and sewer maintenance districts to provide adequate public facilities *and to plan/coordinate, as appropriate, future utility corridors in an effort to minimize future land use conflicts.* [New Policy – Modified Draft EIR Analysis]
- LU-7.12 Historic Buildings and Areas.** The County shall seek to encourage preservation of buildings and areas with special and recognized historic, architectural, or aesthetic value. New development should respect architecturally and historically significant buildings and areas. *Landscaping, original roadways, sidewalks, and other public realm features of historic buildings or neighborhoods shall be restored or repaired where ever possible.* [New Policy – Modified Draft EIR Analysis]

Impact LU-2: Development proposed under the General Plan would conflict with an adopted applicable land use plan, policy or regulation of an agency with jurisdiction over the project adopted for the purpose of avoiding or mitigating an environmental effect.

Impact Summary

Level of Significance Before Mitigation: <i>Less than Significant</i>
Required Mitigation Measures: <i>None</i>
Level of Significance After Mitigation: <i>Less than Significant</i>

Impact Analysis

Other key City, County, and regional agencies in the vicinity of the County include the following:

- Cities of Dinuba, Exeter, Farmersville, Lindsay, Porterville, Tulare, Visalia, and Woodlake
- Tulare County Local Agency Formation Commission
- Counties of Fresno, Kern, Inyo, and Kings
- Tulare County Association of Governments
- Neighboring Cities of Delano, Kingsburg, Reedley, Corcoran and Orange Cove.
- Keweah Delta WCD and Upper Kings River WCD
- San Joaquin Valley Air Pollution Control District
- Tulare County Airport Land Use Commission
- Central Valley Regional Water Quality Control Board

The General Plan Update was designed specifically to achieve and promote consistency with the planning documents of other key neighboring land use agencies or other agencies that may have jurisdiction over future projects anticipated under buildout of the General Plan Update.

Policies and implementation measures included as part of the General Plan Update that would minimize this impact are summarized below by general plan element. For example, policies within the Draft Transportation & Circulation and Health & Safety Elements encourage the development of a uniform land use policy with other local jurisdictions and encourage continued participation by the County in regional transportation and planning programs administered by a variety of agencies including the Tulare County Association of Governments (TCAG), the California Department of Transportation (Caltrans), and the San Joaquin Valley Air Pollution Control District (SJVAPCD) (see Policies AQ-1.1, AQ-1.2, AQ-2.1, AQ Implementation Measure #1, and AQ Implementation Measure #2). Other policies (see Policy WR-2.2 and WR-3.2) require the County to participate in integrated regional water management planning and water quality monitoring/enforcement programs.

Other policies (see Policies TC-3.4, TC-3.6, HS-3.1, HS-3.2, and HS-8.4) require the County to ensure that all development within the vicinity of local airport facilities be consistent with the policies adopted by the Tulare County Airport Land Use Commission and the most recently adopted Comprehensive Airport Land Use Plan.

Overall, the intent of the proposed General Plan is to ensure that existing and future land uses function without imposing a nuisance, hazard, or unhealthy condition upon adjacent uses. Commercial, residential, and office uses are usually compatible if building scale and character are consistent, pedestrian connections are provided, and auto-oriented uses are limited. Uses within development areas are expected to be compatible with one another because General Plan policies establish requirements for compatible development, including buffering, screening, controls and performance standards, as demonstrated by various policies that encourage the placement of compatible land uses (see Policies LU-1.3, LU-3.6, and LU-5.4) and the use of buffers to minimize a variety of negative land use impacts (see Policies LU-5.6, LU-6.2, AG-1.11, and ERM-1.8). In addition, policies included in the Planning Framework element are specifically designed to direct urban development within UDBs of existing cities and ensure that all development is well planned and adequately served by infrastructure (see policies PF-4.1 through PF-4.16). With implementation of the below mentioned policies this impact is considered *less than significant*.

Land Use and Scenic Landscapes Elements	Agriculture, Environmental Resource Management, and Public Facilities & Services Elements
Policies designed to promote compatible land use development and patterns that minimize impacts to surrounding land uses (including open space uses) include the following:	
LU-1.3 Prevent Incompatible Uses LU-3.6 Project Design LU-5.4 Compatibility with Surrounding Land Use LU-5.6 Industrial Use Buffer LU-6.2 Buffers LU-7.2 Integrate Natural Features SL-3.2 Urban Expansion-Edges SL-3.4 Planned Communities AG-1.11 Agricultural Buffers	ERM-1.2 Development in Environmentally Sensitive Areas ERM-1.3 Encourage Cluster Development ERM-1.8 Open Space Buffers PFS-9.2 Appropriate Siting of Natural Gas and Electric Systems PFS-9.3 Transmission Corridors PFS-9.4 Power Transmission Lines Land Use Implementation Measure #1 (and 1A, 1B, 1C) Land Use Implementation Measure #8 (8A through 8G)
Transportation & Circulation Element	Health & Safety Element
Policies designed to promote development compatible with local airport land use compatibility plans, include the following:	
TC-3.4 Airport Compatibility TC-3.6 Airport Encroachment	HS-3.1 Airport Land Use Compatibility Plan HS-3.2 Compliance with FAA Regulations HS-8.4 Airport Noise Contours
Air Quality Element	Water Resources Element
Policies designed to minimize this impact through the continued coordination with federal, State, and other local agencies (regulatory and non-regulatory) responsible for addressing regional environmental issues include the following:	
AQ-1.1 Cooperation with Other Agencies AQ-1.2 Cooperation with Local Jurisdictions AQ-2.1 Transportation Demand Management Programs AQ Implementation Measure #1 AQ Implementation Measure #2	WR-2.2 NPDES Enforcement WR-3.2 Develop an Integrated Regional Water Master Plan

Planning Framework Element	
Policies and Implementation Measures designed to direct urban development within UDBs of existing cities and ensure that all development is well planned and adequately served by infrastructure include the following:	
PF-4.1 UABs for Cities PF-4.2 UDBs for Cities PF-4.3 Modification of City UABs and UDBs PF-4.4 Planning in UDBs PF-4.5 Spheres of Influence PF-4.6 Orderly Expansion of City Boundaries PF-4.7 Avoiding Isolating Unincorporated Areas PF-4.8 General Plan Designations Within City UDBs PF-4.9 Updating Land Use Diagram in City UDBs PF-4.10 City Design Standards	PF-4.11 Transition to Agricultural Use PF-4.12 Compatible Project Design PF-4.13 Coordination with Cities on Development Proposals PF-4.14 Revenue Sharing PF-4.15 Urban Improvement Areas for Cities PF-4.16 Coordination with Cities in Adjacent Counties Planning Framework Implementation Measure #2 Planning Framework Implementation Measure #13A

Required Mitigation Measures

This impact is considered *less than significant*. No additional mitigation measures are required.

3.5 Housing

The Housing Element Revision was adopted by the County Board of Supervisors as General Plan Amendment (GPA) 03-001 by Resolution 2003-0943 on December 9, 2003, and is incorporated into the Goals and Policies Report by reference. Approved by the Department of Housing and Community Development (HCD), the Element has been prepared pursuant to current Housing Element Law and Guidelines adopted by the HCD. It contains standards and plans for the improvement of housing and for the provision of adequate sites. In addition, this Element makes adequate provisions for the housing needs of all economic segments of the unincorporated area of Tulare County. Finally, the Element identified both immediate and prospective needs for market-rate and nonmarket-rate households and sets forth a program to meet identified needs. Housing Element law requires localities to update their Housing Elements every five years (next update by August 31, 2009 for Tulare County) and incorporate the regional allocation of housing needs by income group.

Housing Element law also requires local housing elements to also incorporate an analysis of subsidized units at-risk of losing their subsidies, and to identify adequate sites suitable for all income levels, including multiple-family and factory-build housing, mobile homes, emergency shelters, and transitional housing in order to meet the community’s housing goals. In addition, Housing Element law requires housing elements to contain an estimate of “quantified objectives” which establishes the maximum number of housing units by income category that can be constructed, rehabilitated, and conserved over a five-year time frame.

The assessment of environmental impacts associated with this topic area also falls into two categories: impacts that are covered elsewhere in this EIR and issues that are not subject to CEQA analysis. For example, construction-related impacts associated with the development of new suburban residential areas and the conversion of scenic corridors and visual resources are addressed in Section 4.2 “Scenic Landscapes”, air quality impacts are addressed in Section 4.4 “Air Quality”, and impacts related to the provision of governmental services to proposed

development (including residential land uses) are addressed in Section 5.2 “Public Facilities and Services”. Other topics were not considered to contribute to physical changes in the environment, and as specified in CEQA, the State CEQA Guidelines and case law, are not considered to be significant effects on the environment. (See Pub. Resources Code, § 21080, subd. (e) (“evidence of social or economic impacts that do not contribute to or are not caused by, physical impacts on the environment” is not “substantial evidence” for purposes of requiring preparation of EIR analysis); CEQA Guidelines, § 15131, subd. (a) (“economic or social effects of a project shall not be treated as significant effects on the environment”); *San Franciscans for Reasonable Growth v. City and County of San Francisco* (1989) 209 Cal.App.3d 1502, 1521-1522, fn. 13 (“demands for additional . . . housing implicate social and economic, not environmental, concerns and, thus, are outside the CEQA purview”).

Chapter 4

Environment



CHAPTER 4.0

Environment

4.1 Introduction

As noted in Chapter 1, “Introduction and Reader’s Guide to the EIR,” Section 15150 of the CEQA Guidelines permits documents of lengthy technical detail to be incorporated by reference in an EIR. Specifically, Section 15150 states that an EIR may “incorporate by reference all or portions of another document which is a matter of public record or is generally available to the public...” Consequently, the General Plan Background Report is incorporated by reference.

Additionally, Section 15146(b) of the CEQA Guidelines states that an EIR on a project such as the adoption or amendment of a local general plan “should focus on the secondary effects that can be expected to follow from the adoption or amendment, but the EIR need not be as detailed as an EIR on the specific construction projects that might follow.” The purpose of this EIR is to provide analysis on the effects that can be expected from implementation of the General Plan Update, but will not provide detail on the impacts of specific construction projects that might follow.

This General Plan EIR is organized to reflect the Goals and Policies Report of the Tulare County General Plan in order to allow readers to easily find related information throughout the documents. In the proposed General Plan, the Tulare County Environment component covers topics related to natural and cultural resources and public health and safety. Consequently, this chapter addresses the following elements:

- Section 4.2 Scenic Landscapes (SL);
- Section 4.3 Environmental Resources Management Element (ERME);
 - Biological Resources
 - Mineral Resources
 - Energy Resources
 - Recreation and Open Space Resources
 - Cultural Resources
 - Soil Resources
- Section 4.4 Air Quality and Global Climate Change (AQ);
- Section 4.5 Health and Safety (HS);

- Geologic and Seismic Hazards
- Airport Hazards
- Hazardous Materials
- Flood Hazards
- Urban and Wildland Fire Hazards
- Emergency Response
- Noise; and
- Section 4.6 Water Resources (WR)
 - Water Supply
 - Water Quality

4.2 Scenic Landscapes

The following section addresses impacts on the visual resources and scenic character of Tulare County’s natural environment. Issues include potential impacts to scenic views and impacts resulting from an increase of urban light sources within the area. No comments specific to scenic resource issues were received during the NOP public scoping phase of the General Plan Update.

Environmental and Regulatory Setting

The General Plan Update included the preparation of several major documents including preparation of a detailed Background Report, which serves to chronicle the existing environmental and regulatory setting conditions applicable to the County. A detailed discussion of scenic landscapes can be found in the General Plan Background Report (see Appendix B, Chapter 11.0 “Scenic Landscapes”).

Methodology

Aesthetics and visual resources are subjective by nature, and therefore the level of a project’s visual impact is difficult to quantify. In addition, it is difficult to estimate the impact development would have on countywide scenic landscapes or resources, since some individual projects can enhance the aesthetic quality of an area. Therefore, this analysis was conducted qualitatively, assessing potential growth implications of the General Plan Update. The General Plan Update’s policies were also evaluated to determine the extent to which they would protect existing scenic landscapes or resources and maximize the degradation of the County’s visual quality.

Standards of Significance

The General Plan Update will establish development guidelines against which future projects will be judged for consistency. The significance criteria for this analysis were developed from criteria presented in Appendix G, “Environmental Checklist Form”, of the CEQA Guidelines and based on the professional judgment of the County of Tulare and its consultants. The project (or the project alternatives) would result in a significant impact if it would:

- Substantially degrade the existing visual character or quality of the site and its surroundings;
- Have a substantial adverse effect on a scenic vista;
- Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway; or
- Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area.

Impacts and Mitigation Measures

Impact SL-1: The General Plan Update would substantially degrade the existing visual character or quality in areas of the County.

Impact Summary

Level of Significance Before Mitigation: <i>Potentially Significant</i>
Required Mitigation Measures: <i>No feasible mitigation available</i>
Level of Significance After Mitigation: <i>Significant and Unavoidable</i>

Impact Analysis

The visual character of the County is influenced by the quality of its roadways, boulevards, multi use paths/trails, view corridors, and the land uses adjoining them (i.e., open space, neighborhoods, etc.). Visual quality is often affected by a variety of factors including General Plan land use designations and policies, specific plan requirements, zoning regulations and enforcement, and private property maintenance. Specific development projects resulting from implementation of the General Plan Update would result in temporary changes in local visual conditions during construction of specific projects in the County. However given the relatively short-term nature of these construction-related activities, construction-related visual impacts are considered *less-than-significant*.

A major focus of the General Plan Update is the enhancement of the visual quality of the County and its surroundings. By adopting the Land Use, Scenic Landscapes, and Environmental Resources Management Elements, the County is taking proactive steps to improve its visual character. For example, the Land Use and Scenic Landscape Elements focus on policies at different levels, from community specific policies that are designed to improve the quality of existing community centers or neighborhoods (see Policy SL-3.1) to broader policies that are designed for expanding communities (see Policies SL-3.2 and SL-3.4). Policy ERM-5.17A provides direction for the County to protect the visibility of the night sky in communities, therefore protecting the visual quality of an area. All of these policies have the common goal of improving the visual quality of the County by maintaining or enhancing existing scenic resource conditions (see Policies SL-1.1, SL-1.2, SL-1.3 and PFS-9.4), developing guidelines to improve future development projects, or creating capital improvements which improve community aesthetics.

The preservation of urban landscapes can also contribute to the scenic quality of a specific location. Preservation of the existing built environment is also a key goal of the General Plan Update, with both the Land Use and Scenic Landscapes Elements containing a variety of policies designed to preserve the existing historic character of the County's communities, hamlets, and rural areas. Policies LU-7.1, LU-7.2, and LU-7.3 encourage the development of new structures and infrastructure that build on the natural landscapes and features of the existing setting. Policies LU-7.8, LU-7.11, LU-7.12, and LU-7.13 encourage the County to implement a variety of measures designed to preserve historic resources, which include abatement programs for dilapidated buildings, adaptive reuse of historic structures, and continued coordination with local preservation groups to improve building facades and other features.

The Scenic Landscapes Element also includes a number of policies designed to protect scenic views for travelers along County roadways and provide guidance on the development of infrastructure that minimizes impacts to existing scenic landscapes. Policies SL-2.1 and SL-2.3 call for the continued maintenance of a designated system of County Scenic Routes and State Scenic Highways. Additionally, Policy SL-2.2 identifies a list of measures designed to protect the "gateway highways" (SR190 and SR198) to the Sequoias.

Policies have also been developed or continued for each of the County's Planning Areas (i.e., corridors, valley, foothills, etc.) to address their own unique scenic landscape issues. For example, Policy C-1.3 supports the development of Scenic Corridor Protection Plans to protect the scenic qualities of local roadways. Policy F-9.19 continue a policy to ensure that hilltop development is designed to preserve the existing skyline and scenic panorama of the foothills. Additionally, Scenic Landscapes Implementation Measure #3 requires the County to prepare design guidelines for County Scenic Routes in the Rural Valley Land Plan areas (similar to those guidelines already maintained for the foothills).

However, it is assumed that some new development (i.e., new residential, commercial, or infrastructure-related, etc.) resulting from population growth associated with the General Plan Update would result in changes to existing views within the County's communities, hamlets, or rural areas. As a portion of this new development could be proposed on land currently used for a

variety of rural residential, agricultural, and open space uses, new development would alter the existing open space views of surrounding visible areas and contrast with the surrounding open space/agricultural environment at the edge of these new development areas. Consequently, even with implementation of the below mentioned policies and implementation measure, this impact is still considered *potentially significant*.

Scenic Landscapes and Public Facilities and Services Element	
Policies designed to protect and feature the existing scenic qualities of the County include the following:	
SL-1.1 Natural Landscapes SL-1.2 Working Landscapes	SL-1.3 Watercourses PFS-9.4 Power Transmission Lines
Environmental Resources Management and Land Use Elements	Scenic Landscapes Element
Policies designed to preserve and enhance the character and scale of the County's communities, hamlets, and rural areas include the following:	
ERM-5.17A Night Sky Protection LU-7.1 Distinctive Neighborhoods LU-7.3 Friendly Streets LU-7.4 Streetscape Continuity LU-7.8 Building Abatement LU-7.9 Visual Access LU-7.10 Gateways/Entry-points LU-7.11 Adaptive Reuse LU-7.12 Historic Buildings and Areas LU-7.13 Preservation of Historic Buildings LU-7.14 Contextual and Compatible Design	SL-3.1 Community Centers and Neighborhoods SL-3.2 Urban Expansion-Edges SL-3.4 Planned Communities
Scenic Landscapes Element	
Policies designed to provide guidance on the development of infrastructure that minimizes impacts to the existing scenic qualities of the County include the following:	
SL-4.1 Design of Highways SL-4.2 Design of County Roads SL-4.3 Railroads and Rail Transit SL Implementation Measure #8B	SL-2.6 Billboard Placement LU Implementation Measure #1A
Scenic Landscapes Element	Transportation & Circulation Element
Policies designed to protect scenic views for travelers along County roads and highways include the following:	
SL-2.1 Designated Scenic Routes and Highways SL-2.2 Gateways to the Sequoias SL-2.3 Historic and Cultural Landscapes SL-2.4 New Billboards SL-2.5 Billboard Removal SL-2.6 Billboard Placement SL-3.3 Highway Commercial SL Implementation Measure #6A SL Implementation Measure #6B	TC-1.12 Scenic Highways and Roads
Corridors, Rural Valley Lands Plan, and Foothills Growth Management Plan Elements	
Similar policies and Implementation Measures designed to provide protection to scenic resources and roadways within the various planning areas include the following:	
C-1.3 Scenic Corridor Protection Plans F-1.7 Preserving Visual Resources F-7.1 Preservation of Scenic Highways F-7.2 Identification of Scenic Highways	F-7.3 Development Along Scenic Highways F-7.4 Development Within Scenic Corridors F-9.19 Maintenance of Scenic Vistas SL Implementation Measure #3 FGMP Implementation Measure #13

Required Mitigation Measures

The County will continue to pursue a variety of measures to preserve the existing visual character or quality of the site and its surroundings. However, even with implementation of the policies and implementation measures listed above, new development along the periphery of the County's existing communities, hamlets, or rural areas would substantially degrade the existing visual

character or quality of the site and its surroundings through the introduction of developed uses within areas currently used for open space/agricultural activities. As a result, the impact remains **significant**. No additional feasible mitigation is currently available.

Significance after Implementation of Mitigation for Impact SL-1

As stated above, no additional feasible mitigation measures are currently available to reduce this impact to a less than significant level. Consequently, this impact is considered **significant and unavoidable**.

Impact SL-2: The General Plan Update would have a substantial adverse effect on a scenic vista or substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway.

Impact Summary

Level of Significance Before Mitigation: <i>Potentially Significant</i>
Required Mitigation Measures: <i>No additional feasible mitigation available</i>
Level of Significance After Mitigation: <i>Significant and Unavoidable</i>

Impact Analysis

A review of the California Department of Transportations (Caltrans) Map of Designated Scenic Routes indicates that there are several highways designated as eligible scenic highways including SR198 (from State Highway 99 to the Sequoia National Park Entrance) and SR190 (from SR 65 to Ponderosa). Additionally, given the diversity of landscapes that comprise the County, other scenic resources in the County include existing open space areas (including views of the Sierra Nevada Mountains), watercourses, and historic settlement areas. Policy ERM-5.17A provides direction for the County to protect the visibility of the night sky in communities, therefore protecting the visual quality of an area. As discussed above, a major focus of the General Plan Update is the enhancement of the visual quality of the County and its scenic landscapes.

As described above under the discussion for Impact SL-1, the Scenic Landscapes Element includes a number of policies designed to protect scenic views for travelers along County roadways and provide guidance on the development of infrastructure that minimizes impacts to existing scenic landscapes. Policies SL-2.1 and SL-2.3 call for the continued maintenance of a designated system of County Scenic Routes and State Scenic Highways. Additionally, Policy SL-2.2 identifies a list of measures designed to protect the “gateway highways” (SR190 and SR198) to the Sequoias. Several other policies (see Policies SL-2.4, SL-2.5, SL-2.6 and SL-3.3) limit or provide guidance on the types of billboards, advertising, or development that can be placed along State Scenic Highways and County Scenic Routes.

However, new development resulting from population growth anticipated as part of the General Plan Update would still result in some permanent changes to existing scenic views in the County. As this new development could be proposed on land currently used for a variety of rural residential, agricultural, and open space uses, new development would alter the existing open space views of surrounding visible areas and contrast with the surrounding open space/agricultural environment at the edge of these new development areas. Consequently, even with implementation of the below mentioned policies and implementation measure, this impact is still considered *potentially significant*.

Scenic Landscapes Element	
Policies designed to protect and feature the existing scenic qualities of the County include the following:	
SL-1.1 Natural Landscapes SL-1.2 Working Landscapes	SL-1.3 Watercourses
Environmental Resources Management and Land Use Elements	Scenic Landscapes Element
Policies designed to preserve and enhance the character and scale of the County's communities, hamlets, and rural areas include the following:	
ERM-5.17A Night Sky Protection LU-7.1 Distinctive Neighborhoods LU-7.3 Friendly Streets LU-7.4 Streetscape Continuity LU-7.8 Building Abatement LU-7.9 Visual Access LU-7.10 Gateways/Entry-points LU-7.11 Adaptive Reuse LU-7.12 Historic Buildings and Areas LU-7.13 Preservation of Historic Buildings LU-7.14 Contextual and Compatible Design	SL-3.1 Community Centers and Neighborhoods SL-3.2 Urban Expansion-Edges SL-3.4 Planned Communities
Scenic Landscapes Element	
Policies designed to provide guidance on the development of infrastructure that minimizes impacts to the existing scenic qualities of the County include the following:	
SL-4.1 Design of Highways SL-4.2 Design of County Roads SL-4.3 Railroads and Rail Transit SL Implementation Measure #8B	SL-2.6 Billboard Placement SL Implementation Measure 1A SL Implementation Measure #6A SL Implementation Measure #6B
Scenic Landscapes Element	Transportation & Circulation Element
Policies designed to protect scenic views for travelers along County roads and highways include the following:	
SL-2.1 Designated Scenic Routes and Highways SL-2.2 Gateways to the Sequoias SL-2.3 Historic and Cultural Landscapes SL-2.4 New Billboards SL-2.5 Billboard Removal SL-2.6 Billboard Placement SL-3.3 Highway Commercial SL Implementation Measure #5A SL Implementation Measure #6A SL Implementation Measure #6B	TC-1.12 Scenic Highways and Roads
Corridors, Rural Valley Lands Plan, and Foothills Growth Management Plan Elements	
Similar policies designed to provide protection to scenic resources and roadways within the various planning areas include the following:	
C-1.3 Scenic Corridor Protection Plans F-1.7 Preserving Visual Resources F-7.1 Preservation of Scenic Highways F-7.2 Identification of Scenic Highways	F-7.3 Development Along Scenic Highways F-7.4 Development Within Scenic Corridors F-9.19 Maintenance of Scenic Vistas F Implementation Measure #8, #12 and #13 SL Implementation Measure #3

Required Mitigation Measures

Similar to Impact SL-1, future development resulting from the General Plan Update would result in temporary changes in local visual conditions during construction of specific projects in the County that may affect a scenic vista or other scenic resources. However given the relatively short-term nature of these construction-related activities, construction-related visual impacts are considered *less-than-significant*. However, new development along the periphery of existing community/hamlet areas would substantially degrade the existing visual character or quality of the area and may result in a substantial adverse effect on a scenic vista or substantially damage local scenic resources (i.e., agricultural/open space, etc.). As a result, on a long term basis, the impact remains *significant*. No additional feasible mitigation is currently available.

Significance after Implementation of Mitigation for Impact SL-2

As stated above, no additional feasible mitigation measures are currently available to reduce this impact to a less than significant level. Consequently, this impact is considered *significant and unavoidable*.

Impact SL-3: The General Plan Update would create a new source of substantial light or glare which would adversely affect day or nighttime views in areas of the County.

Impact Summary

Level of Significance Before Mitigation: <i>Potentially Significant</i>
Required Mitigation Measures: <i>New Policies “LU-7.17 “Lighting” and LU-7.18 “Minimize Lighting Impacts”</i>
Level of Significance After Mitigation: <i>Significant and Unavoidable</i>

Impact Analysis

As planned growth and development occur through implementation of the General Plan Update, additional lighting will be required to provide nighttime street and building illumination, security lighting, traffic lights, and light associated with new recreation areas.

The General Plan Update addresses the topic of glare and new light in a variety of ways. The Land Use Element provides various policies calling for the screening of some land uses and the maintenance of visual accessibility to ensure new development maintains existing views of natural areas. Policy ERM-5.17A provides direction for the County to protect the visibility of the night sky in communities, therefore protecting the visual quality of an area. The Scenic Landscapes Element also includes several policies (see Policies SL-2.4, SL-2.5, SL-2.6, and SL-3.3) that would limit the use of billboards, advertising, or development that would introduce

forms of nuisance lighting along State Scenic Highways, County Scenic Routes, or other areas that currently have limited amounts of existing development.

However, new development resulting from population growth anticipated as part of the General Plan Update would increase the amount of light and glare associated with the development of urban uses, such as additional parking lots, building lights, and streetlights within areas that currently have no light or minimal amounts of light and glare. While the types of lighting and their specific locations are not specified at this point, development proposed under the General Plan Update would increase the amount of spill light and glare onto adjacent areas. However, even with implementation of the below mentioned policies and implementation measure, this impact is still considered *potentially significant*.

Scenic Landscapes Element	
Policies designed to protect and feature the existing scenic qualities of the County include the following:	
SL-1.1 Natural Landscapes SL-1.2 Working Landscapes	SL-1.3 Watercourses
Environmental Resources Management and Land Use Elements	Scenic Landscapes Element
Policies designed to preserve and enhance the character and scale of the County's communities, hamlets, and rural areas include the following:	
ERM-5.17A Night Sky Protection LU-7.1 Distinctive Neighborhoods LU-7.3 Friendly Streets LU-7.4 Streetscape Continuity LU-7.8 Building Abatement LU-7.9 Visual Access LU-7.10 Gateways/Entry-points LU-7.11 Adaptive Reuse LU-7.12 Historic Buildings and Areas LU-7.13 Preservation of Historic Buildings LU-7.14 Contextual and Compatible Design	SL-3.1 Community Centers and Neighborhoods SL-3.2 Urban Expansion-Edges SL-3.4 Planned Communities
Scenic Landscapes Element	
Policies designed to provide guidance on the development of infrastructure that minimizes impacts to the existing scenic qualities of the County include the following:	
SL-4.1 Design of Highways SL-4.2 Design of County Roads SL-4.3 Railroads and Rail Transit SL Implementation Measure #8B	SL-2.6 Billboard Placement SL Implementation Measure #6A SL Implementation Measure #6B
Scenic Landscapes Element	Transportation & Circulation Element
Policies designed to protect scenic views for travelers along County roads and highways include the following:	
SL-2.1 Designated Scenic Routes and Highways SL-2.2 Gateways to the Sequoias SL-2.3 Historic and Cultural Landscapes SL-2.4 New Billboards SL-2.5 Billboard Removal SL-2.6 Billboard Placement SL-3.3 Highway Commercial SL Implementation Measure #6A SL Implementation Measure #6B	TC-1.12 Scenic Highways and Roads
Corridors, Rural Valley Lands Plan, and Foothills Growth Management Plan Elements	
Similar policies designed to provide protection to scenic resources and roadways within the various planning areas include the following:	
C-1.3 Scenic Corridor Protection Plans F-1.7 Preserving Visual Resources F-7.1 Preservation of Scenic Highways F-7.2 Identification of Scenic Highways	F-7.3 Development Along Scenic Highways F-7.4 Development Within Scenic Corridors F-9.19 Maintenance of Scenic Vistas Implementation Measure #8, #12 and #13 SL Implementation Measure #3

Required Mitigation Measures

In addition to the above mentioned policies, the following new Policies LU-7.17 “Lighting” and LU-7.18 “Minimize Lighting Impacts” are required to address this impact:

- **LU-7.17 Lighting.** The County shall continue to improve and maintain lighting in park and recreation facilities to prevent nuisance light and glare spillage on adjoining residential areas. *[New Policy – Draft EIR Analysis]*.
- **LU-7.18 Minimize Lighting Impacts.** The County shall ensure that lighting in residential areas and along County roadways shall be designed to prevent artificial lighting from reflecting into adjacent natural or open space areas. *[New Policy – Draft EIR Analysis]*.

As stated above, the County will continue to enforce a variety of measures designed to minimize impacts resulting from a new source of substantial light or glare which would adversely affect day or nighttime views in the area. However, even with implementation of the policies and implementation measures listed above (including the new Policies “LU-7.17 “Lighting” and LU-7.18 “Minimize Lighting Impacts”), new development would result in substantial new sources of light and glare within areas currently used for a variety of open space/agricultural activities. As a result, the impact remains *significant*. No additional feasible mitigation is currently available.

Significance after Implementation of Mitigation for Impact SL-3

As stated above, no additional feasible mitigation measures are currently available to reduce this impact to a less than significant level. Consequently, this impact is considered *significant and unavoidable*.

4.3 Environmental Resources Management

As noted previously, this General Plan EIR is organized to reflect the Goals and Policies Report of the Tulare County General Plan in order to allow readers to easily find related information throughout the documents. In the proposed General Plan, the Tulare County Environment component’s Environmental Resources Management section covers topics related to natural and cultural resources. Consequently, this section addresses the following resources:

- Biological Resources;
- Mineral Resources;
- Energy Resources;
- Recreation and Open Space Resources;
- Cultural Resources; and
- Soil Resources.

Biological Resources

As a result of comments (see Table 1-2 of Chapter 1.0 “Introduction”) received during the NOP public scoping phase of the General Plan Update, specific effects on biological resources have been considered as part of the impact analysis. For example, Carole Clum suggested that the EIR analysis consider habitat buffers around sensitive habitats. The Center on Race, Poverty, and the Environment suggested that impacts to endangered species or impacts to riparian (and other sensitive habitats) areas be addressed in the EIR. Comments submitted by Wildplaces and Maya Ricci suggested that the County’s Oak Woodlands Management Plan be incorporated into the updated General Plan’s Conservation/Open Space Element. Additionally, the California Regional Water Quality Control Board suggested that the EIR analyze the regional importance of movement corridors in and along waterbodies and should identify any impacts to riparian areas and sensitive plant and animal species likely to use movement corridors.

Environmental and Regulatory Setting

The General Plan Update included the preparation of several major documents including preparation of a Background Report, which serves to chronicle the existing environmental and regulatory setting conditions applicable to the County. A discussion of ecosystems, habitats, species, and regulations specific to biological resources can be found in the General Plan Background Report (see Appendix B, Chapter 9.0 “Biological, Archaeological, and Historical Resources”).

Methodology

The assessment of impacts to biological resources is a qualitative review of the existing biological resource conditions within the County and a determination of whether the General Plan Update includes adequate provisions to ensure continued protection of these resources. For development anticipated in the County’s unincorporated areas, the extent to which current State and Federal regulations and the proposed General Plan policies would protect identified biological resources is evaluated. Evaluation of impacts has been based on the habitat types that have the potential to support the species identified in the General Plan Background Report. Due to the overall size of the County, the biodiversity of the County, and the programmatic nature of this EIR, specific habitat types that could support the identified species have been encompassed under one impact for both wildlife and plant species.

Standards of Significance

The proposed General Plan Update will establish development guidelines against which future projects will be judged for consistency. The significance criteria for this analysis were developed from criteria presented in Section 15065 and Appendix G “Environmental Checklist Form” of the CEQA Guidelines and based on the professional judgment of the County of Tulare and its consultants. The project (or the project alternatives) would result in a significant impact if it would:

- Substantially reduce the habitat of a fish or wildlife species;
- Cause a fish or wildlife population to drop below self-sustaining levels;
- Threaten to eliminate a plant or animal community;
- Substantially reduce the number or restrict the range of an endangered, rare or threatened species;
- Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special-status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service;
- Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, or regulations by the California Department of Fish and Game or U.S. Fish and Wildlife Service;
- Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marshes, vernal pools, coastal wetlands, etc.) through direct removal, filling, hydrological interruption, or other means;
- Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites;
- Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance; or
- Conflict with the provisions of an adopted habitat conservation plan, natural community conservation plan, or other approved local, regional, or state habitat conservation plan.

Impacts and Mitigation Measures

Impact ERM-1: The General Plan Update could have a substantial adverse effect, either directly or through habitat modifications, on any fish or wildlife species including those officially designated species identified as an endangered, threatened, candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service.

Impact Summary

Level of Significance Before Mitigation: <i>Potentially Significant</i>
Required Mitigation Measures: <i>New Policy ERM-1.15 “Minimize Lighting Impacts”</i>
Level of Significance After Mitigation: <i>Significant and Unavoidable</i>

Impact Analysis

Sensitive vegetation communities or habitats in the County include Northern Hardpan Vernal Pool, Valley Saltbrush Scrub, Central Valley Drainage Hardhead/Squawfish Stream, and Blue Ridge Ecological Reserve (Condor Habitat). Within these sensitive habitat areas, a number of sensitive plant and wildlife species are known to occur or have the potential to occur in the County. In addition, these sensitive vegetation communities provide important foraging, dispersal, and migratory corridors for many sensitive wildlife species. Future growth resulting from implementation of the General Plan Update will result in both direct and indirect significant adverse impacts to wildlife occurring in the County.

Although focused within the unincorporated communities, hamlets, and established Urban Development Boundaries, some limited population growth associated with the General Plan Update will allow for the introduction of development (predominately agricultural land uses) into largely undisturbed areas. Such construction has the potential to result in a significant impact on sensitive habitats, individual plants, and wildlife species. The primary impact will be the potential for removal of sensitive habitats for building pad development and the construction of buildings, infrastructure and roadways. Additional impacts will result from a continued increased incidence of fire due to human activity, increased erosion from roadways, and the introduction of non-native weed species. The introduction of developed land uses will also result in the elimination of habitat and food resources for wildlife through the removal of vegetative communities. The introduction of new sources of light and glare could affect nesting habitat and migratory corridors. These effects may be particularly pronounced for wildlife species with low tolerance for habitat modification or disturbance, especially some riparian bird and reptile species.

The majority of impacts to sensitive vegetation communities and wildlife species will occur as a result of project-specific activities developed subsequent to the General Plan Update. At the time individual development applications are submitted, the County will assess development proposals for potential impacts to significant biological resources pursuant to CEQA and associated State and federal regulations. Potential impacts related to development of the County may also be mitigated (to a limited extent) through regional conservation efforts.

The preservation of open space areas and biological resources is a key goal of the General Plan Update, with the inclusion of several policies in the Environmental Resources Management Element. Policies ERM-1.1 through 1.8 and 1.12 require the County to protect key sensitive habitats (i.e., riparian, wetlands, and oak woodlands, etc.) by encouraging future County growth outside these sensitive habitat areas. Policy ERM-1.9 encourages the County to work with other government land management agencies to preserve and protect sensitive habitat areas. Policy ERM-1.14 directs the County to support the establishment and administration of a mitigation banking program. Policies ERM-5.7 and ERM-5.8 require the County to address development impacts to local waterways through the use of lakefront and river bank vegetation buffers designed to protect habitats and the scenic quality of local lakes and water courses. The Environmental Resources Management Element also includes a number of implementation measures designed to protect sensitive habitats and their associated species (i.e., Pixley National

Wildlife Refuge, etc.). Several other implementation measures have also been developed to identify and mitigate impacts to affected habitats and species (both plant and wildlife) resulting from the General Plan Update.

The General Plan Update also includes a number of similar policies in the Foothill Growth Management Plan (FGMP) (see Policies F-5.1, F-9.1, F-9.5, F-9.12, F-9.13, F-9.15, and F-9.20) that have been developed to address sensitive habitats and species specific to this unique County area. However, even with implementation of the above mentioned policies, this impact is still considered *potentially significant*.

ENVIRONMENTAL RESOURCES MANAGEMENT AND FOOTHILL GROWTH MANAGEMENT PLAN ELEMENTS	
Policies designed to protect sensitive habitats from the impacts of future development in Tulare County include the following:	
ERM-1.1 Protection of Rare and Endangered Species ERM-1.2 Development in Environmentally Sensitive Areas ERM-1.3 Encourage Cluster Development ERM-1.4 Protect Riparian Areas ERM-1.5 Riparian Management Plans and Mining Reclamation Plans ERM-1.6 Management of Wetlands ERM-1.8 Open Space Buffers ERM-1.9 Coordination of Management on Adjacent Lands	ERM-1.12 Management of Oak Woodland Communities ERM-1.13 Pesticides ERM-1.14 Mitigation and Conservation Banking Program ERM-5.7 Public Water Access ERM-5.8 Watercourse Development ERM-5.15 Open Space Preservation ERM Implementation Measure #2, #7, #7A, #8, #9, #10, #12A, #13 and #55A
Implementation Measures designed to identify and mitigate the impact of development on key biological resources include the following:	
ERM Implementation Measure #3 ERM Implementation Measure #4 ERM Implementation Measure #5	
Policies designed to preserve and maintain biological resources within the foothill growth management plan include the following:	
F-5.1 Identification of Environmentally Sensitive Areas F-9.1 Riparian Area Development F-9.5 Protection of Lakes F-9.12 Vegetation Removal	F-9.15 Identification of Wildlife F-9.20 Preservation of Unique Features FGMP Implementation Measure #21

Required Mitigation Measures

In addition to the above mentioned policies and implementation measures, the following new Policy ERM-1.15 “Minimize Lighting Impacts” is required to address this impact:

- **ERM-1.15 Minimize Lighting Impacts.** *The County shall ensure that lighting associated with new development or facilities (including street lighting, recreational facilities, and parking) shall be designed to prevent artificial lighting from illuminating adjacent natural areas at a level greater than one foot candle above ambient conditions. [New Policy – Draft EIR Analysis].*

Significance after Implementation of Mitigation for Impact ERM-1

As stated above, the County will adopt and implement a variety of policies and implementation measures designed to address impacts to biological resources (including officially designated endangered, threatened, candidate, sensitive, or special status species). Although these policies

seek to protect a variety of open space resources within the County, implementation of the General Plan Update would still result in the conversion of some open space and habitat areas, which would result in the overall reduction of a plant or wildlife species habitat. Therefore, implementation of the General Plan Update including the adoption of the policies and implementation measures (including the new Policy ERM-1.15 “Minimize Lighting Impacts”) listed above would still result in a *significant and unavoidable* impact. No additional feasible mitigation is currently available.

Impact ERM-2: The General Plan Update could have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Game or U.S. Fish and Wildlife Service.

Impact Summary

Level of Significance Before Mitigation: <i>Potentially Significant</i>
Required Mitigation Measures: <i>New Policy ERM-1.15 “Minimize Lighting Impacts”</i>
Level of Significance After Mitigation: <i>Significant and Unavoidable</i>

Impact Analysis

Areas along local waterways contain riparian habitat. Riparian habitats support a variety of plant and wildlife species along watercourses or water bodies adaptable to seasonal flooding. Other sensitive habitats in the County include forest, oaks woodland, wetlands, and vernal pool habitats. As more fully described above under Impact ERM-1, development resulting from implementation of the General Plan Update may result in both direct and indirect significant adverse impacts to riparian and other sensitive natural communities occurring in the County.

The preservation of riparian habitats (and other sensitive habitats) is a key goal of the General Plan Update, with the inclusion of several policies in the Environmental Resources Management Element (see Policies ERM-1.4 and ERM-1.5). Additionally, policies ERM-1.1 through 1.8 and 1.12 require the County to protect other key sensitive habitats (i.e., riparian, wetlands, and oak woodlands, etc.) by encouraging future County growth outside these sensitive habitat areas. Policy ERM-1.14 directs the County to support the establishment and administration of a mitigation banking program. Policies ERM-5.7 and ERM-5.8 require the County to address development impacts to local waterways through the use of lakefront and water bank vegetation buffers designed to protect habitats and the scenic quality of local lakes and waterways. The Environmental Resources Management Element also includes a number of implementation measures designed to protect sensitive riparian habitats and their associated species (i.e., kit fox, etc.). Several other implementation measures have also been developed to identify procedures for the identification of impacts and mitigation measures to affected habitats and species (both plant and wildlife) resulting from implementation of the General Plan Update.

The General Plan Update also includes a number of similar policies in the Foothill Growth Management Plan (see Policies F-5.1, F-9.1, F-9.5, F-9.12, F-9.13, F-9.15, and F-9.20) that have been developed to address sensitive habitats and species specific to this unique County area. However, even with implementation of the above mentioned policies, this impact is still considered *potentially significant*.

ENVIRONMENTAL RESOURCES MANAGEMENT AND FOOTHILL GROWTH MANAGEMENT PLAN ELEMENTS	
Policies designed to protect sensitive habitats from the impacts of future development in Tulare County include the following:	
ERM-1.1 Protection of Rare and Endangered Species ERM-1.2 Development in Environmentally Sensitive Areas ERM-1.3 Encourage Cluster Development ERM-1.4 Protect Riparian Areas ERM-1.5 Riparian Management Plans and Mining Reclamation Plans ERM-1.6 Management of Wetlands	ERM-1.8 Open Space Buffers ERM-1.9 Coordination of Management on Adjacent Lands ERM-1.12 Management of Oak Woodland Communities ERM-1.13 Pesticides ERM-1.14 Mitigation and Conservation Banking Program ERM-5.7 Public Water Access ERM-5.8 Watercourse Development ERM-5.15 Open Space Preservation ERM Implementation Measure #2, #7, #7A, #8, #9, #10, #12A, #13 and #55A
Implementation Measures designed to identify and mitigate the impact of development on key biological resources include the following:	
ERM Implementation Measure #3 ERM Implementation Measure #4 ERM Implementation Measure #5	
Policies designed to preserve and maintain FGMP biological resources include the following:	
F-5.1 Identification of Environmentally Sensitive Areas F-9.1 Riparian Area Development F-9.5 Protection of Lakes F-9.12 Vegetation Removal	F-9.15 Identification of Wildlife F-9.20 Preservation of Unique Features FGMP Implementation Measure #21

Required Mitigation Measures

In addition to the above mentioned policies and implementation measures, the following new Policy ERM-1.15 “Minimize Lighting Impacts” is required to address this impact:

- **ERM-1.15 Minimize Lighting Impacts.** *The County shall ensure that lighting associated with new development or facilities (including street lighting, recreational facilities, and parking) shall be designed to prevent artificial lighting from illuminating adjacent natural areas at a level greater than one foot candle above ambient conditions. [New Policy – Draft EIR Analysis].*

Significance after Implementation of Mitigation for Impact ERM-2

As stated above, the County will adopt and implement a variety of policies and implementation measures designed to address impacts to biological resources (including officially designated endangered, threatened, candidate, sensitive, or special status species). Although these policies seek to protect a variety of open space resources within the County, including riparian areas and other sensitive natural communities, implementation of the General Plan Update would still result in the conversion of some open space areas, which would result in the overall reduction of a plant or wildlife species habitat. Therefore, implementation of the General Plan Update including the adoption of the policies and implementation measures (including the new Policy ERM-1.15

“Minimize Lighting Impacts”) listed above would still result in a *significant and unavoidable* impact. No additional feasible mitigation is currently available.

Impact ERM-3: The General Plan Update could have a substantial adverse effect on “federally protected” wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, etc.) through direct removal, filling, hydrological interruption, or other means.

Impact Summary

Level of Significance Before Mitigation: <i>Potentially Significant</i>
Required Mitigation Measures: <i>No additional feasible mitigation available</i>
Level of Significance After Mitigation: <i>Significant and Unavoidable</i>

Impact Analysis

As more fully described above under Impact ERM-1, development resulting from implementation of the General Plan Update may result in both direct and indirect significant adverse impacts to wetlands and other sensitive natural communities occurring in the County.

The preservation of wetland (including vernal pool) habitats is a key goal of the General Plan Update, with the inclusion of several policies in the Environmental Resources Management Element (see Policies ERM-1.6). Additionally, policies ERM-1.1 through 1.8 and 1.12 require the County to protect other key sensitive habitats (i.e., riparian, wetlands, and oak woodlands, etc.) by encouraging future County growth outside these sensitive habitat areas. Policy ERM-1.14 directs the County to support the establishment and administration of a mitigation banking program. Policies ERM-5.7 and ERM-5.8 require the County to address development impacts to local waterways through the use of lakefront and water bank vegetation buffers designed to protect habitats and the scenic quality of local lakes and waterways. The Environmental Resources Management Element also includes a number of implementation measures (see ERM Implementation Measure #5) designed to identify wetland resources using Corps of Engineers protocols in addition to the identification of impacts and mitigation measures to other habitats and species (both plant and wildlife) resulting from implementation of the General Plan Update.

The General Plan Update also includes a number of similar policies in the Foothill Growth Management Plan (see Policies F-5.1, F-9.1, F-9.5, F-9.12, F-9.13, F-9.15, and F-9.20) that have been developed to address sensitive habitats and species specific to this unique County area. However, even with implementation of the above mentioned policies, it is not possible to determine exactly where individual projects will be constructed and therefore not possible to determine if wetlands or other sensitive communities may be affected. Therefore, this impact is still considered *potentially significant*.

ENVIRONMENTAL RESOURCES MANAGEMENT AND FOOTHILL GROWTH MANAGEMENT PLAN ELEMENTS	
Policies designed to protect sensitive habitats from the impacts of future development in Tulare County include the following:	
ERM-1.1 Protection of Rare and Endangered Species ERM-1.2 Development in Environmentally Sensitive Areas ERM-1.3 Encourage Cluster Development ERM-1.4 Protect Riparian Areas ERM-1.5 Riparian Management Plans and Mining Reclamation Plans ERM-1.6 Management of Wetlands	ERM-1.8 Open Space Buffers ERM-1.9 Coordination of Management on Adjacent Lands ERM-1.12 Management of Oak Woodland Communities ERM-1.13 Pesticides ERM-1.14 Mitigation and Conservation Banking Program ERM-5.7 Public Water Access ERM-5.8 Watercourse Development ERM-5.15 Open Space Preservation ERM Implementation Measure #2, #7, #7A, #8, #9, #10, #12A, #13 and #55A
Implementation Measures designed to identify and mitigate the impact of development on key biological resources include the following:	
ERM Implementation Measure #3 ERM Implementation Measure #4 ERM Implementation Measure #5	
Policies designed to preserve and maintain biological resources in the foothills include the following:	
F-5.1 Identification of Environmentally Sensitive Areas F-9.1 Riparian Area Development F-9.5 Protection of Lakes F-9.12 Vegetation Removal	F-9.15 Identification of Wildlife F-9.20 Preservation of Unique Features FGMP Implementation Measure #21

Required Mitigation Measures

As stated above, the County will adopt and implement a variety of policies and implementation measures designed to address impacts to biological resources (including federally protected wetlands as defined by Section 404 of the Clean Water Act). Although these policies seek to protect a variety of open space resources within the County, including wetlands, implementation of the General Plan Update would still result in the conversion of some open space areas and associated wetlands, which would result in the overall reduction of a plant or wildlife species habitat. Therefore, implementation of the General Plan Update including the adoption of the policies and implementation measures listed above would still result in a *significant* impact. No additional feasible mitigation is currently available.

Significance after Implementation of Mitigation for Impact ERM-3

As stated above, no additional feasible mitigation measures are currently available to reduce this impact to a less than significant level. Consequently, this impact is considered *significant and unavoidable*.

Impact ERM-4: The General Plan Update could interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites.

Impact Summary

Level of Significance Before Mitigation: <i>Potentially Significant</i>
Required Mitigation Measures: <i>New Policy ERM-1.15 “Minimize Lighting Impacts”</i>
Level of Significance After Mitigation: <i>Significant and Unavoidable</i>

Impact Analysis

Several areas within the County (predominately waterways and the riparian areas that border them) are utilized as migratory corridors for the movement of wildlife (including a variety of bird, mammal, and fish species). As more fully described above under Impact ERM-1, development resulting from implementation of the General Plan Update may have potential to remove or interfere with existing linkages between habitat areas currently providing cover and could increase the distance that animals would need to traverse. Additionally, development within the County would also cause an increase in both vehicular traffic levels and nighttime light levels, which would also serve to deter wildlife movement in the area.

The preservation of riparian habitats (and other sensitive habitats) is a key goal of the General Plan Update, with the inclusion of several policies in the Environmental Resources Management Element (see Policies ERM-1.4 and ERM-1.5). Additionally, policies ERM-1.1 through 1.8 and 1.12 require the County to protect other key sensitive habitats (i.e., riparian, wetlands, and oak woodlands, etc.) by encouraging future County growth outside these sensitive habitat areas and requiring buffer areas between development projects and these areas. Policy ERM-1.14 directs the County to support the establishment and administration of a mitigation banking program. Policies ERM-5.7 and ERM-5.8 require the County to address development impacts to local waterways through the use of lakefront and water bank vegetation buffers designed to protect habitats and the scenic quality of local lakes and waterways. The Environmental Resources Management Element also includes a number of implementation measures designed to protect sensitive habitat corridors and their associated species (i.e. Pixley National Wildlife Refuge, etc.). Several other implementation measures have also been developed to identify procedures for the identification of impacts and mitigation measures to affected habitats and species (both plant and wildlife) resulting from implementation of the General Plan Update.

The General Plan Update also includes a number of similar policies in the Foothill Growth Management Plan (see Policies F-5.1, F-9.1, F-9.5, F-9.12, F-9.15, and F-9.20) and Implementation Measure #7 from the Mountain Framework Plan which has been developed to promote fencing standards consistent with those recommended by the California Department of Fish and Game to permit deer movement. However, even with implementation of the above mentioned policies and implementation measures, this impact is still considered *potentially significant*.

ENVIRONMENTAL RESOURCES MANAGEMENT, FOOTHILL GROWTH MANAGEMENT PLAN AND MOUNTAIN FRAMEWORK PLAN ELEMENTS	
Policies designed to protect sensitive habitats from the impacts of future development in Tulare County include the following:	
ERM-1.1 Protection of Rare and Endangered Species ERM-1.2 Development in Environmentally Sensitive Areas ERM-1.3 Encourage Cluster Development ERM-1.4 Protect Riparian Areas ERM-1.5 Riparian Management Plans and Mining Reclamation Plans ERM-1.6 Management of Wetlands	ERM-1.8 Open Space Buffers ERM-1.9 Coordination of Management on Adjacent Lands ERM-1.12 Management of Oak Woodland Communities ERM-1.13 Pesticides ERM-1.14 Mitigation and Conservation Banking Program ERM-5.7 Public Water Access ERM-5.8 Watercourse Development ERM-5.15 Open Space Preservation ERM Implementation Measure #2, #7, #7A, #8, #9, #10, #12A, #13 and #55A

Implementation Measures designed to identify and mitigate the impact of development on key biological resources include the following:	
ERM Implementation Measure #3 ERM Implementation Measure #4 ERM Implementation Measure #5	
Policies designed to preserve and maintain Foothill and Mountain Area biological resources include the following:	
F-5.1 Identification of Environmentally Sensitive Areas F-9.1 Riparian Area Development F-9.5 Protection of Lakes F-9.12 Vegetation Removal	F-9.15 Identification of Wildlife F-9.20 Preservation of Unique Features F Implementation Measure #21 Mountain Framework Plan Implementation Measure #7

Required Mitigation Measures

In addition to the above mentioned policies and implementation measures, the following new Policy ERM-1.15 “Minimize Lighting Impacts” is required to address this impact:

- **ERM-1.15 Minimize Lighting Impacts.** *The County shall ensure that lighting associated with new development or facilities (including street lighting, recreational facilities, and parking) shall be designed to prevent artificial lighting from illuminating adjacent natural areas at a level greater than one foot candle above ambient conditions. [New Policy – Draft EIR Analysis].*
- **ERM-1.16 Cooperate with Wildlife Agencies.** *The County shall cooperate with State and federal wildlife agencies to address linkages between habitat areas. [New Policy – Draft EIR Analysis]*

Significance after Implementation of Mitigation for Impact ERM-4

As stated above, the County will adopt and implement a variety of policies and implementation measures designed to address impacts to biological resources (including any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or native wildlife nursery sites). Although these policies seek to protect a variety of open space resources within the County, implementation of the General Plan Update would still result in the conversion of some open space areas, which would result in the overall reduction of a plant or wildlife species habitat, including habitat areas that would otherwise function as corridors facilitating the movement of wildlife species through developed areas. Therefore, implementation of the General Plan Update including the adoption of the policies and implementation measures (including the new Policy ERM-1.15 “Minimize Lighting Impacts”) listed above would still result in a **significant and unavoidable** impact. No additional feasible mitigation is currently available.

Impact ERM-5: The General Plan Update would not conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance.

Impact Summary

Level of Significance Before Mitigation: <i>Less-than-Significant</i>
Required Mitigation Measures: <i>No Mitigation Required</i>
Level of Significance After Mitigation: <i>Not Applicable.</i>

Impact Analysis

The General Plan Update has been developed to promote consistency throughout all the elements that comprise the County's updated General Plan and with all the various community plans that provide policy direction for portions of the County. Various implementation measures (see ERM Implementation Measure #2 and #8) contained in the Environmental Resources Management Element require the County to incorporate provisions for the designation of Conservation Areas and the protection of open space areas within the County's Zoning Ordinance. Additionally, Policy ERM-1.9 requires the County to work with other government land management agencies to preserve and protect sensitive habitat areas. Policy ERM-1.14 directs the County to support the establishment and administration of a mitigation banking program. Future projects in accordance with the General Plan Update would comply with all relevant policies and ordinances relating to the protection of other biological resources (including tree preservation). With implementation of the below mentioned policies, this impact is considered *less-than-significant*.

ENVIRONMENTAL RESOURCES MANAGEMENT AND FOOTHILL GROWTH MANAGEMENT PLAN ELEMENTS	
Policies designed to protect sensitive habitats from the impacts of future development in Tulare County include the following:	
ERM-1.1 Protection of Rare and Endangered Species ERM-1.2 Development in Environmentally Sensitive Areas ERM-1.3 Encourage Cluster Development ERM-1.4 Protect Riparian Areas ERM-1.5 Riparian Management Plans and Mining Reclamation Plans ERM-1.6 Management of Wetlands	ERM-1.8 Open Space Buffers ERM-1.9 Coordination of Management on Adjacent Lands ERM-1.12 Management of Oak Woodland Communities ERM-1.13 Pesticides ERM-1.14 Mitigation and Conservation Banking Program ERM-5.7 Public Water Access ERM-5.8 Watercourse Development ERM-5.15 Open Space Preservation ERM Implementation Measure #2, #7, #7A, #8, #9, #10, #12A, #13 and #55A
Implementation Measures designed to identify and mitigate the impact of development on key biological resources include the following:	
ERM Implementation Measure #3 ERM Implementation Measure #4 ERM Implementation Measure #5	
Policies designed to preserve and maintain FGMP biological resources include the following:	
F -5.1 Identification of Environmentally Sensitive Areas F -9.1 Riparian Area Development F -9.5 Protection of Lakes F -9.12 Vegetation Removal	F -9.15 Identification of Wildlife F -9.20 Preservation of Unique Features FGMP Implementation Measure #21

Required Mitigation Measures

This impact is considered *less-than-significant*. No additional mitigation measures are required.

Impact ERM-6: The General Plan Update could conflict with the provisions of an adopted habitat conservation plan, natural community conservation plan, or other approved local, regional, or state habitat conservation plan.

Impact Summary

Level of Significance Before Mitigation: <i>Less-than- Significant</i>
Required Mitigation Measures: <i>Recommended new Policy ERM-1.17 “Conservation Plan Coordination”</i>
Level of Significance After Mitigation: <i>Less-than-Significant</i>

Impact Analysis

Under Section 10 of the Federal Endangered Species Act, the preparation of a habitat conservation plan may be required for a non-federal entity that has requested a take permit for a federally listed species or critical habitat. Similarly, a natural community conservation plan may be required to address State requirements specific to State listed species or critical habitats.

The Kern Water Bank Habitat Conservation Plan is the only approved multi-species habitat conservation plan (HCP) that exists in Tulare County. This HCP was approved by the United State Fish and Wildlife Service on October 2, 1997 and protects a total of 22 federally listed species and 29 non-listed species. The HCP covers a 19,900-acre area located in Tulare, Kern, and Kings Counties. The species protected in this HCP include the valley elderberry longhorn beetle, California condor, Conservancy fairy shrimp, San Joaquin kit fox, and the western snowy plover. Although the HCP represents a regional opportunity to address key biological resource impacts associated with regional development, participation in the HCP is a voluntary activity. Project proponents can choose to address biological resource impacts outside of the HCP program by consulting directly with applicable local, State, and federal agencies.

As previously described above under Impacts ERM-1 through ERM-5, the General Plan Update has been developed to address a variety of impacts to biological resources. Additionally, the General Plan Update has been developed to ensure continued coordination (see Policy ERM-1.9) with a variety of other government land management agencies to preserve and protect sensitive habitat areas. Consequently, with implementation of the above mentioned policies, this impact is considered *less-than-significant*.

ENVIRONMENTAL RESOURCES MANAGEMENT AND FOOTHILL GROWTH MANAGEMENT PLAN ELEMENTS	
Policies designed to protect sensitive habitats from the impacts of future development in Tulare County include the following:	
ERM-1.1 Protection of Rare and Endangered Species ERM-1.2 Development in Environmentally Sensitive Areas ERM-1.3 Encourage Cluster Development ERM-1.4 Protect Riparian Areas ERM-1.5 Riparian Management Plans and Mining	ERM-1.8 Open Space Buffers ERM-1.9 Coordination of Management on Adjacent Lands ERM-1.12 Management of Oak Woodland Communities ERM-1.13 Pesticides ERM-1.14 Mitigation and Conservation Banking Program

Reclamation Plans ERM-1.6 Management of Wetlands	ERM-5.7 Public Water Access ERM-5.8 Watercourse Development ERM-5.15 Open Space Preservation ERM Implementation Measure #2, #7, #7A, #8, #9, #10, #12A, #13 and #55A
Implementation Measures designed to identify and mitigate the impact of development on key biological resources include the following:	
ERM Implementation Measure #3 ERM Implementation Measure #4 ERM Implementation Measure #5	
Policies designed to preserve and maintain FGMP biological resources include the following:	
F-5.1 Identification of Environmentally Sensitive Areas F-9.1 Riparian Area Development F-9.5 Protection of Lakes F-9.12 Vegetation Removal	F-9.15 Identification of Wildlife F-9.20 Preservation of Unique Features F Implementation Measure #21

Required Mitigation Measures

Although this impact is considered *less-than-significant*, the following new policy specifically addresses continued coordination with the HCP and is recommend to ensure that this impact remains *less-than-significant*:

- ERM-1.17 Conservation Plan Coordination.** *The County shall coordinate with local, State, and federal habitat conservation planning efforts (including Section 10 Habitat Conservation Plan) to protect critical habitat areas that support endangered species and other special-status species. [New Policy – Draft EIR Analysis]*

Mineral Resources

This section focuses on how development resulting from implementation of the General Plan Update would affect the availability of mineral resources or result in potential land use conflicts. Related topics include soil resource issues and potential geologic hazards (including seismicity, landsliding, and liquefaction) associated with implementation of the General Plan Update. These soil and geologic hazard impacts are more fully described in Section 4.5, “Health and Safety.”

As a result of comments (see Table 1-2 of Chapter 1.0 “Introduction”) received during the NOP public scoping phase of the General Plan Update, specific mineral resource issues have been considered as part of the impact analysis. Del Strange commented that the General Plan should include separate elements for a variety of resource topics including mineral resources.

Environmental and Regulatory Setting

The General Plan Update included preparation of several major documents including preparation of a detailed Background Report, which serves to chronicle the existing environmental and regulatory setting conditions applicable to the County. A detailed discussion of mineral resource issues can be found in the General Plan Background Report (see Appendix B, Chapter 10.3 “Mineral Resources”).

Methodology

The assessment of mineral resources is a qualitative review of the existing resources located within the County and a determination of whether the General Plan Update includes adequate provisions to ensure continued protection of these resources.

Standards of Significance

The General Plan Update will establish development guidelines against which future projects will be judged for consistency. The significance criteria for this analysis were developed from criteria presented in Appendix G, “Environmental Checklist Form”, of the CEQA Guidelines and based on the professional judgment of the County of Tulare and its consultants. The project (or the project alternatives) would result in a significant impact if it would:

- Result in the loss or availability of a known mineral resource that would be of value to the region and the residents of the state;
- Result in the loss of availability of a locally important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan; or
- Result in land use conflicts with adjacent mineral extraction operations.

Impacts and Mitigation Measures

Impact ERM-7: The General Plan Update would not result in the loss of availability of a known mineral resource that would be of a value to the region and the residents of the State or result in the loss of availability of a locally important mineral resource recovery site delineated on a local general plan, specific plan, or other land use plan.

Impact Summary

Level of Significance Before Mitigation: <i>Less-than- Significant</i>
Required Mitigation Measures: <i>No Mitigation Required</i>
Level of Significance After Mitigation: <i>Not Applicable</i>

Impact Analysis

Mineral resources located within the County include predominantly sand and gravel resources and to a lesser extent minerals such as asbestos, copper, gold, iron and silver. Currently, there are three streams that have provided the main source of high quality sand and gravel in Tulare County. These include the Kaweah River and the Tule River. The highest quality deposits are located along the Kaweah River, near Lemon Cove, and along the Tule River between Porterville and Lake Success. Aggregate resource extraction operations are located predominantly within these areas.

Although the locations of most major sand and gravel deposits and other mineral commodities are known, not all areas of the County have been comprehensively investigated by the State or the County to identify other mineral deposits and potential land use planning implications. Development resulting from implementation of the General Plan Update would require the use of aggregate or other mineral resources that could be extracted from existing and future deposits. Additionally, if development resulting from implementation of the General Plan Update were to occur in locations where the presence or extent of extractive mineral resources has not been clearly delineated, access to those minerals could be restricted or eliminated as a result of development.

The General Plan Update includes a number of policies in the Environmental Resources Management Element designed to conserve this important County resource. For example, Policies ERM-2.1 through ERM-2.5 recognize the important contribution of mineral resources to both the local and regional economy and provide for the future conservation of identified and/or potential mineral deposits within the County. Other policies (see Policy ERM-2.11) serve to protect existing mineral resource operations by limiting the development of potentially incompatible uses near existing identified or potential mineral deposits. With implementation of the below mentioned policies intended to promote the efficient use of resources and compatible development, this impact is considered *less-than-significant*.

Environmental Resources Management Element	
Policies designed to promote the efficient use of mineral extraction resources include the following:	
ERM-2.1 Conserve Mineral Deposits ERM-2.2 Recognize Mineral Deposits ERM-2.3 Future Resource Development	ERM-2.4 identify New Resources ERM-2.5 Resources Development ERM Implementation Measures #20, #21, #21A, #22, and #23-#31
Policies designed to promote compatible development near mineral extraction resource areas include the following:	
ERM-2.8 Minimize Adverse Impacts ERM-2.9 Minimize Hazards and Nuisances	ERM-2.10 Compatibility ERM-2.11 Incompatible Development ERM-3.2 Limited In-City Mining

Required Mitigation Measures

This impact is considered *less-than-significant*. No additional mitigation measures are required.

Impact ERM-8: The General Plan Update could result in land use incompatibilities with adjacent mineral extraction operations.

Impact Summary

Level of Significance Before Mitigation: Less-than- Significant
Required Mitigation Measures: No Mitigation Required
Level of Significance After Mitigation: Not Applicable

Impact Analysis

Development resulting from implementation of the General Plan Update would require the use of aggregate or other mineral resources that could be extracted from existing and future deposits, some of which may be located within or adjacent to river habitats or other environmentally sensitive areas. In addition, some of the anticipated growth under the General Plan Update could occur in proximity to areas of significant mineral resources or existing mineral extraction operations. Consequently, potential land use conflicts (i.e., increased noise, dust, traffic, etc.) between existing or future mineral resource extraction sites and potential urban and suburban development could occur.

The General Plan Update includes a number of policies in the Environmental Resources Management Element designed to protect sensitive land uses and environmentally sensitive areas from mineral resource extraction activities. For example, Policy ERM-3.2 limits new commercial mining operations from within UDBs due a variety of environmental and compatibility concerns. Policies ERM-2.10 and ERM-2.11 limit the development of incompatible land uses adjacent or near identified or potential mineral deposits. Additionally Policy ERM-2.8 ensures that mining operations minimize adverse effects to a range of environmental issues (i.e., water quality, air quality, aesthetics, etc.). Policy ERM-2.14 also requires that all surface mine operations be subject to the requirements of the Surface Mining and Reclamation Act. Therefore, land use compatibility issues with adjacent mineral extraction operations are considered *less-than-significant* for the General Plan Update. However, these issues may need to be evaluated in the site-specific environmental review for future development proposals.

Environmental Resources Management Element	
Policies designed to promote compatible development near mineral extraction resource areas include the following:	
ERM-2.8 Minimize Adverse Impacts ERM-2.9 Minimize Hazards and Nuisances ERM-2.10 Compatibility	ERM-2.11 Incompatible Development ERM-2.14 SMARA Requirements ERM-3.2 Limited In-City Mining ERM Implementation Measures #32-#47A

Required Mitigation Measures

This impact is considered *less-than-significant*. No additional mitigation measures are required.

Energy Resources

This section focuses on how development resulting from implementation of the General Plan Update would affect the availability of oil or gas resources or result in potential land use conflicts. No comments specific to oil and gas resource issues were received during the NOP public scoping phase of the General Plan Update.

Environmental and Regulatory Setting

The General Plan Update included preparation of several major documents including preparation of a detailed Background Report, which serves to chronicle the existing environmental and regulatory setting conditions applicable to the County. A detailed discussion of oil and gas resource issues can be found in the General Plan Background Report (see Appendix B, Chapter 10.4 “Oil and Gas Resources”).

Methodology

The assessment of oil and gas resources is a qualitative review of the existing resources located within the County and a determination of whether the General Plan Update includes adequate provisions to ensure continued protection of these resources.

Standards of Significance

The General Plan Update will establish development guidelines against which future projects will be judged for consistency. The significance criteria for this analysis were developed from criteria presented in Appendix G, “Environmental Checklist Form”, of the CEQA Guidelines and based on the professional judgment of the County of Tulare and its consultants. The project (or the project alternatives) would result in a significant impact if it would:

- Result in the loss or availability of a known oil and gas resource that would be of value to the region and the residents of the state; or
- Result in land use conflicts with adjacent oil and/or gas operations.

Methodology

The assessment of oil and gas resources is a qualitative review of the existing resources located within the County and a determination of whether the General Plan Update includes adequate provisions to ensure continued protection of these resources.

Impacts and Mitigation Measures

Impact ERM-9: The General Plan Update would not result in the loss of availability of a known oil and/or gas resource that would be of a value to the region and the residents of the State.

Impact Summary

Level of Significance Before Mitigation: <i>Less-than- Significant</i>
Required Mitigation Measures: <i>No Mitigation Required</i>
Level of Significance After Mitigation: <i>Not Applicable</i>

Impact Analysis

Oil and gas resources are located within the County. Active oil wells are located in the Deer Creek oil field (near the City of Porterville) area, which contains, as of 2004, 73 oil wells. The Trico gas fields (southwestern corner of Tulare County), in 2004, contain a total of 22 gas wells. If development resulting from implementation of the General Plan Update were to occur in locations near existing oil/gas operations or where the presence or extent of oil/gas resources have not been clearly delineated, access to those resources could be restricted or eliminated as a result of development.

The General Plan Update includes a number of policies in the Environmental Resources Management Element designed to conserve this important County resource. For example, Policies ERM-3.3 and ERM-3.4 recognize the importance of continuing oil and gas operations that are considered compatible with surrounding land uses. With implementation of the below mentioned policies, this impact is considered *less-than-significant*.

Environmental Resources Management Element	
Policies designed to promote the efficient use of oil/gas resources include the following:	
ERM-3.3 Small-scale Oil and Gas Extraction	
ERM-3.4 Oil and Gas Extraction	
ERM-3.5 Reclamation of Oil and Gas Sites	

Required Mitigation Measures

This impact is considered *less-than-significant*. No additional mitigation measures are required.

Impact ERM-10: The General Plan Update could result in land use incompatibilities with adjacent oil and gas operations.

Impact Summary

Level of Significance Before Mitigation: Less-than- Significant
Required Mitigation Measures: No Mitigation Required
Level of Significance After Mitigation: Not Applicable

Impact Analysis

As more fully described above under Impact ERM-3, the General Plan Update includes a number of policies in the Environmental Resources Management Element designed to protect sensitive land uses and environmentally sensitive areas from mineral resource extraction activities. For example, Policies ERM-3.3 and ERM-3.4 allow the development of small scale oil/gas operations (by special use permit) only when these new facilities can demonstrate compatibility with surrounding land uses. Additional State law mandates that no building intended for human

occupancy may be located near any active oil or gas well unless suitable safety and fire protection measures (including setbacks) are approved by the local fire department. In addition, if any plugged and abandoned or unrecorded wells are damaged or uncovered during specific project-related excavation or grading activities, State regulations require specific notification and remedial plugging operations. Therefore, land use compatibility issues with adjacent gas/oil operations are considered *less-than-significant* for the General Plan Update. However, these issues may need to be evaluated in the site-specific environmental review for future development proposals.

Environmental Resources Management Element	
Policies designed to promote the efficient use of oil/gas resources include the following:	
ERM-3.3 Small-scale Oil and Gas Extraction	
ERM-3.4 Oil and Gas Extraction	
ERM-3.5 Reclamation of Oil and Gas Sites	

Required Mitigation Measures

This impact is considered *less-than-significant*. No additional mitigation measures are required.

Recreation and Open Space Resources

As a result of comments (see Table 1-2 of Chapter 1.0 “Introduction”) received during the NOP public scoping phase of the General Plan Update, specific effects from the project on recreation or open space-related issues have been considered as part of the impact analysis. For example, the Center on Race, Poverty, and the Environment suggested that the EIR’s recreation analysis consider adoption of the Quimby Act.

Environmental and Regulatory Setting

Government Code 66477 states that “the legislative body of a city or county may, by ordinance, require the dedication of land or impose a requirement of the payment of fees in lieu thereof, or a combination of both, for park or recreational purposes as a condition to the approval of a tentative map or parcel map.”

The General Plan Update included the preparation of several major documents including preparation of a detailed Background Report, which serves to chronicle the existing environmental and regulatory setting conditions applicable to the County. A detailed discussion of recreational opportunities including parks (i.e., County, State, and federal) and other open space areas can be found in the General Plan Background Report (see Appendix B, Chapter 4.0 “Agriculture, Recreation, and Open Space”).

Methodology

The assessment of parks and recreation services is a qualitative review of the existing services available to the County and a determination of whether the General Plan Update includes adequate provisions to ensure continued service that meets acceptable standards.

Standards of Significance

The General Plan Update will establish development guidelines against which future projects will be judged for consistency. The significance criteria for this analysis were developed from criteria presented in Appendix G of the CEQA Guidelines and based on the professional judgment of the County of Tulare and its consultants. The project (or the project alternatives) would result in a significant impact if it would:

- Increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated; or
- Include recreational facilities or require the construction or expansion of recreational facilities that might have an adverse physical effect on the environment.

Impacts and Mitigation Measures

Impact ERM-11: The General Plan Update would result in the substantial physical deterioration of existing neighborhood and regional parks or other recreational facilities through increased use.

Impact Summary

Level of Significance Before Mitigation: <i>Less-than-Significant</i>
Required Mitigation Measures: <i>None</i>
Recommended Mitigation Measures: <i>Revised Public Facilities and Services Implementation Measure #3</i>
Level of Significance After Mitigation: <i>Less-than-Significant</i>

Impact Analysis

Implementation of the General Plan Update would increase the overall demand on park facilities throughout the County. Future growth in accordance with development anticipated under the General Plan Update is also expected to generate additional demand for various recreation programs currently provided by the County (i.e., use of museum, etc.) at these facilities. New or expanded park facilities and recreation programs will be required in order to provide adequate

recreational opportunities to serve future growth. Therefore, the County's costs to develop and maintain park facilities and programs would also increase.

Policies included as part of the General Plan Update that would minimize this impact are summarized below by general plan element. Policies from the Environmental Resources Management Element acknowledge the important role parks play in the community (see Policy ERM-5.1) and provide guidelines (see Policies ERM-5.2, ERM-5.3, and ERM-5.6) on the types of recreation facilities that should be developed. Other policies promote water-related recreation opportunities (see Policies ERM-5.7 and ERM-5.8), recreation needs for special use groups (see Policy ERM-5.10), and encourage cooperative long-range recreation planning efforts with a variety of private and public entities (see Policies ERM-5.9, ERM-5.11, and ERM-5.16). The Public Facilities and Services Element also identifies a range of policies (see Policies PFS-1.1, PFS-1.2, PFS-1.7, PFS-1.9, PFS-1.10, and PFS-1.11) designed to establish and maintain acceptable service levels for parks and recreation facilities in addition to a range of other public services.

Additional policies in both the Environmental Resources Management and Public Facilities and Services Elements promote the development of joint use recreation facilities (see Policies ERM-5.5, PFS-4.5, and PFS-8.2) with local school districts and special districts as a way to maximize the use of existing recreation facilities and ensure the continued provision of future recreation-related services. These elements also include a variety of policies that identify a range of funding mechanisms necessary to implementation future park development. This impact is considered *less-than-significant*.

Environmental Resources Management & Public Facilities and Services Elements	
Policies designed to minimize this impact through the establishment of guidelines or standards that promote the continued support of recreation-related programs and organizations include the following:	
ERM-5.1 Parks as Community Focal Points ERM-5.2 Park Amenities ERM-5.3 Park Dedication Requirements ERM-5.4 Park-Related Organizations ERM-5.6 Location and Size Criteria for Parks ERM-5.7 Public Water Access ERM-5.8 Watercourse Development ERM-5.9 Encourage Development of Private Recreation Facilities ERM-5.10 Recreational Facilities for Special Use Groups	ERM-5.11 Cooperation with Federal and State Agencies ERM-5.12 Meet Changing Recreation Needs ERM-5.16 Regional Recreation Planning ERM-5.17 Activity Prioritization ERM Implementation Measures #48-#54 PFS-1.1 Existing Development PFS-1.2 Maintain Existing Levels of Services PFS-1.7 Coordination with Service Providers PFS-1.9 New Special Districts PFS-1.10 Homeowners Associations PFS-1.11 Facility Sizing
Policies designed to minimize this impact through the promotion of joint use facilities with other public agencies include the following:	
ERM-5.5 Collocated Facilities PFS-4.5 Detention/Retention Basins Design PFS-8.2 Joint use Facilities and Programs	
Policies designed to minimize this impact through the encouragement of park facility and staffing funding mechanisms include the following:	
ERM-5.13 Funding for Recreational Areas and Facilities PFS -1.3 Impact Mitigation PFS-1.4 Standards of Approval PFS-1.5 Funding for Public Facilities PFS-1.6 Funding Mechanisms PFS-1.8 Funding for Services Providers PFS Implementation Measure #3	

Recommended Mitigation Measures

In addition to the above mentioned policies and implementation measures, the following clarifying revision to Public Facilities and Services Implementation Measure #3 is recommended:

- **Implementation Measure PFS-3.** The County shall develop and adopt an impact fee program for new development to ensure the provision, operation, and on-going maintenance of appropriate public facilities and services (*including, but not limited to, fire stations and equipment, police stations and equipment, utility infrastructure, park recreational and library facilities*). [*New Implementation Program – Draft EIR Analysis*].

Significance after Implementation of Recommended Mitigation for Impacts ERM-11

As stated above, the County will continue to ensure that future development projects mitigate impacts to parks & recreation facilities through the various policies and implementation measures included in the General Plan. Therefore, implementation of the General Plan Update including the adoption of the policies and implementation measures listed above would result in a ***less-than-significant*** impact

Impact ERM-12: The General Plan Update would include recreational facilities or require the construction or expansion of recreational facilities, which would have an adverse physical effect on the environment.

Impact Summary

Level of Significance Before Mitigation: <i>Potentially Significant</i>
Required Mitigation Measures: <i>Revised Policy PFS-1.4 and the new Policy HS-8.12 “Noise Analysis”</i>
Level of Significance After Mitigation: <i>Significant and Unavoidable</i>

Impact Analysis

Similar to any other development in areas of new growth, the construction of any future required park or recreation facilities could also result in a variety of environmental impacts (i.e., conversion of existing open space/agricultural lands, noise, traffic, light/glare, etc.) that can not be mitigated. Without definitive plans, it can not be determined at this time whether these impacts would be substantial and are therefore characterized as potentially significant. The General Plan Update includes several policies designed to minimize these impacts including the premature conversion or preservation of existing agricultural/open space lands (see Policies LU-2.1, LU-2.4, AG-1.7, and ERM-1.2), analysis of air quality emissions (see AQ-1.5), visual resources (see SL-1.1), and traffic impacts (see TC-1.15). However, even with implementation of the below mentioned policies and implementation measures, this impact is considered ***potentially significant***.

Land Use, Agriculture, and Transportation & Circulation Elements	Air Quality, Scenic Landscapes, and Environmental Resources Management Elements
Policies designed to minimize this impact through the development of new facilities that address all applicable public safety and environmental concerns include the following:	
LU-2.1 Agricultural Lands LU-2.4 Open Space Character LU-7.12 Historic Buildings and Areas AG-1.7 Preservation of Agricultural Lands TC-1.15 Traffic Impact Study	AQ-1.5 CEQA Compliance SL-1.1 Natural Landscapes ERM-1.2 Development in Environmentally Sensitive Areas

Required Mitigation Measures

In addition to the above mentioned policies and implementation measures, the following revisions to Policy PFS-1.4 and the new Policy HS-8.12 “Noise Analysis” are required to address this impact:

- **PFS-1.4 Standards of Approval.** The County should not approve any development unless the following conditions are met:
 - The applicant can demonstrate all necessary infrastructure will be installed and adequately financed;
 - Infrastructure improvements are consistent with adopted County infrastructure plans and standards; ~~and~~
 - Funding mechanisms are provided to maintain, operate, and upgrade the facilities throughout the life of the project; *and*
 - *Facilities shall be designed in compliance with all applicable regulations designed to address public safety and environmental impacts that may result through the construction, operation, and maintenance of these facilities. [New Policy – Draft EIR Analysis].*
- **HS-8.12 Noise Analysis.** *The County shall require a detailed noise impact analysis in areas where current or future exterior noise levels from transportation or stationary sources have the potential to exceed the adopted noise policies of the Health and Safety Element, where there are development of new noise sensitive land uses or the development of potential noise generating land uses near existing sensitive land uses. The noise analysis shall be the responsibility of the project applicant and be prepared by a qualified acoustical specialist (i.e., a Registered Civil Engineer in the State of California, etc.). The analysis shall include recommendations and evidence to establish mitigation that will reduce noise exposure to acceptable levels. [New Policy – Draft EIR Analysis].*

As stated above, the County will continue to implement a variety of policies (including the revised Policy PFS-1.4 and the new Policy HS-8.12 “Noise Analysis”) designed to address the range of potential environmental impacts that may be associated with the construction and

operation of future County facilities or infrastructure. However, there may be instances where construction of recreational facilities result in impacts that can not mitigated. For example, similar to any other development in areas of new growth, the construction of park facilities could result in the permanent conversion of existing agricultural lands. Without definitive plans, it can not be determined at this time whether such conversion of land would be substantial and would therefore have to be characterized as significant and unavoidable. Likewise, new recreational facilities such as public pools, stadiums, ball parks, etc., could result in the introduction of significant noise and/or night time lighting in areas of sensitive receptors. Also, traffic generated by new park facilities could contribute to regional air quality impacts. However, it should be noted, the ability to mitigate these potential impacts is contingent upon a variety of factors including the severity of the impact, existing land use conditions, and the technical feasibility of being able to implement any proposed mitigation measures. Due to these uncertainties, potential impacts resulting from the construction and/or expansion of any required public utility facilities or infrastructure remain *significant*. No additional feasible mitigation is currently available.

Significance after Implementation of Mitigation for Impact ERM-12

As stated above, no additional feasible mitigation measures are currently available to reduce this impact to a less than significant level. Consequently, this impact is considered *significant and unavoidable*.

Impact ERM-13: The General Plan Update could result in land use incompatibilities with adjacent timber or forestry operations.

Impact Summary

Level of Significance Before Mitigation: Less-than- Significant
Required Mitigation Measures: No Mitigation Required
Level of Significance After Mitigation: Not Applicable

Impact Analysis

Timber lands in the County are located in the eastern portion of Tulare County in Sequoia National Forest and Sequoia and Kings Canyon National Parks. Some of the privately owned timberland areas in Tulare County are zoned as Timberland Preserve Zoning (TPZ). Land within a TPZ cannot be converted to a non-forestry use without a rezoning through the County and approval by the State Board of Forestry.

Development resulting from implementation of the General Plan Update would primarily occur in the unincorporated community or hamlet development where timber crop production does not occur, boundaries of foothill development corridors, and mountains.

The General Plan Update includes a number of policies in the Mountain Framework Plan (MFP) designed to protect timber resources. For example, Policies M-1.6, M-1.11, and M-1.12 call for the designation and protection of Resource Conservation areas those lands subject to an agricultural preserve contract, TPZ, or an approved Timber Harvesting Plan. Policy M-1.19 requires the County to continue supporting Federal agencies in the management of USFS lands for a variety of resource conservation uses. Additionally, Policy M-1.29 requires the County to encourage protect and maintenance of privately-owned forest lands. Policy ERM-5.19 of the Environmental Resources Management Element specifically describes allowable uses on timber production lands. With implementation of the below mentioned policies, this impact is considered *less-than-significant*.

Mountain Framework Plan	
Policies designed to protect and promote the efficient use of timber resources include the following:	
M-1.6 Mountain Service Areas M-1.19 USFS Support M-1.11 Resource Conservation Criteria	M-1.12 Resource Conservation Uses M-1.29 Privately-Owned Forest Lands ERM-5.19 Allowable Uses on Timber Production Lands

Required Mitigation Measures

This impact is considered *less-than-significant*. No additional mitigation measures are required.

Cultural Resources

As a result of comments (see Table 1-2 of Chapter 1.0 “Introduction”) received during the NOP public scoping phase of the General Plan Update, specific effects on cultural resources have been considered as part of the impact analysis. For example, the Center on Race, Poverty, and the Environment suggested that the EIR address impacts to cultural resources, such as the potential disturbance of human remains.

Environmental and Regulatory Setting

The General Plan Update included the preparation of several major documents including preparation of a very detailed Background Report, which serves to chronicle the existing environmental and regulatory setting conditions applicable to the County. A detailed discussion of local prehistoric, ethnographic, and historic settings for the County can be found in the General Plan Background Report (see Appendix B, Chapter 9.0 “Biological, Archaeological, and Historical Resources”).

Standards of Significance

The proposed General Plan Update will establish development guidelines against which future projects will be judged for consistency. The significance criteria for this analysis were developed from criteria presented in Section 15064.5 and Appendix G of the CEQA Guidelines and based on the professional judgment of the County and its consultants.

CEQA offers directives regarding impacts to historical resources and unique archaeological resources. CEQA states that if implementation of a project would result in significant environmental impacts, then public agencies should determine whether such impacts can be substantially lessened or avoided through feasible mitigation measures or feasible alternatives. However, only significant cultural resources (e.g., “historical resources” and “unique archaeological resources”) need to be addressed. The CEQA Guidelines define a historical resource as, among other things “a resource listed or eligible for listing on the California Register of Historical Resources” (CRHR) (State CEQA Guidelines Section 15064.5(a)(i); Public Resources Code Section 5024.1, 21084.1). A historical resource may be eligible for inclusion on the CRHR, as determined by the State Historical Resources Commission or the lead agency, if the resource¹:

- is associated with events that have made a significant contribution to the broad patterns of California’s history and cultural heritage; or
- is associated with the lives of persons important in our past; or
- embodies the distinctive characteristics of a type, period, region, or method of construction, or represents the work of an important creative individual, or possesses high artistic values; or
- has yielded, or may be likely to yield, information important in prehistory or history.

In addition, a resource is presumed to constitute an “historical resource” if it is included in a “local register of historical resources” unless “the preponderance of evidence demonstrates that it is not historically or culturally significant.” (CEQA Guidelines, Section 15064.5, subd. (a)(2)).

The State CEQA Guidelines also require consideration of unique archaeological sites (Section 15064.5) (see also Public Resources Code Section 21083.2). A “unique archaeological resource” is defined as:

an archaeological artifact, object, or site about which it can be clearly demonstrated that, without merely adding to the current body of knowledge, there is a high probability that it meets any of the following criteria: (1) Contains information needed to answer important scientific research questions and that there is a demonstrable public interest in that information. (2) Has a special and particular quality such as being the oldest of its type or the best available example of its type. (3) Is directly associated with a scientifically recognized important prehistoric or historic event or person. [Public Resources Code, Section 21083.2, subd. (h)].

If an archaeological site does not meet the criteria for inclusion on the CRHR but does meet the definition of a unique archeological resource as outlined in the Public Resource Code Section 21083.2, it is entitled to special protection or attention under CEQA. Treatment options under Section 21083.2 include activities that preserve such resources in place in an undisturbed state. Other acceptable methods of mitigation under Section 21083.2 include excavation and curation or study in place without excavation and curation.

¹ (CEQA Guidelines, Section 15064.5, subds. (a)(1), (a)(3).)

CEQA Guidelines Section 15064.5, subdivision (e), requires that excavation activities be stopped whenever human remains are uncovered and that the county coroner be called in to assess the remains. If the county coroner determines that the remains are those of Native Americans, the Native American Heritage Commission must be contacted within 24 hours. At that time, the lead agency shall consult with the appropriate Native Americans as identified by the Native American Heritage Commission. Under certain circumstances, the Native American Heritage Commission may direct the lead agency (or applicant) to develop an agreement with the Native Americans for the treatment and disposition of the remains.

For historical structures, Section 15064.5, subdivision (b)(3), indicates that a project that follows the Secretary of the Interior's Standards for the Treatment of Historic Properties with Guidelines for Preserving, Rehabilitating, Restoring, and Reconstructing Historic Buildings, or the Secretary of the Interior's Standards for Rehabilitation and Guidelines for Rehabilitating Historic Buildings (1995), shall mitigate impacts to a level of less than significant. Potential eligibility also rests upon the integrity of the resource. Integrity is defined as the retention of the resource's physical identity that existed during its period of significance. Integrity is determined through considering the setting, design, workmanship, materials, location, feeling and association of the resource.

In light of this legal background, the project (or the project alternatives) would result in a significant impact if it would:

- Cause a substantial adverse change in the significance of an historical resource as defined in Section 15064.5;
- Cause a substantial adverse change in the significance of a unique archaeological resource pursuant to Section 15064.5;
- Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature; or
- Disturb any human remains, including those interred outside of formal cemeteries.

CEQA Guidelines Section 15064 defines "substantial adverse change" as physical demolition, destruction, relocation, or alteration of the resource or its immediate surroundings.

Methodology

The assessment of impacts to cultural resources is a qualitative review of the existing cultural resource conditions (including historic, Native American, and paleontological resources) within the County and a determination of whether the General Plan Update includes adequate provisions to ensure continued protection of these resources. Impacts on particular properties or areas are not identified because specific information concerning the location and design of future development is unknown at this time. The impact analysis for the General Plan Update is general in nature, consistent with the methodology for updating the General Plan. Overall, the preferred approach for reducing impacts to cultural resources is to anticipate and avoid the specific resources if possible.

Impacts and Mitigation Measures

Impact ERM-14: The General Plan Update could cause a substantial adverse change in the significance of a historical resource as defined in Section 15064.5.

Impact Summary

Level of Significance Before Mitigation: <i>Potentially Significant</i>
Required Mitigation Measures: <i>Revised Policy ERM-6.6 “Historic Structures and Sites”</i>
Level of Significance After Mitigation: <i>Significant and Unavoidable</i>

Impact Analysis

Although most existing known historic resources are located within established Urban Development Boundaries or other areas outside the direct jurisdictional authority of the County (i.e., National Park boundaries) and are not considered as susceptible to future growth and development impacts resulting from the General Plan Update, existing identified historic resources (i.e., Colonel Allensworth Historic State Park) or those considered potentially eligible for National Register of Historic Resources listing within the County unincorporated areas could be affected through implementation of the General Plan Update. Potential impacts to these resources could result from the following development-related activities or project design elements:

- **Ground-disturbing activities.** Project-related excavation, grading, trenching, or other sub-surface disturbance could damage or destroy buried archaeological resources including prehistoric and historic remains or human burials.
- **Damage, destruction, or alteration of historic buildings or structures.** Project-related demolition, damage, or alteration of historic buildings or structures or their immediate surroundings could impair the significance of a historic resource or adversely alter those physical characteristics of an historical resource that convey its historical significance.

In developing the General Plan Update, the County has taken a key role in the preservation and enhancement of its historic resources with the development of several policies contained in the Economic Development, Land Use, Scenic Landscape, Environmental Resources Management, and FGMP Elements. For example, Policies LU-7.11, LU-7.12, and LU-7.13 promote the preservation and adaptive reuse of historic buildings and areas to preserve the County unique historic heritage. Similar policies (see Policies SL-3.1, SL-3.2, and SL-3.4) from the “Community Design” section of the Scenic Landscapes Element encourage the restoration, preservation, and integration of cultural resources into the development of new communities within the unincorporated communities and hamlet areas. The Scenic Landscapes Element also contains a number of policies (see Policies SL-2.3, SL-3.1, SL-3.2, SL-3.4, SL-4.1, and SL-4.2) designed to protect cultural or historic resources along County scenic routes and highways and to

consider the location of historic resources during the design phase of proposed roadways or highways. The FGMP Element also includes a number of policies (see F-8.1, F-8.2, and F-8.3) designed to address the important cultural resource issues of the FGMP including development of a historical sites inventory, preparation of an archaeological sensitivity map and the protection of significant cultural resource sites (i.e., Rocky Hill, etc.). Additionally, the proposed Environmental Resources Management Element also contains various policies requiring the continued implementation of State and federal standards in the evaluation of potential historic resources and call for the development of a historic resources inventory. However, even with implementation of the above mentioned policies, this impact is still considered *potentially significant*.

LAND USE, SCENIC LANDSCAPE, FOOTHILL GROWTH MANAGEMENT PLAN AND ENVIRONMENTAL RESOURCES MANAGEMENT ELEMENTS	
Policies designed to preserve and maintain historic resources in Tulare County include the following:	
LU-7.11 Adaptive Reuse LU-7.12 Historic Buildings and Areas LU-7.13 Preservation of Historic Buildings SL-2.3 Historic and Cultural Landscapes SL-3.1 Community Centers and Neighborhoods SL-3.2 Urban Expansion–Edges SL-3.4 Planned Communities SL-4.1 Design of Highways SL-4.2 Design of County Roads SL Implementation Measure #8B ERM-6.1 Evaluation of Cultural and Archaeological Resources	ERM-6.2 Protection of Resources with Potential State or Federal Designations ERM-6.3 Alteration of Sites with Identified Cultural Resources ERM-6.4 Mitigation ERM-6.5 Cultural Resources Education Programs ERM-6.6 Historic Structures and Sites ERM-6.7 Cooperation of Property Owners ERM-6.8 Solicit Input from Local Native Americans ERM-6.10 Grading Cultural Resources Sites
Policies designed to preserve and maintain FGMP historical and archaeological sites include the following:	
F-8.1 Inventory of Historical Sites F-8.2 Preparation of an Archaeological Sensitivity Map F-8.3 Protection of Historical or Archaeological Sites	

Required Mitigation Measures

In addition to the above mentioned policies and implementation measures, the following revisions to ERM-6.6 “Historic Structures and Sites” are required to address this impact:

- ERM-6.6 Historic Structures and Sites.** The County shall support public and private efforts to preserve, rehabilitate, and continue the use of historic structures, *sites*, and *Parks*. *Where applicable, preservation efforts shall conform to the current Secretary of the Interior’s Standards for the Treatment of Historic Properties and Guidelines for Preserving, Rehabilitating, Restoring, and Reconstructing Historic Buildings.* [Revised Draft EIR Analysis].

Significance after Implementation of Mitigation for Impact ERM-14

As stated above, the County will continue to ensure that a variety of preservation efforts are implemented (including the revised Policy ERM-6.6 “Historic Structures and Sites” under all future development projects to minimize impacts to historic resources (as defined in Section 15064.5). However, implementation of the General Plan Update may none the less result in a “substantial adverse change” (physical demolition, destruction, relocation, or alteration of the

resource or its immediate surroundings) through various development activities for which no possible mitigation may be available to maintain the historic integrity of the affected resource or its surroundings. For this reason, impacts to historical resources would still result in a **significant and unavoidable** impact. No additional feasible mitigation is currently available.

Impact ERM-15: The General Plan Update could cause a substantial adverse change in the significance of a unique archaeological resource as defined in Section 15064.5 and/or disturb any human remains, including those interred outside of formal cemeteries.

Impact Summary

Level of Significance Before Mitigation: <i>Potentially Significant</i>
Required Mitigation Measures: <i>Add new ERM Implementation Measures 56A “Archaeological Resource Surveys”, -56B “Discovery of Archaeological Resources”, and 56C “Discovery of Human Remains”</i>
Level of Significance After Mitigation: <i>Significant and Unavoidable for “Historical Resources” and Less-than-Significant for other “Archaeological Resources and Human Remains”</i>

Impact Analysis

Archival research indicates that most prehistoric settlement in the area was focused along major waterways, with most settlements generally occurring below 4,000-foot elevation range. Evidence from previous survey activities and site investigations of the County indicate that most prehistoric sites would consist of the following: bedrock milling stations, petroglyphs, lithic flakes, and projectile points. Due to extensive agricultural development, prehistoric site probabilities would likely be lower in the southern and western portions of the County, although it is possible to encounter archaeological deposits in almost any location throughout the County. Archaeological resources and/or human remains could be damaged or inadvertently unearthed during ground-disturbing activities such as grading, trenching, or use of staging areas.

In developing the General Plan Update, the County has taken a key role in addressing archaeological resources. Policies within the proposed FGMP and Environmental Resources Management Elements establish protocols to address archaeological resources including pre-project activities (i.e., preparation of an archaeological sensitivity map) and resource protection measures (i.e., impact mitigation, confidentiality policies, and public education, etc.). A variety of resource protection measures are outlined in Policies ERM-6.1, ERM-6.4, and ERM-6.10. Other policies call for the protection of important archaeological sites in both the FGMP area (i.e., Rocky Hill) and other culturally sensitive areas of the County (see Policies F-8.3 and ERM-6.2). Several policies (i.e., ERM-6.5 and ERM-6.7) support continued County involvement in a variety of educational programs designed to encourage continued public support of local cultural and archaeological resources. To address local Native American issues and resources, Policy ERM-6.8 requires that the County consult with representatives of the Native American Heritage

Commission at the onset of specific projects (see Policy ERM-6.8). However, even with implementation of the below mentioned policies, this impact is still considered *potentially significant*.

FOOTHILL GROWTH MANAGEMENT PLAN AND ENVIRONMENTAL RESOURCES MANAGEMENT ELEMENTS	
Policies designed to preserve and maintain County archaeological resources include the following:	
ERM-6.1 Evaluation of Cultural and Archaeological Resources	ERM-6.4 Mitigation
ERM-6.2 Protection of Resources with Potential State or Federal Designations	ERM-6.5 Cultural Resources Education Programs
ERM-6.3 Alteration of Sites with Identified Cultural Resources	ERM-6.7 Cooperation of Property Owners
	ERM-6.8 Solicit Input from Local Native Americans
	ERM-6.9 Confidentiality of Archaeological Sites
	ERM-6.10 Grading Cultural Resources Sites
Policies designed to preserve and maintain FGMP historical and archaeological sites include the following:	
F-8.1 Inventory of Historical Sites	
F-8.2 Preparation of an Archaeological Sensitivity Map	
F-8.3 Protection of Historical or Archaeological Sites	

Required Mitigation Measures

In addition to the above mentioned policies, the addition of new ERM Implementation Measures 56A “Archaeological Resource Surveys”, 56B “Discovery of Archaeological Resources”, and 56C “Discovery of Human Remains” are required to address this impact:

- ERM Implementation Measure 56A Archaeological Resource Surveys.** *Prior to project approval and after consultation, the County shall determine the need for project applicant to have a qualified archeologist conduct the following activities: (1) conduct a record search at the Regional Archaeological Information Center and other appropriate historical repositories, (2) conduct field surveys where appropriate, and (3) prepare technical reports, where appropriate, meeting California Office of Historic Preservation Standards (Archeological Resource Management Reports). [New Policy – Draft EIR Analysis].*
- ERM Implementation Measure 56B Discovery of Archaeological Resources.** *In the event that archaeological or paleontological resources are discovered during site excavation, the County shall required that grading and construction work on the project site be suspended until the significance of the features can be determined by a qualified archaeologist or paleontologist. The County will require that a qualified archeologist/paleontologist make recommendations for measures necessary to protect any site determined to contain or constitute an historical resource, a unique archaeological resource, or a unique paleontological resource or to undertake data recovery, excavation, analysis, and curation of archaeological or paleontological materials. County staff shall consider such recommendations and implement them where they are feasible in light of project design as previously approved by the County. [New Policy – Draft EIR Analysis].*
- ERM Implementation Measure 56C Discovery of Human Remains.** *Consistent with Section 7050.5 of the California Health and Safety Code and (CEQA Guidelines) Section 15064.5, if human remains of Native American origin are discovered during project construction, it is necessary to comply with state laws relating to the disposition of Native American burials, which fall within the jurisdiction of the Native American Heritage Commission (Public Resources Code Sec. 5097). If any human remains are discovered*

or recognized in any location on the project site, there shall be no further excavation or disturbance of the site or any nearby area reasonably suspected to overlie adjacent human remains until:

- a. *The Tulare County Coroner/Sheriff has been informed and has determined that no investigation of the cause of death is required; and*
- b. *if the remains are of Native American origin,*
 1. *The descendants of the deceased Native Americans have made a timely recommendation to the landowner or the person responsible for the excavation work, for means of treating or disposing of, with appropriate dignity, the human remains and any associated grave goods as provided in Public Resources Code Section 5097.98,*
 2. *The Native American Heritage Commission was unable to identify a descendant or the descendant failed to make a recommendation within 24 hours after being notified by the Commission, or*
 3. *The landowner or his or her authorized representative rejects any timely recommendations of the descendent, and mediation conducted by the Native American Heritage Commission has failed to provide measures acceptable to the landowner. [New Policy – Draft EIR Analysis].*

Significance after Implementation of Mitigation for Impact ERM-15

As stated above, the County will continue to ensure that a variety of preservation efforts are implemented (including the new ERM Implementation Measures 56A “Archaeological Resource Surveys”, 56B “Discovery of Archaeological Resources”, and 56C “Discovery of Human Remains”) under all future development projects to minimize impacts to archaeological resources (as defined in Section 15064.5), or human remains. Under CEQA, however, any "substantial adverse change in the significance of an historical resource" (e.g., the destruction of such a resource) is considered a significant environmental effect as a matter of law. Because it is possible that, after County decision-makers have approved a development project, grading activities in an area identified for development reveal an archaeological resource meeting the definition of an historical resource, and that such a previously unknown historical resource cannot be preserved or avoided without substantial redesign at significant cost, the County cannot be sure that impacts on all such historical resources can be mitigated to less than significant levels. For this reason, impacts to historical resources would still result in a ***significant and unavoidable*** impact. No additional feasible mitigation is currently available.

Similar considerations do not apply to unique archaeological resources, which therefore can be fully mitigated through data recovery where avoidance or preservation is infeasible or unnecessary. Therefore, implementation of the General Plan Update including the adoption of the policies listed above would result in ***less-than-significant*** impacts with respect to human remains and archaeological resources that do not qualify as historical resources.

Soil Resources

The ERME of the Goals and Policies Report focuses on preserving and protecting soil resources in the County for agriculture and timber productivity and to protect public health and safety. Impacts related to these issues are covered in other areas of this EIR, as follows:

- Impact HS-1 (page 4-46) addresses the loss of topsoil and erosion potential;
- Impact HS-2 (page 4-48) addresses rupture of an earthquake fault;
- Impact HS-3 (page 4-49) addresses unstable soil and geologic units; and
- Impact HS-4 (page 4-51) addresses expansive soil.

4.4 Air Quality and Global Climate Change

As a result of comments (see Table 1-2 of Chapter 1.0 “Introduction”) received during the NOP public scoping phase of the General Plan Update, specific effects from the project on air quality issues have been considered as part of the impact analysis.

Regional Air Quality Setting

The County falls within the southern portion of the San Joaquin Valley Air Basin (SJVAB), which is bordered on the east by the Sierra Nevada range, on the west by the Coast Ranges, and on the south by the Tehachapi Mountains. These features restrict air movement through and out of the SJVAB. As noted in the Background Report (Chapter 6.0 “Air Quality”) the SJVAB topography and climate are two factors that create poor air quality conditions. When an upper layer of warm air forms over the Valley, it traps cooler air along with pollutants at ground level within this natural basin creating a temperature inversion. When there are long periods of stable air, temperature inversions form at elevations between 2,500 and 3,000 feet. Pollutants that are trapped under these inversions cannot rise and subsequently cannot be removed from the Valley through upper air circulation. Thus they remain near the Valley floor continuing to build. Additionally, the SJVAB is highly susceptible to pollutant accumulation over time due to the transport of pollutants into the SJVAB from upwind sources. Stationary emission sources in the County include the use of cleaning and surface coatings and industrial processes, road dust, local burning, construction/demolition activities, and fuel combustion. Mobile emissions are primarily generated from the operation of motor vehicles. According to air quality monitoring data (see Table 6-2 of the Background Report), the County (including the larger air basin area) has been in violation for exceeding ozone and PM10 emission standards for several years. Additional information regarding the County’s air quality conditions as well as a complete air quality regulatory setting is provided in Chapter 6.0 “Air Quality” of the Background Report, included as Appendix B of this EIR. Because regulatory and setting information for Global Climate Change is not provided in the Background Report, this information is provided in the following paragraphs.

Regulatory Setting for Global Climate Change

In 2005, in recognition of California's vulnerability to the effects of climate change, Governor Schwarzenegger established Executive Order S-3-05, which sets forth a series of target dates by which statewide emission of greenhouse gas would be progressively reduced, as follows:

- By 2010, reduce greenhouse gas emissions to 2000 levels;
- By 2020, reduce greenhouse gas emissions to 1990 levels; and
- By 2050, reduce greenhouse gas emissions to 80 percent below 1990 levels.

In 2006, California passed the California Global Warming Solutions Act of 2006 (Assembly Bill No. 32; California Health and Safety Code Division 25.5, Sections 38500, et seq., or AB 32), which requires the California Air Resources Board (CARB) to design and implement emission limits, regulations, and other measures, such that feasible and cost-effective statewide greenhouse gas emissions are reduced to 1990 levels by 2020 (representing an approximate 25 percent reduction in emissions).

In June 2007 CARB directed staff to pursue 37 early actions for reducing greenhouse gas emissions under the California Global Warming Solutions Act of 2006 (AB 32). The broad spectrum of strategies to be developed – including a Low Carbon Fuel Standard, regulations for refrigerants with high global warming potentials, guidance and protocols for local governments to facilitate greenhouse gas reductions, and green ports – reflects that the serious threat of climate change requires action as soon as possible (CARB, 2007a).

In addition to approving the 37 greenhouse gas reduction strategies, CARB directed staff to further evaluate early action recommendations made at the June 2007 meeting, and to report back to CARB within six months. The general sentiment of CARB suggested a desire to try to pursue greater greenhouse gas emissions reductions in California in the near-term. Since the June 2007 CARB hearing, CARB staff has evaluated all 48 recommendations submitted by several stakeholder and several internally-generated staff ideas and published the *Draft List of Early Action Measures To Reduce Greenhouse Gas Emissions In California Recommended For Board Consideration* in September 2007 (CARB, 2007a). Based on its additional analysis, CARB staff is recommending the expansion of the early action list to a total of 44 measures, which are listed below in Table 4-1. Three of these early action items were approved by the Board at its June 2007 hearing, listed as ID# 15, 16 and 17 in Table 4-1.

The 2020 target reductions are currently estimated to be 174 MMTCO₂E (million metric tons of carbon dioxide equivalents). In total, the 44 recommended early actions have the potential to reduce greenhouse gas emissions by at least 42 million metric tons of carbon dioxide (CO₂) equivalent (MMTCO₂E) emissions by 2020, representing about 25% of the estimated reductions needed by 2020. CARB staff is working on 1990 and 2020 greenhouse gas emission inventories in order to refine the projected reductions needed by 2020 and expects to present its recommendations to the CARB by the end of 2007. The 44 measures are in the sectors of fuels, transportation, forestry, agriculture, education, energy efficiency, commercial, solid waste, cement, oil and gas, electricity, and fire suppression.

In addition to identifying early actions to reduce greenhouse gases, the CARB is also developing the greenhouse gas mandatory reporting regulation that is required by January 1, 2008 pursuant to requirements of AB32. The regulations are expected to require reporting for certain types of facilities that make up the bulk of the stationary source emissions in California. Currently, the draft regulation language identifies major facilities as those that generate more than 25,000 metric tons of CO₂ per year (CO₂/yr). This reporting limit is consistent with European Union reporting. Cement plants, oil refineries, electric generating facilities/providers, co-generation facilities, and hydrogen plants and other stationary combustion sources that emit more than 25,000 MT CO₂/yr, make up 94 percent of the point source CO₂ emissions in California (CARB, 2007b).

**TABLE 4-1
RECOMMENDED AB32 GREENHOUSE GAS MEASURES TO BE
INITIATED BY CARB BETWEEN 2007 AND 2012**

ID #	Sector	Strategy Name
1	Fuels	Above Ground Storage Tanks
2	Transportation	Diesel – Offroad equipment (non-agricultural)
3	Forestry	Forestry protocol endorsement
4	Transportation	Diesel – Port trucks
5	Transportation	Diesel – Vessel main engine fuel specifications
6	Transportation	Diesel – Commercial harbor craft
7	Transportation	Green ports
8	Agriculture	Manure management (methane digester protocol)
9	Education	Local gov. Greenhouse Gas (GHG) reduction guidance / protocols
10	Education	Business GHG reduction guidance / protocols
11	Energy Efficiency	Cool communities program
12	Commercial	Reduce high Global Warming Potential (GWP) GHGs in products
13	Commercial	Reduction of PFCs from semiconductor industry
14	Transportation	SmartWay truck efficiency
15*	Transportation	Low Carbon Fuel Standard (LCFS)
16*	Transportation	Reduction of HFC-134a from DIY Motor Vehicle AC servicing
17*	Waste	Improved landfill gas capture
18	Fuels	Gasoline dispenser hose replacement
19	Fuels	Portable outboard marine tanks
20	Transportation	Standards for off-cycle driving conditions
21	Transportation	Diesel – Privately owned on-road trucks
22	Transportation	Anti-idling enforcement
23	Commercial	SF ₆ reductions from the non-electric sector
24	Transportation	Tire inflation program
25	Transportation	Cool automobile paints
26	Cement	Cement (A): Blended cements
27	Cement	Cement (B): Energy efficiency of California cement facilities
28	Transportation	Ban on HFC release from Motor Vehicle AC service / dismantling
29	Transportation	Diesel – offroad equipment (agricultural)
30	Transportation	Add AC leak tightness test and repair to Smog Check
31	Agriculture	Research on GHG reductions from nitrogen land applications

**TABLE 4-1
RECOMMENDED AB32 GREENHOUSE GAS MEASURES TO BE
INITIATED BY CARB BETWEEN 2007 AND 2012**

ID #	Sector	Strategy Name
32	Commercial	Specifications for commercial refrigeration
33	Oil and Gas	Reduction in venting / leaks from oil and gas systems
34	Transportation	Requirement of low-GWP GHGs for new Motor Vehicle ACs
35	Transportation	Hybridization of medium and heavy-duty diesel vehicles
36	Electricity	Reduction of SF ₆ in electricity generation
37	Commercial	High GWP refrigerant tracking, reporting and recovery program
38	Commercial	Foam recovery / destruction program
39	Fire Suppression	Alternative suppressants in fire protection systems
40	Transportation	Strengthen light-duty vehicle standards
41	Transportation	Truck stop electrification with incentives for truckers
42	Transportation	Diesel – Vessel speed reductions
43	Transportation	Transportation refrigeration – electric standby
44	Agriculture	Electrification of stationary agricultural engines

*Note: ID# 15, 16, and 17 were approved by CARB at its June 2007 meeting.
Source: CARB, 2007a

Description of Global Climate Change and Greenhouse Gases

Gases that trap heat in the atmosphere are called greenhouse gases. The major concern is that increases in greenhouse gases are causing Global Climate Change. Global Climate Change is a change in the average weather on earth that can be measured by wind patterns, storms, precipitation and temperature. Although there is disagreement as to the speed of global warming and the extent of the impacts attributable to human activities, most agree that there is a direct link between increased emission of so-called greenhouse gases and long-term global temperature. What greenhouse gases have in common is that they allow sunlight to enter the atmosphere, but trap a portion of the outward-bound infrared radiation and warm up the air. The process is similar to the effect greenhouses have in raising the internal temperature, hence the name greenhouse gases. Both natural processes and human activities emit greenhouse gases. The accumulation of greenhouse gases in the atmosphere regulates the earth's temperature; however, emissions from human activities such as electricity production and motor vehicles have elevated the concentration of greenhouse gases in the atmosphere. This accumulation of greenhouse gases has contributed to an increase in the temperature of the earth's atmosphere and contributed to Global Climate Change. The principal greenhouse gases are carbon dioxide (CO₂), methane (CH₄), nitrous oxide (N₂O), sulfur hexafluoride (SF₆), perfluorocarbons (PFCs), hydrofluorocarbons (HFCs), and water vapor (H₂O). Carbon dioxide is the reference gas for climate change because it gets the most attention and is considered the most important greenhouse gas. To account for the warming potential of greenhouse gases, greenhouse gas emissions are often quantified and reported as CO₂ equivalents (CO₂E). Large emission sources are reported in million metric tons of CO₂E (MMTCO₂E). HFCs are used in refrigeration systems as substitutes for CFCs, which were banned for depleting the ozone layer.

CO₂ and methane are the primary greenhouse gases that would result from buildout of the General Plan Update. CO₂ is the first-most significant greenhouse gas that contributes to global warming, followed by methane. CO₂ is generated by all material combustion and would be associated with development through the operation of trucks, mobile equipment, and automobiles. Methane is emitted into the environment from various sources, including ruminant livestock and manure decomposition from dairy and feedlot operations. Methane generation from ruminant animals is influenced by feed quality, essential nutrients in the feed, feeding level and schedule, and animal health.

Methodology

Buildout of the General Plan Update will allow planned development to occur within both developed and undeveloped portions of the County. While buildout will ultimately be market driven, for modeling purposes this analysis is based on the assumption that most uses will be developed by the year 2030 and emissions were estimated for this planning horizon. This analysis is based on thresholds included in the SJVAPCD's *Guide for Assessing and Mitigating Air Quality Impacts (GAMAQI)* (SJVAPCD, 2002) and traffic information provided by the Tulare County Association of Governments (TCAG, 2007a).

The operational emissions analysis included in the *Draft Conformity Analysis for the 2007 Tulare County Federal Transportation Improvement Program and 2007 Tulare County Regional Transportation Plan* (TCAG, 2007b) is based on the EMFAC 2002 model rather than EMFAC 2007. However, as described on page 30 of the Tulare County *Draft Conformity Analysis*:

It is important to note that EMFAC 2007 was released on November 1, 2006. However, the model has not yet been submitted to EPA for approval. As a result, it is not required to be used in transportation conformity analyses at this time. In addition, FHWA California Division issued a letter dated February 1, 2007 that indicated that a six-month transitional period would begin for using the new vehicle fleet data in conformity demonstrations. Conformity determinations where emission modeling is started after August 1, 2007, must use the updated vehicle fleet data.

Notably, the emissions analyzed and presented below have been quantified based on the EMFAC2007 emissions model for on-road vehicles. Dairy and feedlot associated emissions in Tulare County are based on information provided in the *Tulare County Draft Phase I Animal Confinement Facilities Plan Supplemental Program EIR* (Jones and Stokes, 2006), which assumed buildout by the year 2020.

Standards of Significance

The proposed Tulare County 2030 General Plan will establish development guidelines against which future projects will be judged for consistency. The significance criteria for this analysis were developed from criteria presented in Appendix G, the "Environmental Checklist", of the

CEQA Guidelines and based on the professional judgment of the County of Tulare and its consultants. The project (or the project alternatives) would result in a significant impact if it would:

- Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is a nonattainment area for an applicable federal or state ambient air quality standard (including releasing emissions that exceed quantitative thresholds for ozone precursors);
- Conflict with or obstruct implementation of the applicable air quality plan;
- Violate any air quality standard or contribute substantially to an existing or projected air quality violation;
- Expose sensitive receptors to substantial pollutant concentrations;
- Create objectionable odors affecting a substantial number of people; or
- Conflict with the state goal of reducing greenhouse gas emissions in California to 1990 levels by 2020, as set forth by the timetable established in AB 32, California Global Warming Solutions Act of 2006.

The SJVAPCD's *GAMAQI* (SJVAPCD, 2002) also includes significance criteria for evaluating operational-phase emissions from direct and indirect sources associated with a project. Indirect sources include motor vehicle traffic resulting from the project and do not include stationary sources covered under permit with the SJVAPCD. For this analysis, the project would be considered to have a significant effect on the environment if it would exceed the following thresholds:

- Cause a net increase in pollutant emissions of reactive organic gases (ROG) or NO_x exceeding 10 tons per year.
- Cause a violation of state CO concentration standards. The level of significance of CO emissions from mobile sources is determined by modeling the ambient concentration under project conditions and comparing the resultant 1- and 8-hour concentrations to the respective state CO standards of 20.0 and 9.0 parts per million.
- Cause "visible dust emissions" due to onsite operations and thereby violate SJVAPCD Regulation VIII.²

Although the SJVAPCD *GAMAQI* recognizes that PM₁₀ is a major air quality issue in the basin, it does not establish quantitative thresholds for potential impact significance. However, for the purposes of this analysis, a PM₁₀ emission of 15 tons per year is used as a significance threshold (based on recommendation by the SJVAPCD). 15 tons per year is the SJVAPCD threshold level at which new stationary sources requiring SJVAPCD permits must provide emissions "offsets".

² Visible dust is defined by the SJVAPCD as "visible dust of such opacity as to obscure an observer's view to a degree equal to or greater than an opacity of 40 percent, for a period or periods aggregating more than three minutes in any one hour."

This threshold of significance for PM10 is consistent with the ROG and NOx thresholds of 10 tons per year, which are also offset thresholds established in SJVAPCD Rule 2201.

In addition, the operation of any project with the potential to expose sensitive receptors to substantial levels of toxic air contaminants (TACs) would be deemed to have a potentially significant air quality impact as well. More specifically, proposed development projects that have the potential to expose the public to project-related TACs in excess of the following thresholds would be considered to have a significant air quality impact:

- Probability of contracting cancer for the Maximally Exposed Individual exceeds 10 in one million.
- Ground-level concentrations of non-carcinogenic TACs would result in a Hazard Index greater than 1.

Application of these standards would typically apply to the preparation of a more detailed project-specific health risk assessment (based on a detailed air dispersion modeling effort) that would occur as individual projects are considered as part of the General Plan Update. For the General Plan Update, the assessment of TACs is conducted at a qualitative level with specific policies and implementation measures provided to address the potential impacts associated with this issue.

Impacts and Mitigation Measures

Impact AQ-1: The General Plan Update would result in a cumulatively considerable net increase of air pollutants. Future growth in accordance with the General Plan Update would exceed the SJVAPCD thresholds for ROG and PM-10.

Impact Summary

Level of Significance Before Mitigation: <i>Potentially Significant</i>
Required Mitigation Measures: <i>New Policies AQ-4.6 and AQ-4.7</i>
Level of Significant After Mitigation: <i>Significant and Unavoidable</i>

Impact Analysis

Construction

Construction activity that would occur over the next 23 years in accordance with the General Plan Update would cause temporary, short-term emissions of various air pollutants. Reactive organic gases (ROG) and nitrogen oxides (NOx), which are ozone precursors, as well as particulate matter (PM-10 and PM-2.5) and CO₂ (a greenhouse gas) would be emitted by construction equipment during various activities, such as grading and excavation, infrastructure construction, building demolition, and a variety of construction activities. Information regarding specific

development projects, soil conditions, and the location of sensitive receptors in relation to the various projects would be needed in order to quantify the level of impact associated with construction activity. However, given the amount of development associated with implementation of the General Plan Update, it is reasonable to assume that some large-scale construction activity would exceed SJVAPCD adopted thresholds over the next 23 years. Actual significance would be determined on a project-by-project basis as future development applications are submitted. Additionally, a variety of policies are designed to address construction-related air quality impacts including requiring contractors to implement appropriate dust suppression measures (see policies AQ-4.1 through AQ-4.3 below).

Operation

Operational impacts would primarily result from local and regional vehicle emissions generated by future population growth and dairy and feedlot development associated with buildout of the General Plan Update. The annual emissions of ROG, NOx, CO, CO₂, PM-10, and PM-2.5 associated with General Plan Update traffic for the analysis year 2030 were estimated using the EMFAC2007 model and traffic information provided by the TCAG. Dairy and feedlot operational emissions were estimated in the *Tulare County Draft Phase I Animal Confinement Facilities Plan Supplemental Program EIR* (Jones and Stokes, 2006). These operational emissions are provided below in Table 4-2. As shown in the table, future growth in accordance with the General Plan Update would exceed the SJVAPCD thresholds for ROG and PM-10. Greenhouse gas (CO₂ and methane) emissions are discussed further in Impact AQ-5.

Although traffic and dairy emissions would be the primary contributor to operational emissions, an increase in stationary source emissions is also anticipated with buildout of the General Plan Update. Emissions will be generated from a variety of stationary sources including the use of natural gas, the use of landscape maintenance equipment, and the use of woodburning fireplaces. In addition, CO₂, which is not a criteria pollutant but a major contributor to global climate change, would be generated by indirect sources associated with electricity generation. Information regarding specific development projects would be needed in order to quantify the area and indirect source emissions. A variety of industrial and commercial processes (e.g., dry cleaning, etc.) allowed under the General Plan Update would also be expected to release emissions; some of which could be of a hazardous nature. These emissions are controlled at the local and regional level through permitting and would be subject to further study and a health risk assessment prior to the issuance of any necessary air quality permits.

**TABLE 4-2
TULARE COUNTY ONROAD VEHICLE AND DAIRY/FEEDLOT OPERATIONAL EMISSIONS
(TONS PER YEAR)**

Emissions Source	Unmitigated Operational Emissions (Tons/Year)							
	ROG	NOx	CO ₂	CO	PM-10	PM-2.5	Methane	Ammonia
Tulare County Onroad Vehicle Emissions^a								
Existing (Year 2007)	1,270	4,964	1,997,046	26,069	3,007	2,977	NA	NA
Buildout (Year 2030)	652	3,082	3,446,934	10,848	5,041	4,991	NA	NA

Incremental Increase	(618) ^b	(1,882) ^b	1,449,888	(15,221) ^b	2,034	2,014	NA	NA
Tulare County Dairy and Feedlot Emissions^c								
Existing	6,829	1,445	NA	NA	3,942	758	145,279	26,126
Future	9,399	1,946	NA	NA	5,190	1,008	158,794	335,813
Incremental Increase	2,570	501	NA	NA	1,248	250	13,515	309,687
Total Incremental Increased	1,952	(1,381)	1,449,888	(15,221)	3,282	2,264	13,515	309,687
SJVAPCD Significance Criteria	10	10	NA	NA	15	NA	NA	NA
Significant? (Yes or No)	Yes	No	NA	NA	Yes	NA	NA	NA

^a Onroad vehicle emissions were estimated with the EMFAC2007 model using traffic information provided by the TCAG (TCAG, 2007a). Please see Appendix D for additional information.

^b Values in (parentheses) represent calculated reductions in future year emissions versus the existing scenario. ROG, NOx, and CO were estimated to decrease in the future scenario due to decreased emission factors in the future year. These emission factors generated by EMFAC2007 assume a cleaner mix of vehicles as older, more polluting vehicles are retired.

^c Dairy and feedlot emissions are from the *Tulare County Draft Phase I Animal Confinement Facilities Plan Supplemental Program EIR* (Jones and Stokes, 2006).

^d Bold values are in excess of the applicable standard. The SJVAPCD established thresholds for ROG and NOx are 10 tons per year, PM-10 is 15 tons per year, and CO, PM-2.5, CO₂, Methane, and Ammonia do not have an established emissions threshold of significance.

SOURCE: ESA, 2007; TCAG, 2007a; Jones and Stokes, 2006.

Policies included as part of the General Plan Update that would minimize this impact are summarized below. However, even with implementation of the below mentioned policies, this impact is considered *potentially significant*.

Policies designed to improve air quality through a regional approach and interagency cooperation include the following: AQ-1.1 Cooperation with Other Agencies AQ-1.2 Cooperation with Local Jurisdictions AQ-1.3 Cumulative Air Quality Impacts AQ-1.4 Air Quality Land Use Compatibility AQ-1.5 CEQA Compliance AQ-1.6 Purchase of Low Emission/Alternative Fuel Vehicles AQ-1.7 Support Statewide Global Warming Solutions
Policies designed to improve air quality by reducing air emissions related to transportation include the following: AQ-2.1 Transportation Demand Management Programs AQ-2.2 Indirect Source Review AQ-2.3 Transportation and Air Quality AQ-2.4 Transportation Management Associations AQ-2.5 Ridesharing AQ Implementation Measure #12
Policies designed to improve air quality and minimize impacts to human health and the economy of the county through smart land use planning and design include the following: AQ-3.1 Location of Support Services AQ-3.2 Infill Near Employment AQ-3.3 Street Design AQ-3.4 Landscape AQ-3.5 Alternative Energy Design AQ-3.6 Mixed Land Uses AQ Implementation Measure #9A and #9B
Policies designed to implement the best available controls and monitoring to regulate air emissions include the following: AQ-4.1 Air Pollution Control Technology AQ-4.2 Dust Suppression Measures AQ-4.3 Paving or Treatment of Roadways for Reduced Air Emissions

AQ-4.4 Wood Burning Devices
Policies designed to encourage economic and social growth while retaining quality of life standards include the following:
LU-1.1 Smart Growth and Healthy Communities LU-1.2 Innovative Development LU-1.3 Prevent Incompatible Uses LU-1.4 Compact Development LU-1.8 Encourage Infill Development
Policies designed to encourage energy conservation in new and developing developments include the following:
ERM-4.1 Energy Conservation and Efficiency Measures ERM-4.2 Streetscape and Parking Area Improvements for Energy Conservation ERM-4.3 Local and State Programs ERM-4.4 Promote Energy Conservation Awareness ERM-4.5 Advance Planning ERM-4.6 Renewable Energy

Required Mitigation Measures

In addition to the above mentioned policies and implementation measures, the following new policies associated with dairy and feedlot operations are required to address this impact:

- **AQ-4.6 PM-10 and PM-2.5 Reduction Measures for Dairy and Feedlot Operations.**

The County shall ensure that dairy and feedlot operators implement the following particulate matter reduction measures as part of all dairy operations:

- A Fugitive Dust Emissions Control Plan (FDECP) shall be submitted with all applications for new or expanded dairies and feedlots. The plan shall describe and demonstrate compliance with SJVAPCD fugitive dust emissions control requirements.
- The dairy or feedlot operator shall minimize fugitive dust emissions from cattle movement in and out of corrals using soil stabilizers that are safe for both the ambient environment and cattle.
- In addition to daily flushing of paved areas, manure shall be removed from all cattle areas as required to prevent pulverization of dried manure.
- Maintain a manure pack less than 2 inches deep.
- Refrain from spreading dry manure on nutrient application areas when wind speeds exceed 10 miles an hour.
- Disc dry manure into nutrient application fields immediately after spreading.
- Field perimeter roads and onsite dairy or feedlot facility roads shall be paved or stabilized with gravel, decomposed granite, or equivalent dust control treatment such that no visible dust clouds extend beyond the site boundary from manure spreading or agricultural vehicles using these roads.
- Mud or dirt on public roads adjacent to the dairies or feedlots that originates from operations shall be removed within 24 hours of deposition.

- Dry feed storage shall be protected on three sides to prevent material loss and transport due to wind erosion.
- All dairies and feedlots shall comply with the control measures for fugitive dust from agricultural sources established by the most recently adopted SJVAPCD Regulation VIII. The FDECP shall specify these control measures to be implemented during dairy operation.
- Conduct AERMOD dispersion analysis using the 24-hour 10.4 $\mu\text{g}/\text{m}^3$ PM-10 threshold on a case-by-case basis, to be submitted with a new or expanded dairy or feedlot application.
- **AQ-4.7 ROG Reduction Measures for Dairy and Feedlot Operations.** The County shall ensure that dairy operators implement the following ROG reduction measures as part of all dairy operations:
 - The General Plan Update shall comply with SJVAPCD Rule 4570 (Confined Animal Facilities), which provides dairies with several options for reducing ROG, including:
 - feed manipulation,
 - improvement of manure and manure-water collection and treatment,
 - capture and treatment of effluent gases using high-technology treatment systems , and,
 - enhanced dispersion of manure and manure wastewater.
 - All animals shall be fed in accord with the National Research Council (NRC) guidelines (NRC, 2001), utilizing routine dairy nutritionist analyses of rations and maintaining feed analyses onsite for regulatory agency monitoring.
 - Feed lanes shall be cleared daily.
 - Silage piles shall be covered with tarps.
 - General Plan Update dairy and feedlot facilities design and construction shall include concrete-base freestalls and walk lanes, as well as water drainage to separator facilities.
 - Manure water shall be either injected subsurface or placed on the surface in thin layers, blending such manure water with irrigation water at a ratio in compliance with the nutrient management plan that shall be required for each dairy and feedlot.

- Design and construction of dairy and feedlot lagoons shall comply with the specifications set forth in National Conservation Practice Standard 359 (Natural Resources Conservation Service, 2003).

As stated above, the County will implement a variety of policies designed to address air quality issues. In addition to the above mentioned policies and implementation measures, new Policies AQ-4.6 and AQ-4.7 shall be implemented. Depending on the feasibility and level of implementation as applied to individual development projects consistent with the General Plan, the inclusion of additional trip reduction measures would help to further reduce vehicle-related emissions. Future project-specific compliance with SJVAPCD permitting would also help to reduce air quality emissions associated with individual projects. Also, as described in new Policy AQ-4.6 and AQ-4.7, the County will continue to ensure that a variety of PM-10, PM-2.5, and manure-related ROG reducing measures are implemented under all future dairy or feedlot development projects to minimize air quality impacts. However, total air quality emissions associated with buildout of the General Plan Update would still exceed SJVAPCD thresholds for ROG and PM-10. As a result, the impact remains *significant*. No additional feasible mitigation measures are available.

Significance after Implementation of Mitigation for Impact AQ-1

As stated above, no additional feasible mitigation measures are currently available to reduce this impact to a less than significant level. Consequently, this impact is considered *significant and unavoidable*.

Impact AQ-2: The General Plan Update would not conflict with or obstruct implementation of an applicable air quality plan.

Impact Summary

Level of Significance Before Mitigation: <i>Potentially Significant</i>
Required Mitigation Measures: <i>New Policies AQ-4.6 and AQ-4.7</i>
Level of Significant After Mitigation: <i>Less-than-Significant</i>

Impact Analysis

The General Plan Update was designed specifically to achieve and promote consistency with the planning documents of other key neighboring land use agencies or other agencies that have jurisdiction over the project. Specific policies direct the County to improve air quality through a regional approach with interagency cooperation (see policies AQ-1.1 through AQ-1.7). Other policies call for the reduction of air emissions associated with transportation (see policies AQ-2.1 through AQ-2.5). Additional policies call for a variety of strategies designed to improve air

quality through land use planning (see policies AQ-3.1 through AQ-3.6 and LU-1.1 through LU-1.4 and LU-1.8), implement the best available controls to regulate air emissions (see policies AQ-4.1 through AQ-4.5, as well as new policies AQ-4.6 through AQ-4.8 associated with dairy and feedlot operations), and encourage energy conservation (see policies ERM-4.1 through ERM-4.6). Policies included as part of the General Plan Update that would minimize this impact are summarized below. However, even with implementation of the below mentioned policies, this impact is considered *potentially significant*.

Policies designed to improve air quality through a regional approach and interagency cooperation include the following: AQ-1.1 Cooperation with Other Agencies AQ-1.2 Cooperation with Local Jurisdictions AQ-1.3 Cumulative Air Quality Impacts AQ-1.4 Air Quality Land Use Compatibility AQ-1.5 CEQA Compliance AQ-1.6 Purchase of Low Emission/Alternative Fuel Vehicles AQ-1.7 Support Statewide Global Warming Solutions
Policies designed to improve air quality by reducing air emissions related to transportation include the following: AQ-2.1 Transportation Demand Management Programs AQ-2.2 Indirect Source Review AQ-2.3 Transportation and Air Quality AQ-2.4 Transportation Management Associations AQ-2.5 Ridesharing AQ Implementation Measure #12
Policies designed to improve air quality and minimize impacts to human health and the economy of the county through smart land use planning and design include the following: AQ-3.1 Location of Support Services AQ-3.2 Infill Near Employment AQ-3.3 Street Design AQ-3.4 Landscape AQ-3.5 Alternative Energy Design AQ-3.6 Mixed Land Uses AQ Implementation Measure #9A and #9B
Policies designed to implement the best available controls and monitoring to regulate air emissions include the following: AQ-4.1 Air Pollution Control Technology AQ-4.2 Dust Suppression Measures AQ-4.3 Paving or Treatment of Roadways for Reduced Air Emissions AQ-4.4 Wood Burning Devices
Policies designed to encourage economic and social growth while retaining quality of life standards include the following: LU-1.1 Smart Growth and Healthy Communities LU-1.2 Innovative Development LU-1.3 Prevent Incompatible Uses LU-1.4 Compact Development LU-1.8 Encourage Infill Development
Policies designed to encourage energy conservation in new and developing developments include the following: ERM-4.1 Energy Conservation and Efficiency Measures ERM-4.2 Streetscape and Parking Area Improvements for Energy Conservation ERM-4.3 Local and State Programs ERM-4.4 Promote Energy Conservation Awareness ERM-4.5 Advance Planning ERM-4.6 Renewable Energy

Required Mitigation Measures

In addition to the above mentioned policies and implementation measures, Policies AQ-4.6 and AQ-4.7 shall be implemented to address this impact:

- AQ-4.6 PM-10 and PM-2.5 Reduction Measures for Dairy and Feedlot Operations.**
 The County shall ensure that dairy and feedlot operators implement the following particulate matter reduction measures as part of all dairy operations:

- A Fugitive Dust Emissions Control Plan (FDECP) shall be submitted with all applications for new or expanded dairies and feedlots. The plan shall describe and demonstrate compliance with SJVAPCD fugitive dust emissions control requirements.
 - The dairy or feedlot operator shall minimize fugitive dust emissions from cattle movement in and out of corrals using soil stabilizers that are safe for both the ambient environment and cattle.
 - In addition to daily flushing of paved areas, manure shall be removed from all cattle areas as required to prevent pulverization of dried manure.
 - Maintain a manure pack less than 2 inches deep.
 - Refrain from spreading dry manure on nutrient application areas when wind speeds exceed 10 miles an hour.
 - Disc dry manure into nutrient application fields immediately after spreading.
 - Field perimeter roads and onsite dairy or feedlot facility roads shall be paved or stabilized with gravel, decomposed granite, or equivalent dust control treatment such that no visible dust clouds extend beyond the site boundary from manure spreading or agricultural vehicles using these roads.
 - Mud or dirt on public roads adjacent to the dairies or feedlots that originates from operations shall be removed within 24 hours of deposition.
 - Dry feed storage shall be protected on three sides to prevent material loss and transport due to wind erosion.
 - All dairies and feedlots shall comply with the control measures for fugitive dust from agricultural sources established by the most recently adopted SJVAPCD Regulation VIII. The FDECP shall specify these control measures to be implemented during dairy operation.
 - Conduct AERMOD dispersion analysis using the 24-hour 10.4 $\mu\text{g}/\text{m}^3$ PM-10 threshold on a case-by-case basis, to be submitted with a new or expanded dairy or feedlot application.
- **AQ-4.7 ROG Reduction Measures for Dairy and Feedlot Operations.** The County shall ensure that dairy operators implement the following ROG reduction measures as part of all dairy operations:
 - The General Plan Update shall comply with SJVAPCD Rule 4570 (Confined Animal Facilities), which provides dairies with several options for reducing ROG, including:

- feed manipulation,
 - improvement of manure and manure-water collection and treatment,
 - capture and treatment of effluent gases using high-technology treatment systems , and,
 - enhanced dispersion of manure and manure wastewater.
- All animals shall be fed in accord with the National Research Council (NRC) guidelines (NRC, 2001), utilizing routine dairy nutritionist analyses of rations and maintaining feed analyses onsite for regulatory agency monitoring.
 - Feed lanes shall be cleared daily.
 - Silage piles shall be covered with tarps.
 - General Plan Update dairy and feedlot facilities design and construction shall include concrete-base freestalls and walk lanes, as well as water drainage to separator facilities.
 - Manure water shall be either injected subsurface or placed on the surface in thin layers, blending such manure water with irrigation water at a ratio in compliance with the nutrient management plan that shall be required for each dairy and feedlot.
 - Design and construction of dairy and feedlot lagoons shall comply with the specifications set forth in National Conservation Practice Standard 359 (Natural Resources Conservation Service, 2003).

Significance after Implementation of Mitigation for Impact AQ-2

Implementation of the above policies would ensure that the General Plan Update would not conflict with applicable air quality plans and that this impact would be *less-than-significant*.

Impact AQ-3: The General Plan Update would expose sensitive receptors to substantial pollutant concentrations.

Impact Summary

Level of Significance Before Mitigation: <i>Potentially Significant</i>
Required Mitigation Measures: <i>New Policies AQ-6 and AQ-7</i>
Level of Significant After Mitigation: <i>Significant and Unavoidable</i>

Impact Analysis

Development resulting from buildout of the General Plan Update could place sensitive land uses near local intersections or roadways associated with air pollutant emissions that exceed State or federal ambient air quality standards. Similarly, existing sensitive land uses near local roadways that experience increased levels of traffic resulting from buildout of the General Plan Update could be exposed to air pollutant emissions that exceed State and/or federal ambient air quality standards. In addition to these air pollutant emissions, a variety of Toxic Air Contaminant (TAC) emissions could also be released from various construction and operations (i.e., dairy or feedlot operations, industrial processes, diesel equipment and vehicles) associated with the General Plan Update. The California Air Resources Board has declared that diesel particulate matter from diesel engine exhaust is a TAC. Additionally, the California Office of Environmental Health Hazard Assessment (OEHHA) has determined that chronic exposure to DPM can cause carcinogenic and non-carcinogenic health effects. Ammonia is also considered a TAC and is a precursor to PM2.5. Ammonia is generated during anaerobic composition of manure.

Policies included as part of the General Plan Update to help address a variety of issues (including air quality and TAC concerns) associated with the inappropriate siting of sensitive land uses near other incompatible uses include policies AQ-3.1 through AQ-3.6 and LU-1.1 through LU-1.4, and LU-1.8. Additionally, subsequent CEQA documentation prepared for individual projects would have project-specific data and will be required to address, and to the extent feasible, mitigate any significant or potentially significant air quality impacts to a less-than-significant level. Examples of mitigation that may be proposed include intersection/roadway capacity improvements or additional land use siting and required setbacks. However, it should be noted, the ability to mitigate these potential impacts is contingent on a variety of factors including the severity of the air quality impact, existing land use conditions and the technical feasibility of being able to implement any proposed mitigation measures (e.g., relocations, road widening, etc.).

Policies included as part of the General Plan Update that would minimize this impact are summarized below. Also, implementation of the new Policy AQ-4.6 requires the County to ensure that dairy and feedlot operators implement a variety of ROG reduction measures that would reduce manure-related ROG emissions, which would also reduce emissions of ammonia and hydrogen sulfide. However, even with implementation of these policies, this impact is still considered *potentially significant*.

Policies designed to improve air quality through a regional approach and interagency cooperation include the following:
AQ-1.1 Cooperation with Other Agencies AQ-1.2 Cooperation with Local Jurisdictions AQ-1.3 Cumulative Air Quality Impacts AQ-1.4 Air Quality Land Use Compatibility AQ-1.5 CEQA Compliance AQ-1.6 Purchase of Low Emission/Alternative Fuel Vehicles AQ-1.7 Support Statewide Global Warming Solutions
Policies designed to improve air quality by reducing air emissions related to transportation include the following:
AQ-2.1 Transportation Demand Management Programs AQ-2.2 Indirect Source Review AQ-2.3 Transportation and Air Quality AQ-2.4 Transportation Management Associations AQ-2.5 Ridesharing AQ Implementation Measure #12
Policies designed to improve air quality and minimize impacts to human health and the economy of the county through

smart land use planning and design include the following:
AQ-3.1 Location of Support Services AQ-3.2 Infill Near Employment AQ-3.3 Street Design AQ-3.4 Landscape AQ-3.5 Alternative Energy Design AQ-3.6 Mixed Land Uses AQ Implementation Measure #9A and #9B
Policies designed to implement the best available controls and monitoring to regulate air emissions include the following:
AQ-4.1 Air Pollution Control Technology AQ-4.2 Dust Suppression Measures AQ-4.3 Paving or Treatment of Roadways for Reduced Air Emissions AQ-4.4 Wood Burning Devices
Policies designed to encourage economic and social growth while retaining quality of life standards include the following:
LU-1.1 Smart Growth and Healthy Communities LU-1.2 Innovative Development LU-1.3 Prevent Incompatible Uses LU-1.4 Compact Development LU-1.8 Encourage Infill Development
Policies designed to encourage energy conservation in new and developing developments include the following:
ERM-4.1 Energy Conservation and Efficiency Measures ERM-4.2 Streetscape and Parking Area Improvements for Energy Conservation ERM-4.3 Local and State Programs ERM-4.4 Promote Energy Conservation Awareness ERM-4.5 Advance Planning ERM-4.6 Renewable Energy

Required Mitigation Measures

As stated above, the County will implement a variety of policies designed to address air quality issues. The County will also continue to discourage the siting of industrial or dairy/feedlot uses near sensitive land uses. In addition, the County will ensure that future CEQA documentation be prepared for individual projects (with project-specific data) that will (if technically possible) mitigate any potential air quality impacts to a less-than-significant level. In addition to the above mentioned policies and implementation measures, the following new policies associated with dairy and feedlot operations are required to address this impact:

- **AQ-4.6 PM-10 and PM-2.5 Reduction Measures for Dairy and Feedlot Operations.**
The County shall ensure that dairy and feedlot operators implement the following particulate matter reduction measures as part of all dairy operations:
 - A Fugitive Dust Emissions Control Plan (FDECP) shall be submitted with all applications for new or expanded dairies and feedlots. The plan shall describe and demonstrate compliance with SJVAPCD fugitive dust emissions control requirements.
 - The dairy or feedlot operator shall minimize fugitive dust emissions from cattle movement in and out of corrals using soil stabilizers that are safe for both the ambient environment and cattle.
 - In addition to daily flushing of paved areas, manure shall be removed from all cattle areas as required to prevent pulverization of dried manure.
 - Maintain a manure pack less than 2 inches deep.

- Refrain from spreading dry manure on nutrient application areas when wind speeds exceed 10 miles an hour.
 - Disc dry manure into nutrient application fields immediately after spreading.
 - Field perimeter roads and onsite dairy or feedlot facility roads shall be paved or stabilized with gravel, decomposed granite, or equivalent dust control treatment such that no visible dust clouds extend beyond the site boundary from manure spreading or agricultural vehicles using these roads.
 - Mud or dirt on public roads adjacent to the dairies or feedlots that originates from operations shall be removed within 24 hours of deposition.
 - Dry feed storage shall be protected on three sides to prevent material loss and transport due to wind erosion.
 - All dairies and feedlots shall comply with the control measures for fugitive dust from agricultural sources established by the most recently adopted SJVAPCD Regulation VIII. The FDECP shall specify these control measures to be implemented during dairy operation.
 - Conduct AERMOD dispersion analysis using the 24-hour 10.4 $\mu\text{g}/\text{m}^3$ PM-10 threshold on a case-by-case basis, to be submitted with a new or expanded dairy or feedlot application.
- **AQ-4.7 ROG Reduction Measures for Dairy and Feedlot Operations.** The County shall ensure that dairy operators implement the following ROG reduction measures as part of all dairy operations:
 - The General Plan Update shall comply with SJVAPCD Rule 4570 (Confined Animal Facilities), which provides dairies with several options for reducing ROG, including:
 - feed manipulation,
 - improvement of manure and manure-water collection and treatment,
 - capture and treatment of effluent gases using high-technology treatment systems , and,
 - enhanced dispersion of manure and manure wastewater.
 - All animals shall be fed in accord with the National Research Council (NRC) guidelines (NRC, 2001), utilizing routine dairy nutritionist analyses of rations and maintaining feed analyses onsite for regulatory agency monitoring.
 - Feed lanes shall be cleared daily.

- Silage piles shall be covered with tarps.
- General Plan Update dairy and feedlot facilities design and construction shall include concrete-base freestalls and walk lanes, as well as water drainage to separator facilities.
- Manure water shall be either injected subsurface or placed on the surface in thin layers, blending such manure water with irrigation water at a ratio in compliance with the nutrient management plan that shall be required for each dairy and feedlot.
- Design and construction of dairy and feedlot lagoons shall comply with the specifications set forth in National Conservation Practice Standard 359 (Natural Resources Conservation Service, 2003).

Significance after Implementation of Mitigation for Impact AQ-3

Given the uncertainty as to whether future air quality impacts associated with the potential exposure of sensitive receptors to substantial pollutant concentrations could be adequately mitigated, this impact remains *significant and unavoidable*.

Impact AQ-4: The General Plan Update would not create objectionable odors affecting a substantial number of people.

Impact Summary

Level of Significance Before Mitigation: <i>Potentially Significant</i>
Required Mitigation Measures: <i>New Policies AQ-4.7 and AQ-4.8</i>
Level of Significant After Mitigation: <i>Less-than-Significant</i>

Impact Analysis

Construction activity will require the operation of equipment which may generate exhaust from either gasoline or diesel fuel. Construction of new buildings will also require the application of architectural coatings and the paving of roads which would generate odors from materials such as paints and asphalt. However, these odors are of a temporary or short-term nature and quickly disperse into the surrounding atmosphere.

Future residential and commercial development would also involve minor, odor-generating activities, such as backyard barbeque smoke, garden equipment exhaust, and the application of exterior paint for home improvement activities. These types of odors are typical of most residential communities and are not considered significant generators of odor impacts.

In regards to dairy and feedlot development, factors that affect odor impacts include the proposed facility design and exposure duration. Manure management operations at dairies and feedlots would include collection, treatment, storage, and reuse of the manure. Manure generated at freestall barns would generally be collected in drive lanes and flushed with process water into on-site storage ponds. Manure generated at unpaved corrals could be managed using a flushed system, or could be mechanically scraped off the corral into stockpiles, or a combination of these techniques could be used. Some facilities may first separate out (via gravity) the heavier particles from the manure waste stream prior to storage in the ponds. The collected solids (gravity separated from the waste stream or physically scraped from corrals) would be stockpiled on-site and applied to on-site agricultural fields or transported off-site and be applied to other agricultural fields. Manure placed in the storage ponds, and potentially the stockpiles, would naturally undergo anaerobic decomposition. As a result, odorous compounds, such as ammonia and H₂S, could be released into the environment, especially when the surface layer of the manure is agitated. Stockpiles could be disturbed and release odors during the loading and application to agricultural fields. Manure liquid waste would not be expected to generate significant odors during field application since the waste is typically mixed with irrigation water prior to application. Policies included as part of the General Plan Update would reduce potential odor generation associated with dairy and feedlot operations. Additionally, subsequent CEQA documentation prepared for individual projects would have project-specific data and will be required to address, and if necessary, mitigate any significant or potentially significant air quality odor impacts to a less-than-significant level.

Policies included as part of the General Plan Update that would minimize this impact are summarized below. However, even with implementation of the below mentioned policies, this impact is considered *potentially significant*.

<p>Policies designed to improve air quality through a regional approach and interagency cooperation include the following:</p> <p>AQ-1.1 Cooperation with Other Agencies AQ-1.2 Cooperation with Local Jurisdictions AQ-1.3 Cumulative Air Quality Impacts AQ-1.4 Air Quality Land Use Compatibility AQ-1.5 CEQA Compliance AQ-1.6 Purchase of Low Emission/Alternative Fuel Vehicles AQ-1.7 Support Statewide Global Warming Solutions</p>
<p>Policies designed to improve air quality by reducing air emissions related to transportation include the following:</p> <p>AQ-2.1 Transportation Demand Management Programs AQ-2.2 Indirect Source Review AQ-2.3 Transportation and Air Quality AQ-2.4 Transportation Management Associations AQ-2.5 Ridesharing AQ Implementation Measure #12</p>
<p>Policies designed to improve air quality and minimize impacts to human health and the economy of the county through smart land use planning and design include the following:</p> <p>AQ-3.1 Location of Support Services AQ-3.2 Infill Near Employment AQ-3.3 Street Design AQ-3.4 Landscape AQ-3.5 Alternative Energy Design AQ-3.6 Mixed Land Uses AQ Implementation Measure #9A and #9B</p>
<p>Policies designed to implement the best available controls and monitoring to regulate air emissions include the following:</p> <p>AQ-4.1 Air Pollution Control Technology AQ-4.2 Dust Suppression Measures AQ-4.3 Paving or Treatment of Roadways for Reduced Air Emissions</p>

AQ-4.4 Wood Burning Devices
Policies designed to encourage economic and social growth while retaining quality of life standards include the following:
LU-1.1 Smart Growth and Healthy Communities LU-1.2 Innovative Development LU-1.3 Prevent Incompatible Uses LU-1.4 Compact Development LU-1.8 Encourage Infill Development
Policies designed to encourage energy conservation in new and developing developments include the following:
ERM-4.1 Energy Conservation and Efficiency Measures ERM-4.2 Streetscape and Parking Area Improvements for Energy Conservation ERM-4.3 Local and State Programs ERM-4.4 Promote Energy Conservation Awareness ERM-4.5 Advance Planning ERM-4.6 Renewable Energy

Required Mitigation Measures

In addition to the above mentioned policies and implementation measures, new Policies AQ-4.7 and AQ-4.8 shall be implemented to address this impact:

- **AQ-4.7 ROG Reduction Measures for Dairy and Feedlot Operations.** The County shall ensure that dairy operators implement the following ROG reduction measures as part of all dairy operations:
 - The General Plan Update shall comply with SJVAPCD Rule 4570 (Confined Animal Facilities), which provides dairies with several options for reducing ROG, including:
 - feed manipulation,
 - improvement of manure and manure-water collection and treatment,
 - capture and treatment of effluent gases using high-technology treatment systems , and,
 - enhanced dispersion of manure and manure wastewater.
 - All animals shall be fed in accord with the National Research Council (NRC) guidelines (NRC, 2001), utilizing routine dairy nutritionist analyses of rations and maintaining feed analyses onsite for regulatory agency monitoring.
 - Feed lanes shall be cleared daily.
 - Silage piles shall be covered with tarps.
 - General Plan Update dairy and feedlot facilities design and construction shall include concrete-base freestalls and walk lanes, as well as water drainage to separator facilities.
 - Manure water shall be either injected subsurface or placed on the surface in thin layers, blending such manure water with irrigation water at a ratio in compliance

with the nutrient management plan that shall be required for each dairy and feedlot.

- Design and construction of dairy and feedlot lagoons shall comply with the specifications set forth in National Conservation Practice Standard 359 (Natural Resources Conservation Service, 2003).
- **AQ-4.8 Odor Management Plan for Dairy and Feedlot Operations.** The County shall ensure that dairy and feedlot operators develop and implement an Odor Management Plan (OMP) as part of the each application submitted to either establish a new or expanded dairy or feedlot. The OMP would include standard operating practices for cattle handling, and manure collection, treatment, storage, and land application. The development of the odor management plan would have four basic steps (Schmidt, 2001).
 - Create a list of the potential odor sources on the farm.
 - Determine which of the odor sources are the most likely to bring about odor complaints.
 - List one or two odor control strategies for each of the significant odor sources.
 - Develop a protocol to respond to odor complaints.

Significance after Implementation of Mitigation for Impact AQ-4

Policies included as part of the General Plan Update to help address a variety of nuisance issues (including odor concerns) associated with the inappropriate siting of sensitive land uses near other incompatible uses include policies AQ-3.1 through AQ-3.6 and LU-1.1 through LU-1.4, and LU-1.8. Policy AQ-4.8 requires the County to ensure that the proponents of dairy or feedlot development projects develop an Odor Management Plan and implement all applicable standard operating practices for cattle handling, and manure collection, treatment, storage, and land application to address any odor-related impacts. Additionally, implementation of Policy AQ-4.7 would result in a reduction of manure-related ROG emissions that would also reduce emissions of odorous compounds, including ammonia and hydrogen sulfide. Implementation of these policies are specifically designed to address air quality impacts and would be implemented at new or expanded existing dairy and feedlot facilities; therefore, with implementation of these new policies as well as the above mentioned policies, this impact is considered *less-than-significant*.

Impact AQ-5: The General Plan Update could conflict with implementation of state goals for reducing greenhouse gas emissions and thereby have a negative effect on Global Climate Change due to CO₂ emissions from on-road vehicles and methane emissions from cattle and cattle manure.

Impact Summary

Level of Significance Before Mitigation: <i>Potentially Significant</i>
Required Mitigation Measures: <i>New Policies AQ-4.7 and AQ-4.9</i>
Level of Significant After Mitigation: <i>Significant and Unavoidable</i>

Impact Analysis

CO₂ from onroad vehicle exhaust and methane from dairy and feedlot operations would be the primary greenhouse gases associated with the General Plan Update. The digestion of cellulose by bacteria in cattle stomachs as well as the decomposition of animal manure generates methane during dairy or feedlot operation.

As depicted in Table 4-2, the increase in onroad vehicle CO₂ emissions for the General Plan Update buildout versus existing scenario would be 1,449,888 metric tons per year. Methane gas emissions would increase by 13,515 tons per year (or 283,815 tons per year of CO₂E)³ with buildout of the General Plan Update. When compared to the overall state reduction goal of approximately 174 million metric tons CO₂E/year, the maximum greenhouse gas emissions for the General Plan Update (1,733,703 metric tons CO₂E/yr) would be about 1 percent of the state goal for reducing greenhouse gas emissions by the year 2020. The efforts the state is currently undertaking related to AB32 are substantial with regard to measures that could reduce greenhouse gas emissions by similar levels (1 percent of the total). Thus, the General Plan Update would conflict with the state AB32 goals related to greenhouse gas emissions and would be a significant impact prior to mitigation. Air Quality policies identified in the table below are intended to improve air quality. However, even with implementation of these policies, this impact is still considered *potentially significant*.

Policies designed to improve air quality through a regional approach and interagency cooperation include the following:
AQ-1.1 Cooperation with Other Agencies AQ-1.2 Cooperation with Local Jurisdictions AQ-1.3 Cumulative Air Quality Impacts AQ-1.4 Air Quality Land Use Compatibility AQ-1.5 CEQA Compliance AQ-1.6 Purchase of Low Emission/Alternative Fuel Vehicles AQ-1.7 Support Statewide Global Warming Solutions
Policies designed to improve air quality by reducing air emissions related to transportation include the following:
AQ-2.1 Transportation Demand Management Programs AQ-2.2 Indirect Source Review AQ-2.3 Transportation and Air Quality AQ-2.4 Transportation Management Associations AQ-2.5 Ridesharing AQ Implementation Measure #12
Policies designed to improve air quality and minimize impacts to human health and the economy of the county through smart land use planning and design include the following:
AQ-3.1 Location of Support Services

³ Mass emissions of methane were converted to CO₂E by multiplying the methane emissions by the Global Warming Potential factor of 21 (U.S. EPA, 2006).

AQ-3.2 Infill Near Employment AQ-3.3 Street Design AQ-3.4 Landscape AQ-3.5 Alternative Energy Design AQ-3.6 Mixed Land Uses AQ Implementation Measure #9A and #9B
Policies designed to implement the best available controls and monitoring to regulate air emissions include the following: AQ-4.1 Air Pollution Control Technology AQ-4.2 Dust Suppression Measures AQ-4.3 Paving or Treatment of Roadways for Reduced Air Emissions AQ-4.4 Wood Burning Devices
Policies designed to encourage economic and social growth while retaining quality of life standards include the following: LU-1.1 Smart Growth and Healthy Communities LU-1.2 Innovative Development LU-1.3 Prevent Incompatible Uses LU-1.4 Compact Development LU-1.8 Encourage Infill Development
Policies designed to encourage energy conservation in new and developing developments include the following: ERM-4.1 Energy Conservation and Efficiency Measures ERM-4.2 Streetscape and Parking Area Improvements for Energy Conservation ERM-4.3 Local and State Programs ERM-4.4 Promote Energy Conservation Awareness ERM-4.5 Advance Planning ERM-4.6 Renewable Energy

Required Mitigation Measures

As stated above, the County will implement a variety of policies designed to address air quality issues. In addition to the above mentioned policies and implementation measures, new Policies AQ-4.7 and AQ-4.9 shall be implemented to address this impact:

- **AQ-4.7 ROG Reduction Measures for Dairy and Feedlot Operations.** The County shall ensure that dairy operators implement the following ROG reduction measures as part of all dairy operations:
 - The General Plan Update shall comply with SJVAPCD Rule 4570 (Confined Animal Facilities), which provides dairies with several options for reducing ROG, including:
 - feed manipulation,
 - improvement of manure and manure-water collection and treatment,
 - capture and treatment of effluent gases using high-technology treatment systems , and,
 - enhanced dispersion of manure and manure wastewater.
 - All animals shall be fed in accord with the National Research Council (NRC) guidelines (NRC, 2001), utilizing routine dairy nutritionist analyses of rations and maintaining feed analyses onsite for regulatory agency monitoring.
 - Feed lanes shall be cleared daily.
 - Silage piles shall be covered with tarps.

- General Plan Update dairy and feedlot facilities design and construction shall include concrete-base freestalls and walk lanes, as well as water drainage to separator facilities.
- Manure water shall be either injected subsurface or placed on the surface in thin layers, blending such manure water with irrigation water at a ratio in compliance with the nutrient management plan that shall be required for each dairy and feedlot.
- Design and construction of dairy and feedlot lagoons shall comply with the specifications set forth in National Conservation Practice Standard 359 (Natural Resources Conservation Service, 2003).
- **AQ-4.9 Greenhouse Gas Emissions Reduction Plan.** The County will develop a Greenhouse Gas Emissions Reduction Plan (Plan) that identifies greenhouse gas emissions within the County as well as ways to reduce those emissions. The Plan will parallel the requirements adopted by the California Air Resources Board specific to this issue. Specifically, the County will work with the Tulare County Association of Governments and the cities within the County to include the following key items in the Plan:
 - Inventory all known, or reasonably discoverable, sources of greenhouse gases in the County,
 - Inventory the greenhouse gas emissions level in 1990, the current level, and that projected for the year 2020, and
 - Set a target for the reduction of emissions attributable to the County's discretionary land use decisions and its own internal government operations.

Significance after Implementation of Mitigation for Impact AQ-5

Depending on the feasibility and level of implementation as applied to individual development projects consistent with the General Plan, the inclusion of additional trip reduction measures would help to further reduce vehicle-related CO₂ emissions. Future project-specific compliance with SJVAPCD permitting would also help to reduce air quality emissions associated with individual projects. Also, as described in new Policy AQ-4.7, the County will continue to ensure that a variety of manure-related ROG (and methane) reducing measures are implemented under all future dairy or feedlot development projects to minimize air quality impacts. Additionally, new Policy AQ-4.9 directs the County to prepare a Greenhouse Gas Emissions Reduction Plan to work towards reducing the County's emissions. However, the emission level at which project generated CO₂E would result in or contribute to a significant impact has not been defined. Consequently, the increase in greenhouse gases by the General Plan Update of 1 percent of the state AB32 goal places the project in conflict with the goal of the state to reduce up to 174 million metric tons CO₂E/yr. Therefore, as a conservative determination, this impact would remain

significant. Implementation of the General Plan Update including the adoption of the policies listed above would still result in a *significant and unavoidable* impact.

4.5 Health and Safety

This section discusses the potential impacts of the General Plan Update on a variety of public health and safety issues:

- Geologic and Seismic Hazards;
- Airport Hazards;
- Hazardous Materials;
- Flood Hazards;
- Urban and Wildland Fire Hazards;
- Emergency Response; and
- Noise.

Geologic and Seismic Hazards

The potential for geologic and seismic hazards (including soil erosion, seismicity, landsliding, and liquefaction) is the focus of this section. Mineral Resource issues are addressed in the mineral resources section of this chapter. No comments specific to geologic and/or seismic hazards were received during the NOP public scoping phase of the General Plan Update.

Environmental and Regulatory Setting

The General Plan Update included preparation of several major documents including preparation of a detailed Background Report, which serves to chronicle the existing environmental and regulatory setting conditions applicable to the County. A detailed discussion of geologic and seismic issues can be found in the General Plan Background Report (see Appendix B, Chapter 8.0 “Safety”).

Methodology

The assessment of impacts to soil resources is a qualitative review of the existing soil conditions within the County and a determination of whether the General Plan Update includes adequate provisions to ensure continued protection of these resources.

The potential for geologic and seismic impacts as a result of implementation of the General Plan Update was reviewed and evaluated using readily available background information, such as pertinent geologic maps and seismic hazard maps. Key sources of information included the California Division of Mines and Geology and the United States Geologic Survey.

To reduce or mitigate potential hazards from earthquakes or other local geologic hazards, the County ensures that development proposals comply with local and State regulations. These regulations include the California Building Code, the Uniform Building Code, the Alquist-Priolo Earthquake Fault Zoning Act, and the Seismic Hazard Mapping Act. Policies and implementation measures developed for the General Plan Update include continued conformance with these applicable local and State building regulations.

Standards of Significance

The General Plan Update will establish development guidelines against which future projects will be judged for consistency. The significance criteria for this analysis were developed from criteria presented in Appendix G, “Environmental Checklist Form”, of the CEQA Guidelines and based on the professional judgment of the County of Tulare and its consultants. The project (or the project alternatives) would result in a significant impact if it would:

- Result in substantial soil erosion or the loss of topsoil;
- Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving: 1) rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault; 2) strong seismic groundshaking; 3) seismic-related ground failure, including liquefaction; or 4) landslides;
- Be located on a geologic unit or soil that is unstable or that would become unstable as a result of the project and potentially result in an onsite or offsite landslide, lateral spreading, subsidence, liquefaction, or collapse; or
- Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial risks to life or property.

Impacts and Mitigation Measures

Impact HS-1: The General Plan Update would not result in substantial soil erosion or the loss of topsoil.

Impact Summary

Level of Significance Before Mitigation: <i>Less-than- Significant</i>
Required Mitigation Measures: <i>No Mitigation Required</i>
Level of Significance After Mitigation: <i>Not Applicable</i>

Impact Analysis

Erosion is a natural and inevitable geologic process whereby earth materials are loosened, worn away, decomposed or dissolved, and are removed from one place and transported to another location. Precipitation, running water, and wind are all factors that contribute to erosion. Ordinarily, erosion proceeds very slowly as to be imperceptible, but when the natural equilibrium of the environment is changed, the rate of erosion can be greatly accelerated. Accelerated erosion within an urban area can cause damage by undermining structures, blocking storm sewers and depositing silt, sand, or mud in roads and tunnels. Consequently, these erosion effects can result in a variety of aesthetic and engineering problems. Additionally, eroded materials are eventually deposited into local waterways where the carried silt remains suspended for some time, constituting a pollutant and altering the normal balance of a waterway ecosystem.

The County’s topography varies from west to east ranging from relatively flat areas (with soil conditions that exhibit minimal potential for erosion impacts) to relatively steep areas with greater potential for soil erosion conditions. Development activities resulting from buildout of the designated growth areas would accelerate the erosion rate through both an increase in short-term construction-related activities and an overall increase in the amount of impervious surfaces. Development in the County would be subject to local and State codes and requirements for erosion control and grading. In addition, project sites encompassing an area of one or more acres would require compliance with a National Pollutant Discharge Elimination System permit and consequently the development and implementation of a Storm Water Pollution Prevention Plan (SWPPP).

Consequently, erosion-related effects can be minimized through implementation of the policies provided as part of the Water Resources and Health and Safety Elements. Policies WR-2.2, WR-2.3, and WR-2.4 relate specifically to monitoring construction activities through NPDES enforcement and requiring the use of Best Management Practices and other mitigation measures designed to protect surface water and groundwater from the adverse effects of construction activities and the control of erosion. Other policies from the Health and Safety Element (see Policies HS-2.3 and HS-2.4) limit construction-related activities and development in areas with slopes in excess of 30 percent, which could result in several public safety issues and increased hillside erosion. The General Plan Update also includes a number of similar policies in the FGMP (see Policies F-1.4, F-1.13, F-9.7, F-9.8, F-9.11, and F-9.12) that have been developed to address a variety of environmental issues (including soil erosion) specific to this unique County area. With implementation of the below mentioned policies, this impact is considered *less-than-significant*.

Water Resources Element	Health and Safety Element
Policies designed to address soil erosion impacts include the following:	
WR-1.10 Channel Modification WR-2.2 NPDES Enforcement WR-2.3 Best Management Practices WR-2.4 Construction Site Sediment Control	HS-2.3 Hillside Development HS-2.4 Structure Siting
FGMP Element	
F-1.4 Grading	F-9.8 Erosion Mitigation Measures

F-1.13 Hillside Development F-9.7 Minimize Soil Disturbance	F-9.11 Development on Slopes F-9.12 Vegetation Removal FGMP Implementation Measure #7, #14 and #34
--	--

Required Mitigation Measures

This impact is considered *less than significant*. No additional mitigation measures are required.

Impact HS-2: The General Plan Update would not expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving: 1) rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map, issued by the State Geologist for the area or based on other substantial evidence of a known fault; 2) strong seismic groundshaking; 3) seismic-related ground failure, including liquefaction.

Impact Summary

Level of Significance Before Mitigation: <i>Potentially Significant</i>
Required Mitigation Measures: <i>New Policy HS-2.8 "Alquist-Priolo Act Compliance"</i>
Level of Significance After Mitigation: <i>Less-than-Significant</i>

Impact Analysis

The County is divided into two major geologic provinces: the Sierra Nevada Mountains and the Central Valley. Although the County is situated in proximity to several fault groups, it is not identified in a delineated Alquist-Priolo Earthquake Fault Zone. Isolated portions of the County may be subject to strong seismic groundshaking. These locations are primarily located in the eastern portion of the County, broken down into four "Sierran Zones" that determine the predicted effects of the maximum probably earthquake on the Owens Valley fault. Within these Sierran Zones, alluvial valleys or the weathered and decomposed zones in the meadows or foothills are expected to experience the greatest groundshaking. Development within these zones must conform to Uniform Building Code-Zone II and III. The probability of soil liquefaction actually occurring in the County is considered to be a low to moderate hazard. However, detailed geotechnical engineering investigations would be necessary to more accurately evaluate liquefaction potential in specific areas.

The General Plan Update includes several policies designed to address a variety of public health and safety issues resulting from seismic hazards. For example, the Health and Safety Element provides a number of policies that have been developed to ensure a safe environment for the County's residents, visitors, and businesses. These policies and implementation measures include continued compliance with all applicable development requirements (i.e., Uniform Building Code, etc.), seismic retrofitting of structures (see policy HS-2.5 and HS-2.6), and the restriction of development in hazardous areas (see policies HS-1.3, HS-1.11, HS-2.1, HS-2.3, HS-2.4, and HS-2.7). With adherence to these codes and regulations and implementation of the policies and implementation measures contained in the Health & Safety Element, geologic hazard impacts

associated with potential rupture of known earthquake fault, strong seismic groundshaking, and seismic-related ground failure would be minimized. The General Plan Update also includes Policy F-9.10 which prohibits development in foothill areas that are considered to be geologically hazardous (slides, earthquake faults, etc.). However, even with implementation of the below mentioned policies, rules do not prevent building in an Alquist-Priolo zone if and when such zones are identified in the County. Therefore, this impact is considered *potentially significant*.

Health and Safety and Foothill Growth Management Plan Elements	
Policies designed to minimize geologic hazard impacts to people and structures in the County include the following:	
HS-1.2 Development Constraints HS-1.3 Hazardous Lands HS-1.4 Building and Codes HS-1.5 Hazard Awareness and Public Education HS-1.7 Safe Housing and Structures HS-1.11 Site Investigations	HS-2.1 Continued Evaluation of Earthquake Risks HS-2.5 Financial Assistance for Seismic Upgrades HS-2.6 Seismic Standards for Dams HS-2.7 Subsidence Health and Safety Implementation Measure #1 F-9.10 Development in Hazard Areas

Required Mitigation Measures

In addition to the above mentioned policies and implementation measures, the following new policy HS-2.8 “Alquist-Priolo Act Compliance” is required to address the impact:

- HS-2.8 Alquist-Priolo Act Compliance.** The County shall not permit any structure for human occupancy to be placed within designated Earthquake Fault Zones (pursuant to and as determined by the Alquist-Priolo Earthquake Fault Zoning Act; Public Resources Code, Chapter 7.5) unless the specific provisions of the Act and Title 14 of the California Code of Regulations have been satisfied. *[New Policy – Draft EIR Analysis]*

Significance after Implementation of Mitigation for Impact HS-2

As stated above, the County will continue to implement a variety of policies designed to address public health and safety issues resulting from seismic hazards. Therefore, implementation of the General Plan Update including the adoption of the policies and implementation measures listed above (including the new Policy HS-2.8 “Alquist-Priolo Act Compliance”), adherence to the Alquist-Priolo Act, and enforcement of the California Building Standards Code would result in a *less than significant* impact.

Impact HS-3: The General Plan Update would not be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on-or off-site landslide, lateral spreading, subsidence, liquefaction, or collapse.

Impact Summary

Level of Significance Before Mitigation: <i>Less-than-Significant</i>
Required Mitigation Measures: <i>No additional mitigation required</i>
Level of Significance After Mitigation: <i>Not applicable</i>

Impact Analysis

The foothill and mountain areas of the County are more likely to experience landslides than the Valley floor. Susceptible areas include areas where fractured and steep slopes are present or where inadequate ground cover accelerates erosion. Erosion and ground slumping of soils can also occur along bluff and banks of the Kaweah, Kings, and Tule Rivers. The probability of soil liquefaction actually taking place in the County is considered to be a low to moderate hazard. Soil types in the area are not conducive to liquefaction because they are either too coarse or too high in clay content. However, due to the high clay content, there is potential for some subsidence to occur. Impacts related to these types of geological hazards are site specific and need to be evaluated on a site by site basis.

The General Plan Update includes several policies and implementation measures that have been developed to ensure a safe environment for its residents, visitors, and businesses. For example, Policies HS-1.2, 1.3, 2.2, 2.3, and 2.7 provide guidance for limiting development in areas with severe slope conditions, subsidence conditions, and other hazardous conditions. Policy HS-1.11 also requires the preparation of engineering studies for all new development proposals within areas of potential soil instability. The General Plan Update also includes several policies in the draft FGMP Element (see Policies F-1.13, F-9.7, F-9.8, F-9.11, and F-9.12) which prohibit development in foothill areas that are considered to be geologically hazardous (slides, earthquake faults, etc.). With adherence to all applicable State and local building codes and regulations and implementation of the policies and implementation measures contained in the draft Health and Safety Element, impacts associated with on-or off-site landslide, subsidence, liquefaction, or collapse would be minimized. Consequently, with implementation of the below mentioned policies and implementation measure, this impact is considered *less than significant*.

Health and Safety Element	
Policies designed to minimize geologic hazard impacts to people and structures in the County include the following:	
HS-1.2 Development Constraints HS-1.3 Hazardous Lands HS-1.4 Building and Codes HS-1.5 Hazard Awareness and Public Education HS-1.7 Safe Housing and Structures HS-1.11 Site Investigations HS-2.1 Continued Evaluation of Earthquake Risks	HS-2.5 Financial Assistance for Seismic Upgrades HS-2.6 Seismic Standards for Dams Implementation Measure #1
Health and Safety Element	FGMP Element
Policies designed to minimize landslide hazard impacts to people and structures in the County through the establishment of development guidelines in hillside areas include the following:	
HS-1.2 Development Constraints HS-1.3 Hazardous Lands HS-2.2 Landslide Areas HS-2.3 Hillside Development HS-2.4 Structure Siting HS-2.7 Subsidence	F-1.13 Hillside Development F-9.7 Minimize Soil Disturbance F-9.8 Erosion Mitigation Measures F-9.11 Development on Slopes F-9.12 Vegetation Removal

Required Mitigation Measures

This impact is considered *less than significant*. No additional mitigation measures are required.

Impact HS-4: The General Plan Update could be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), but would not create substantial risks to life or property.

Impact Summary

Level of Significance Before Mitigation: <i>Less-than-Significant</i>
Required Mitigation Measures: <i>No additional mitigation required</i>
Level of Significance After Mitigation: <i>Not applicable</i>

Impact Analysis

Expansive soils are those possessing clay particles that react to moisture changes by shrinking (when they dry) or swelling (when they become wet). Expansive soils can also consist of silty to sandy clay. The extent of shrinking and swelling is influenced by the environment, including the extent of wet or dry cycles, and by the amount of clay in the soil. This physical change in the soils can react unfavorably with building foundations, concrete walkways, swimming pools, roadways, and masonry walls. Within the County, expansive soils are more common along the Western edge of the Southern foothills. In most developed areas, the existing layer of clay has been blended into more granular soils as a part of general site excavation, which helps to reduce the overall soil’s expansiveness.

The General Plan Update includes several policies and implementation measures that have been developed to ensure a safe environment for its residents, visitors, and businesses. For example, policies include continued compliance with all applicable development requirements including the Uniform Building Code (see Policies HS-1.4) and the restriction of development within a variety of hazardous areas (see Policies HS-1.2 and HS-1.3). Policy HS-1.11 requires the preparation of engineering studies for all new development proposals within areas of potential soil instability. With adherence to these codes and regulations and implementation of the policies and implementation measures contained in the draft Health and Safety Element, geologic hazard impacts associated with expansive soils would be minimized. With implementation of the below mentioned policies, this impact is considered *less than significant*.

Health and Safety and Foothills Area Elements	
Policies designed to minimize geologic hazard impacts to people and structures in the County include the following:	
HS-1.2 Development Constraints HS-1.3 Hazardous Lands HS-1.4 Building and Codes HS-1.5 Hazard Awareness and Public Education HS-1.7 Safe Housing and Structures HS-1.11 Site Investigations HS-2.1 Continued Evaluation of Earthquake Risks	HS-2.5 Financial Assistance for Seismic Upgrades HS-2.6 Seismic Standards for Dams Health and Safety Implementation Measure #1 F-9.10 Development in Hazard Areas

Required Mitigation Measures

This impact is considered *less than significant*. No additional mitigation measures are required.

Airport Hazards

The potential for public health and safety issues resulting from airport hazards is the focus of this section. Noise issues resulting from airport operations are described below in the Noise section of Chapter 4.5, “Health and Safety.” Chapter 3.5 “Land Use” also includes a discussion of compatibility with the Tulare County Airport Land Use Commission (ALUC) and the most recently adopted Comprehensive Airport Land Use Plan (CALUP).

As a result of comments (see Table 1-2 of Chapter 1.0 “Introduction”) received during the NOP public scoping phase of the General Plan Update, the following airport-related issues have been considered as part of the impact analysis. For example, ALUC staff suggested that the proposed General Plan should incorporate and be consistent with the planned update for the Tulare County CALUP.

Environmental and Regulatory Setting

The General Plan Update included preparation of several major documents including preparation of a detailed Background Report, which serves to chronicle the existing environmental and regulatory setting conditions applicable to the County. A detailed discussion of airport-related hazards can be found in the General Plan Background Report (see Appendix B, Chapter 8.0 “Safety”).

Methodology

The assessment of airport-related hazard impacts is a qualitative review of the existing conditions applicable to the County and a determination of whether the General Plan Update includes adequate provisions to address the potential impacts associated with local airport-related conditions.

Standards of Significance

The proposed General Plan Update will establish development guidelines against which future projects will be judged for consistency. The significance criteria for this analysis were developed from criteria presented in Appendix G, “Environmental Checklist Form”, of the CEQA Guidelines and based on the professional judgment of the County of Tulare and its consultants. The project (or the project alternatives) would result in a significant impact if it would:

- Be located within an airport land use plan area or, where such a plan has not been adopted, be within two miles of a public airport or public use airport, and result in a safety hazard for people residing or working in the project area; or
- Be located within the vicinity of a private airstrip and result in a safety hazard for people residing or working in the project area.

Impacts and Mitigation Measures

Impact HS-5: The General Plan Update could result in development located within an airport land use plan area or could result in a safety hazard for people residing or working in the project area.

Impact Summary

Level of Significance Before Mitigation: <i>Less-than-Significant</i>
Required Mitigation Measures: <i>No additional mitigation required</i>
Level of Significance After Mitigation: <i>Not applicable</i>

Impact Analysis

Implementation of the General Plan Update would result in additional residential and non-residential land use developments. Although the exact location of this new development is not currently known at this time and would be planned through 2030, these land use developments could result in new urban development, including new urban land uses in the vicinity of airports and private airstrips, of which the County has nine public use airports. New development near aviation facilities, particularly multi-story structures or developments with aerial features such as antennas, could create hazards to aviation.

The Airport Land Use Commission (ALUC) was established to ensure that there are no direct conflicts with land uses, noise, or other issues that would impact the functionality and safety of airport operations. One of the key functions of the ALUC is to review that cities' and counties' general plans and zoning ordinances for consistency with the Comprehensive Airport Land Use Plans (CALUP's), which contain noise contours, restrictions for types of construction and building heights in navigable air space, as well as requirements impacting the establishment or construction of sensitive uses within close proximity to airports.

Overall, the intent of the proposed General Plan is to ensure that existing and future land uses function without imposing a nuisance, hazard, or unhealthy condition upon adjacent uses. Policies included as part of the General Plan Update that would minimize conflicts with public use airports are summarized below by general plan element. The draft Land Use Element provides a number of policies that establish requirements for compatible development, including buffering, screening, controls and performance standards, and the siting of compatible land uses (see Policies LU-1.3, LU-3.6, and LU-5.4). Other policies from the draft Transportation and Circulation and Health and Safety Elements (see Policies TC-3.4, TC-3.6, HS-3.1, HS-3.2, and HS-8.4) require the County to ensure that all development within the vicinity of local airport facilities is consistent with the policies adopted by the Tulare County Airport Land Use Commission and the most recently adopted Airport Land Use Compatibility Plan. With implementation of the below mentioned policies, this impact is considered *less-than-significant*.

Land Use Elements	
Policies designed to promote compatible land use development and patterns that minimize impacts to surrounding land uses (including open space uses) include the following:	
LU-1.3 Prevent Incompatible Uses LU-3.6 Project Design LU-5.4 Compatibility with Surrounding Land Use LU-6.2 Buffers	
Transportation & Circulation Element	Health & Safety Element
Policies designed to promote development compatible with local airport land use compatibility plans, include the following:	
TC-3.4 Airport Compatibility TC-3.6 Airport Encroachment	HS-3.1 Airport Land Use Compatibility Plan HS-3.2 Compliance with FAA Regulations HS-8.4 Airport Noise Contours

Required Mitigation Measures

This impact is considered *less than significant*. No additional mitigation measures are required.

Hazardous Materials

This section provides information on a variety of hazardous materials impacts with the potential to occur within the County. As a result of comments (see Table 1-2 of Chapter 1.0 “Introduction”) received during the NOP public scoping phase of the General Plan Update, the following hazardous materials issues have been considered as part of the impact analysis. For example, the Center on Race, Poverty and the Environment stated that the EIR should discuss the impact of pesticide use in the County and the potential public hazards resulting from the transportation of hazardous materials.

Environmental and Regulatory Setting

The General Plan Update included preparation of several major documents including preparation of a detailed Background Report, which serves to chronicle the existing environmental and regulatory setting conditions applicable to the County. A detailed discussion of hazardous materials issues can be found in the General Plan Background Report (see Appendix B, Chapter 8.0 “Safety”).

Methodology

The assessment of hazardous materials impacts is a qualitative review of the existing conditions applicable to the County and a determination of whether the General Plan Update includes adequate provisions to address the potential impacts associated with local hazardous materials conditions.

Standards of Significance

The General Plan Update will establish development guidelines against which future projects will be judged for consistency. The significance criteria for this analysis were developed from criteria presented in Appendix G, “Environmental Checklist Form”, of the CEQA Guidelines and based

on the professional judgment of the County of Tulare and its consultants. The project (or the project alternatives) would result in a significant impact if it would:

- Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials;
- Create a significant hazard to the public or the environment through reasonable foreseeable upset and accident conditions involving the release of hazardous materials into the environment;
- Emit hazardous emissions or involve handling hazardous or acutely hazardous substances, or waste within one-quarter mile of an existing or proposed school; or
- Be located on a site that is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or environment.

Impacts and Mitigation Measures

Impact HS-6: The General Plan Update could create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials or create a significant hazard to the public or the environment through reasonable foreseeable upset and accident conditions involving the release of hazardous materials to the environment.

Impact Summary

Level of Significance Before Mitigation: <i>Potentially Significant</i>
Required Mitigation Measures: <i>New Policies HS-4.8 “Designated Routes for Hazardous Materials Transport” and HS-4.9 “Hazardous Materials Studies”</i>
Level of Significance After Mitigation: <i>Potentially Significant</i>

Impact Analysis

Lists of contaminated sites within the County are available through the Regional Water Quality Control Board, and the Department of Toxic Substance Control. According to information provided by these agencies, the majority of these sites are associated with leaking underground storage tanks, pesticide manufacturing/processing, industrial manufacturing and old landfills. In addition, businesses such dry cleaners, gas stations, and local airports could also be contaminated. Railroad rights-of-way typically have surface contamination due to the lubricating oil used on the wheels and the use of herbicides to help minimize weeds within these areas. Impacts related to these types of hazards are site specific and need to be evaluated on a site by site basis.

Implementation of the General Plan Update would result in additional residential and non-residential land use developments, which could occur on land currently used for agricultural or developed uses. Hazardous materials such as pesticides, vehicle fluids, asbestos-containing materials, lead paint, polychlorinated biphenyls (PCBs), underground storage tanks, and aboveground storage tanks could all be found in these areas.

Policies included as part of the General Plan Update that would minimize this impact are summarized below by general plan element. For example, the draft Health & Safety Element provides a number of policies and implementation measures that have been developed to address hazardous materials concerns including the safe storage, use, transportation, and disposal of hazardous materials (see Policy HS-4.1), continued compliance with all applicable local, state, and federal safety standards (see Policy HS-4.1), continued coordination with the California Highway Patrol to establish procedures for the movement of hazardous waste (see Policy HS-4.2), and the monitoring of studies on pesticide use and its effects on residents and wildlife (see Policy HS-4.6). Other policies require the continued education of County residents about household hazardous waste and its proper disposal (see Policy HS-4.5). Additional policies from both the draft Land Use and Health and Safety Elements (see Policies LU-1.3, LU-5.4, and HS-4.3) prevent the placement of incompatible land uses within residential areas or near properties that produce or store hazardous materials. Policy HS-4.7 directs the County to work with state and federal land managers to coordinate the handling and disposal of hazardous materials on public lands. However, even with implementation of the below mentioned policies and implementation measures, the lack of designated routes for hazardous materials transportation could expose County residents to unnecessary risk. Additionally, if development is proposed for known hazardous materials sites an extra layer of analysis is required for the safety of people and the environment. Therefore, this impact is considered *potentially significant*.

Land Use Elements
Policies designed to promote compatible land use development and patterns that minimize impacts to surrounding land uses (including open space uses) include the following:
LU-1.3 Prevent Incompatible Uses LU-5.4 Compatibility with Surrounding Land Use
Health & Safety Element
Policies designed to minimize the risk of County residents and property associated with the transport, distribution, use, and storage of hazardous materials include the following:
HS-4.1 Hazardous Materials HS-4.2 Establishment of Procedures to Transport Hazardous Waste HS-4.3 Incompatible Land Uses HS-4.4 Contamination Prevention HS-4.5 Increase Public Awareness HS-4.6 Pesticide Control HS-4.7 Coordination of Materials on Public Lands Health and Safety Implementation Measure #12

Required Mitigation Measures

In addition to the above mentioned policies and implementation measures, the following new policies HS-4.8 “Designated Routes for Hazardous Materials Transport” and HS-4.9 “Hazardous Materials Studies” are required to ensure that this impact is reduced to a less than significant level:

- HS-4.8 Designated Routes for Hazardous Materials Transport.** The County shall continue to encourage the transportation of hazardous materials within the County to routes that have been designated for such transport. *[New Policy – Draft EIR Analysis]*.
- HS-4.9 Hazardous Materials Studies.** The County shall ensure that the proponents of new development projects address hazardous materials concerns through the preparation of Phase I or Phase II hazardous materials studies for each identified site as part of the design phase for each project. Recommendations required to satisfy federal or State cleanup standards outlined in the studies will be implemented as part of the construction phase for each project. *[New Policy – Draft EIR Analysis]*.

Significance after Implementation of Mitigation for Impact HS-6

As stated above, the County will continue to regulate facilities that routinely use, store, handle and transport hazardous substances. Additionally, the County will implement a variety of policies designed to address hazardous materials concerns including continued cooperation with the California Highway Patrol and other State and federal agencies to manage the use of hazardous materials, the designation of routes for the transport of hazardous materials, and continued compliance with all applicable local, state, and federal safety standards. Therefore, implementation of the General Plan Update including the adoption of the policies and implementation measures listed above (including the new policies HS-4.8 “Designated Routes for Hazardous Materials Transport” and HS-4.9 “Hazardous Materials Studies”) would result in a *less-than-significant* impact.

Impact HS-7: The General Plan Update would not emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school.

Impact Summary

Level of Significance Before Mitigation: <i>Less-than-Significant</i>
Required Mitigation Measures: <i>No mitigation required</i>
Level of Significance After Mitigation: <i>Not applicable</i>

Impact Analysis

Schools are one of several sensitive receptors that must be taken into consideration when the County is approving new land uses or transportation routes that may accommodate the production, storage, use, or transportation of hazardous materials and/or waste. Implementation of the General Plan Update would result in increased population levels in designated growth areas and would increase the number of school-age children as well. A potential increase in levels of residential development would generate an increase in the number of students (dependent upon

future household sizes and make-ups), and would necessitate the need to construct additional school facilities. New school sites should be evaluated for their proximity and potential exposure to hazardous materials as they are proposed for development. Potential school sites should be selected to minimize their exposure to a variety of hazardous conditions. In addition to general CEQA requirements, school acquisition/development projects to be funded under the State School Facilities Program must also satisfy several specific requirements established under the California Education Code and California Code of Regulations. These regulations require that potential school hazards relating to soils, seismicity, hazards and hazardous materials, and flooding be addressed during the school site selection process. Compliance with these requirements will address significant impacts associated with the siting of new public schools within the County.

Policies included as part of the General Plan Update that would minimize this impact are summarized below by general plan element. For example, the draft Health & Safety Element provides a number of policies and implementation measures that have been developed to address hazardous materials concerns including the safe storage, use, transportation, and disposal of hazardous materials (see Policy HS-4.1), continued compliance with all applicable local, state, and federal safety standards (see Policy HS-4.1), continued coordination with the California Highway Patrol to establish procedures for the movement of hazardous waste (see Policy HS-4.2), and the monitoring of studies on pesticide use and its effects on residents and wildlife (see Policy HS-4.6). Other policies require the continued education of County residents about household hazardous waste and its proper disposal (see Policy HS-4.5). Additional policies from both the draft Land Use and Health and Safety Elements (see Policies LU-1.3, LU-5.4, and HS-4.3) prevent the placement of incompatible land uses within residential areas or near properties that produce or store hazardous materials. Policy HS-4.7 directs the County to work with state and federal land managers to coordinate the handling and disposal of hazardous materials on public lands. With implementation of the below mentioned policies, this impact is considered *less than significant*.

Land Use Elements
Policies designed to promote compatible land use development and patterns that minimize impacts to surrounding land uses (including open space uses) include the following:
LU-1.3 Prevent Incompatible Uses LU-5.4 Compatibility with Surrounding Land Use LU-6.3 Schools in Neighborhoods LU-6.4 School District Coordination
Health & Safety Element
Policies designed to minimize the risk of County residents and property associated with the transport, distribution, use, and storage of hazardous materials include the following:
HS-4.1 Hazardous Materials HS-4.2 Establishment of Procedures to Transport Hazardous Waste HS-4.3 Incompatible Land Uses HS-4.4 Contamination Prevention HS-4.5 Increase Public Awareness HS-4.6 Pesticide Control HS-4.7 Coordination of Materials on Public Lands Health and Safety Implementation Measure #12

Required Mitigation Measures

This impact is considered *less than significant*. No additional mitigation measures are required.

Impact HS-8: Development under the General Plan Update could be located on a site which is included on a list of hazardous materials sites compiled pursuant to government code section 65962.5 and, as a result, could create a significant hazard to the public or the environment.

Impact Summary

Level of Significance Before Mitigation: <i>Potentially Significant</i>
Required Mitigation Measures: <i>New Policies HS-4.8 “Designated Routes for Hazardous Materials Transport” and HS-4.9 “Hazardous Materials Studies”</i>
Level of Significance After Mitigation: <i>Less-than-Significant</i>

Impact Analysis

As more fully described above under Impact HS-6, lists of contaminated sites within the County are available through the Regional Water Quality Control Board and the Department of Toxic Substance Control. According to information provided by these agencies, several of these sites are associated with leaking underground storage tanks, pesticide manufacturing/processing, industrial manufacturing and old landfills comprise the majority of these sites.

Policies included as part of the General Plan Update that would minimize this impact are summarized below by general plan element. For example, the draft Health & Safety Element provides a number of policies and implementation measures that have been developed to address hazardous materials concerns including the safe storage, use, transportation, and disposal of hazardous materials (see Policy HS-4.1), continued compliance with all applicable local, state, and federal safety standards (see Policy HS-4.1), continued coordination with the California Highway Patrol to establish procedures for the movement of hazardous waste (see Policy HS-4.2), and the monitoring of studies on pesticide use and its effects on residents and wildlife (see Policy HS-4.6). Other policies require the continued education of County residents about household hazardous waste and its proper disposal (see Policy HS-4.5). Additional policies from both the draft Land Use and Health and Safety Elements (see Policies LU-1.3, LU-5.4, and HS-4.3) prevent the placement of incompatible land uses within residential areas or near properties that produce or store hazardous materials. Policy HS-4.7 directs the County to work with state and federal land managers to coordinate the handling and disposal of hazardous materials on public lands. However, even with implementation of the below mentioned policies and implementation measures, this impact is considered *potentially significant*.

Land Use Elements
Policies designed to promote compatible land use development and patterns that minimize impacts to surrounding land uses (including open space uses) include the following:
LU-1.3 Prevent Incompatible Uses LU-5.4 Compatibility with Surrounding Land Use
Health & Safety Element
Policies designed to minimize the risk of County residents and property associated with the transport, distribution, use, and storage of hazardous materials include the following:
HS-4.1 Hazardous Materials HS-4.2 Establishment of Procedures to Transport Hazardous Waste HS-4.3 Incompatible Land Uses HS-4.4 Contamination Prevention HS-4.5 Increase Public Awareness HS-4.6 Pesticide Control HS-4.7 Coordination of Materials on Public Lands Health and Safety Implementation Measure #12

Required Mitigation Measures

In addition to the above mentioned policies and implementation measures, the following new policies HS-4.8 “Designated Routes for Hazardous Materials Transport” and HS-4.9 “Hazardous Materials Studies” are required to ensure that this impact is reduced to a less than significant level:

- **HS-4.8 Designated Routes for Hazardous Materials Transport.** The County shall continue to encourage the transportation of hazardous materials within the County to routes that have been designated for such transport. *[New Policy – Draft EIR Analysis]*.
- **HS-4.9 Hazardous Materials Studies.** The County shall ensure that the proponents of new development projects address hazardous materials concerns through the preparation of Phase I or Phase II hazardous materials studies for each identified site as part of the design phase for each project. Recommendations required to satisfy federal or State cleanup standards outlined in the studies will be implemented as part of the construction phase for each project. *[New Policy – Draft EIR Analysis]*.

Significance after Implementation of Mitigation for Impact HS-8

As stated above, the County will continue to regulate hazardous materials concerns as part of the development process for future projects in the County. Additionally, the County will implement a variety of policies designed to address hazardous materials concerns including continued cooperation with the California Highway Patrol and other State and federal agencies to manage the use of hazardous materials, the designation of routes for the transport of hazardous materials, and continued compliance with all applicable local, state, and federal safety standards. Therefore, implementation of the General Plan Update including the adoption of the policies and implementation measures listed above (including the new policies HS-4.6 “Designated Routes for Hazardous Materials Transport” and HS-4.7 “Hazardous Materials Studies”) would result in a *less-than-significant* impact.

Flood Hazards

The potential for flooding and flood-related hazards is the focus of this section. Issues associated with storm drainage infrastructure are addressed in Chapter 5.3 “Public Facilities and Services.” As a result of comments (see Table 1-2 of Chapter 1.0 “Introduction”) received during the NOP public scoping phase of the General Plan Update, the following flooding-related issues have been considered as part of the impact analysis. For example, the Valley Citizens for Water stated that the EIR should address flooding concerns. Del Strange also stated that the General Plan should include a flood control element.

Environmental and Regulatory Setting

The General Plan Update included preparation of several major documents including preparation of a detailed Background Report, which serves to chronicle the existing environmental and regulatory setting conditions applicable to the County. A detailed discussion of flooding issues can be found in the General Plan Background Report (see Appendix B, Chapters 8.0 “Safety”).

Methodology

The assessment of flooding impacts is a qualitative review of the existing conditions applicable to the County and a determination of whether the General Plan Update includes adequate provisions to address the potential impacts associated with local flooding conditions.

Standards of Significance

The proposed General Plan Update will establish development guidelines against which future projects will be judged for consistency. The significance criteria for this analysis were developed from criteria presented in Appendix G, “Environmental Checklist Form”, of the CEQA Guidelines and based on the professional judgment of the County of Tulare and its consultants. The project (or the project alternatives) would result in a significant impact if it would:

- Place housing within a 100-year flood hazard area, as mapped on a federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map;
- Place within a 100-year flood hazard area structures that would impede or redirect flood flows; or
- Expose people or structures to a significant risk of loss, injury, or death involving flooding, including flooding as a result of the failure of a levee or dam.

Impacts and Mitigation Measures

Impact HS-9: The General Plan Update could place housing within a 100-year flood hazard area, as mapped on a federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map or place within a 100-year flood hazard area structures which could impede or redirect flood flows.

Impact Summary

Level of Significance Before Mitigation: <i>Less-than-Significant</i>
Required Mitigation Measures: <i>No mitigation required</i>
Level of Significance After Mitigation: <i>Not applicable</i>

Impact Analysis

A review of applicable FEMA flood maps indicates that although much of the County is not located within 100-year floodplain areas, portions of the County contain 100-year floodplains. Floodplains occur primarily along creeks, rivers, and sloughs that flow throughout the County. Buildout of the designated growth areas of the General Plan could expose more people and habitable structures to potential flooding if development occurs within or adjacent to these floodplain areas.

Policies included as part of the General Plan Update that would minimize this impact are summarized below by general plan element. Specific policies from the draft Health and Safety Element direct the County to preserve floodway areas (see policy HS-5.2, 5.4, 5.9) and limit development in hazardous areas (see policies HS-1.2, HS-1.3, and HS-5.5). Other policies require the County to ensure that new flood control projects do not adversely affect or contribute to flooding hazards (see Policy HS-5.6) or require the County to review projects for their exposure to inundation due to dam failure (see Policy HS-5.5). Policies from the draft Public Facilities and Services Element (PFS-4.1, PFS-4.2, PFS-4.3, PFS-4.4, and PFS-4.6) require the provision of adequate levels of storm water drainage infrastructure to protect the public and property from storm water damage and minimize flooding. Additional policies from the draft Health and Safety Element require the County to continue to participate in the National Flood Insurance Program (see policy HS-5.3) and require adequate emergency response (HS-1.1) in the event of a flood emergency. Policy HS-1.12 directs the County to expand home addressing requirements for emergency service response. With implementation of the below mentioned policies, this impact is considered *less than significant*.

Health & Safety Element	
Policies designed to minimize this impact through the preservation of floodplain areas and the management of new development in hazardous areas include the following:	
HS-1.2 Development Constraints HS-1.3 Hazardous Lands HS-1.12 Addressing HS-5.1 Development Compliance with Federal, State, and Local Regulations HS-5.2 Development in Floodplain Zones HS-5.3 Participation in Federal Flood Insurance Program HS-5.4 Multi-Purpose Flood Control Measures HS-5.5 Development in Dam and Seiche Inundation Zones	HS-5.6 Impacts to Downstream Properties HS-5.7 Mapping of Flood Hazard Areas HS-5.8 Road Location HS-5.9 Floodplain Development Restrictions HS-5.10 Flood Control Design HS-5.11 Natural Design Implementation Measure #14
Policies designed to minimize this impact through the continued coordination with service providers, implementation of emergency response plans, and emergency training programs include the following:	
HS-1.1 Maintain Emergency Public Services HS-7.1 Coordinate Emergency Response Services with Government Agencies HS-7.2 Mutual Aid Agreement	Implementation Measure #2 Implementation Measure #3 Implementation Measure #5 Implementation Measure #9

HS-7.3 Maintain Emergency Evacuation Plans HS-7.7 Joint Exercises Implementation Measure #1	Implementation Measure #16 Implementation Measure #18
Public Facilities & Services Element	
Policies designed to minimize this impact through adherence to appropriate levels of stormwater infrastructure planning, financing and construction include the following:	
PFS-4.1 Stormwater Management Plans PFS-4.2 Site Improvements PFS-4.3 Development Requirements PFS-4.4 Stormwater Retention Facilities PFS-4.6 Agency Coordination	

Required Mitigation Measures

This impact is considered *less than significant*. No additional mitigation measures are required.

Impact HS-10: The General Plan Update could expose people or structures to a significant risk of loss, injury or death involving flooding, including flooding as a result of the failure of a levee or dam.

Impact Summary

Level of Significance Before Mitigation: <i>Potentially Significant</i>
Required Mitigation Measures: <i>No feasible mitigation available</i>
Level of Significance After Mitigation: <i>Significant and Unavoidable</i>

Impact Analysis

In addition to flood hazards associated with 100-year flood zones, flood inundation resulting from levee or dam failure due to a variety of factors is a potential hazard for the County. As noted in the General Plan Background Report, two major dams could cause substantial flooding in Tulare County in the event of a failure: Terminus Dam and Success Dam. In addition, there are many smaller dams throughout the County that would cause localized flooding in the event of their failing. However, a comprehensive analysis of the potential for dam failure and possible downstream effects for these upstream dams has not been undertaken. Dam failure can result from numerous natural or human activities, such as earthquakes, erosion, improper siting, rapidly rising flood waters, and structural and design flaws.

Recent flood events, including Hurricane Katrina, have brought to the forefront a heightened awareness of the dangers of levee failure. This realization has led to increased public scrutiny of new development projects that are located in floodplain areas protected by levees. Levees typically fail in one of two ways: (1) overtopping of the levee during peak flows or (2) structural failure. Structural failure can occur as a result of a variety of factors including seismic activity, erosion, damage from vegetation and rodents. Both types of levee failure can result in deep flooding within the adjacent floodplain.

In summary, the risk of living behind a levee system is that there could be a minor, major, or catastrophic failure of the levee. Implementation of the General Plan Update would result in additional residential and non-residential land use developments that would face similar risks to those experienced by other residents in the region. Other areas of California face similar risks from natural disasters including earthquakes, mudslides, wildfires, and inundation as a result of dam failure. However, the regulatory framework developed to address these hazards and fund the necessary improvements is generally better established. Levees are regulated at the State level with maintenance activities delegated to local agencies. The County has no jurisdiction and is limited in terms of alternatives to mitigate for the identified risks. Furthermore, levee maintenance and its associated funding mechanisms are complicated by various factors outside the County's control and beyond the scope of this project.

Policies included as part of the General Plan Update that would minimize this impact are summarized below by general plan element. Specific policies from the draft Health and Safety Element direct the County to preserve floodway areas (see policy HS-5.2, 5.4, 5.9) and limit development in hazardous areas (see policies HS-1.2, HS-1.3, and HS-5.5). Other policies require the County to ensure that new flood control projects do not adversely affect or contribute to flooding hazards (see Policy HS-5.6) or require the County to review projects for their exposure to inundation due to dam failure (see Policy HS-5.5). Policies from the draft Public Facilities and Services Element (PFS-4.1, PFS-4.2, PFS-4.3, PFS-4.4, and PFS-4.6) require the provision of adequate levels of storm water drainage infrastructure to protect the public and property from storm water damage and minimize flooding. Additional policies from the draft Health and Safety Element require the County to continue to participate in the National Flood Insurance Program (see policy HS-5.3) and require adequate emergency response (HS-1.1) in the event of a flood emergency. Policy HS-1.12 directs the County to expand home addressing requirements for emergency service response. However, even with implementation of the below mentioned policies and implementation measures, structural integrity of existing levees is an unknown. Therefore, this impact is considered *potentially significant*.

Health & Safety Element	
Policies designed to minimize this impact through the preservation of floodplain areas and the management of new development in hazardous areas include the following:	
HS-1.2 Development Constraints HS-1.3 Hazardous Lands HS-1.12 Addressing HS-5.1 Development Compliance with Federal, State, and Local Regulations HS-5.2 Development in Floodplain Zones HS-5.3 Participation in Federal Flood Insurance Program HS-5.4 Multi-Purpose Flood Control Measures HS-5.5 Development in Dam and Seiche Inundation Zones	HS-5.6 Impacts to Downstream Properties HS-5.7 Mapping of Flood Hazard Areas HS-5.8 Road Location HS-5.9 Floodplain Development Restrictions HS-5.10 Flood Control Design HS-5.11 Natural Design Implementation Measure #14
Policies designed to minimize this impact through the continued coordination with service providers, implementation of emergency response plans, and emergency training programs include the following:	
HS-1.1 Maintain Emergency Public Services HS-7.1 Coordinate Emergency Response Services with Government Agencies HS-7.2 Mutual Aid Agreement HS-7.3 Maintain Emergency Evacuation Plans HS-7.7 Joint Exercises Implementation Measure #1	Implementation Measure #2 Implementation Measure #3 Implementation Measure #5 Implementation Measure #9 Implementation Measure #16 Implementation Measure #18

Public Facilities & Services Element
Policies designed to minimize this impact through adherence to appropriate levels of stormwater infrastructure planning, financing and construction include the following:
PFS-4.1 Stormwater Management Plans PFS-4.2 Site Improvements PFS-4.3 Development Requirements PFS-4.4 Stormwater Retention Facilities PFS-4.6 Agency Coordination

Required Mitigation Measures

As stated above, the County will implement a variety of policies designed to address flood plain issues by requiring the preservation of floodplain areas, permitting development that addresses floodplain issues, and maintaining emergency response programs. However, although this approach provides for human health and safety, it could still result in property damage during a flood event. Therefore, implementation of the General Plan Update including the adoption of the policies and implementation measures listed above would still result in a *significant* impact. No additional feasible mitigation is currently available.

Significance after Implementation of Mitigation for Impact HS-10

As stated above, no additional feasible mitigation measures are currently available to reduce this impact to a less than significant level. Consequently, this impact is considered *significant and unavoidable*.

Urban and Wildland Fire Hazards

The potential for urban and wildland fire hazards is the focus of this section. Issues associated with the provision of fire protection services are addressed in Chapter 5.3 “Public Facilities and Services.” No comments specific to urban and/or wildland fire hazards were received during the NOP public scoping phase of the General Plan Update.

Environmental and Regulatory Setting

The General Plan Update included preparation of several major documents including preparation of a detailed Background Report, which serves to chronicle the existing environmental and regulatory setting conditions applicable to the County. A detailed discussion of urban and wildland fire hazard issues can be found in the General Plan Background Report (see Appendix B, Chapters 8.0 “Safety”).

Methodology

The assessment of fire hazard impacts is a qualitative review of the existing conditions applicable to the County and a determination of whether the General Plan Update includes adequate provisions to address the potential impacts associated with local urban and wildland fire hazard conditions.

Standards of Significance

The proposed General Plan Update will establish development guidelines against which future projects will be judged for consistency. The significance criteria for this analysis were developed from criteria presented in Appendix G, “Environmental Checklist Form”, of the CEQA Guidelines and based on the professional judgment of the County of Tulare and its consultants. The project (or the project alternatives) would result in a significant impact if it would:

- Expose people or structures to a significant risk of loss, injury, or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands.

Impacts and Mitigation Measures

Impact HS-11: The General Plan Update could expose people or structures to a significant risk of loss, injury, or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands.

Impact Summary

Level of Significance Before Mitigation: <i>Less-than-Significant</i>
Required Mitigation Measures: <i>No mitigation required</i>
Level of Significance After Mitigation: <i>Not applicable</i>

Impact Analysis

Wildland fires would continue to pose a significant threat to the people and structures of the County, in particular those residing in the Foothill and Mountain Growth Areas, which are more susceptible to wildland fires due to potential fuel loads (grassland and other vegetation). One of the primary factors contributing to the effective control of a vegetation fire is the rapid response by local fire units. This is especially true during fire season, when fire units may be committed to other fires and are unavailable to respond as quickly.

Policies and implementation measures included as part of the General Plan Update that address the need for additional fire prevention services are summarized below by draft General Plan element. For example, Policies HS-1.10, HS-7.3 through HS-7.6 require the County to plan for and expand a variety of public services (including fire protection services and facilities) consistent with community needs. Policy PFS-7.5 indicates the County shall strive to maintain fire department staffing and response time goals consistent with National Fire Protection Association (NFPA) standards. Policies HS-7.1, HS-7.2, HS-6.14, HS-7.1, HS-7.7 and PFS-7.4 promote the implementation of a coordinated emergency response plan both locally and regionally. Policies HS-1.4, HS-6.1 and HS-6.5 through HS-6.12 provide requirements regarding fire safety and building standards for new development. Policy HS-1.12 directs the County to

expand home addressing requirements for emergency service response. Policy HS-6.13 directs the County to support the restoration of disturbed land resulting from wildfires and HS-6.15 provides direction on reducing fuel related hazards. Additionally, policy PFS-1.3 and Public Facilities and Services Implementation Measures #1, #2, and #3 provide for the funding mechanism to provide additional or expanded services in conjunction with new development. With implementation of the below mentioned policies and implementation measures, this impact is considered *less-than-significant*.

Health & Safety Element	Land Use, Planning Framework, Public Facilities and Services and Foothills Elements
Policies designed to minimize this impact through the continued provision of fire protection services and emergency response planning include the following:	
HS-1.4 Building and Codes HS-1.5 Hazard Awareness and Public Education HS-1.6 Public Safety Programs HS-1.8 Response Times Planning in GIS HS-1.9 Emergency Access HS-1.10 Emergency Services Near Assisted Living Housing HS-1.12 Addressing HS-6.1 New Building Fire Hazards HS-6.2 Development in Fire Hazard Zones HS-6.3 Consultation with Fire Service Districts HS-6.4 Encourage Cluster Development HS-6.5 Fire Risk Recommendations HS-6.6 Wildland Fire Management Plans HS-6.7 Water Supply System HS-6.8 Private Water Supply HS-6.9 Fuel Modification Programs HS-6.10 Fuel Breaks HS-6.11 Fire Buffers HS-6.12 Weed Abatement HS-6.13 Restoration of Disturbed Lands HS-6.14 Coordination with Cities HS-6.15 Coordination of Fuel Hazards on Public Lands HS-7.1 Coordinate Emergency Response Services with Government Agencies HS-7.2 Mutual Aid Agreement HS-7.3 Maintain Emergency Evacuation Plans HS-7.4 Upgrading for Streets and Highways HS-7.5 Emergency Centers HS-7.6 Search and Rescue HS-7.7 Joint Exercises HS Implementation Measure #15A	PF-5.2 Criteria for New Towns PFS-1.3 Impact Mitigation PFS-2.1 Water Supply PFS-7.1 Fire Protection PFS-7.2 Fire Protection Standards PFS-7.3 Visible Signage for Roads and Buildings PFS-7.4 Interagency Fire Protection Cooperation PFS-7.5 Fire Staffing and Response Time Standards PFS-7.6 Provision of Station Facilities and Equipment PFS-7.8 Cost Sharing PFS-7.12 Locations of Fire and Sheriff Stations/Sub-stations F-11.2 Provision of Safety Services F-11.3 Fire and Crime Protection Plan
Public Facilities and Services Implementation Measures designed to ensure funding for County utilities to provide adequate service levels.	
Public Facilities and Services Implementation Measure #1 Public Facilities and Services Implementation Measure #2 Public Facilities and Services Implementation Measure #3 Public Facilities and Services Implementation Measure #9	

Required Mitigation Measures

This impact is considered *less than significant*. No additional mitigation measures are required.

Emergency Response

The potential for inadequate emergency response services is the focus of this section. Issues associated with the provision of fire protection and law enforcement services are addressed in Chapter 5.3 “Public Facilities and Services.” No comments specific to emergency response services were received during the NOP public scoping phase of the General Plan Update.

Environmental and Regulatory Setting

The General Plan Update included preparation of several major documents including preparation of a detailed Background Report, which serves to chronicle the existing environmental and regulatory setting conditions applicable to the County. A detailed discussion of emergency response issues can be found in the General Plan Background Report (see Appendix B, Chapters 8.0 “Safety”).

Methodology

The assessment of impacts to existing levels of emergency response services is a qualitative review of the existing conditions applicable to the County and a determination of whether the General Plan Update includes adequate provisions to address the potential impacts to local emergency response conditions.

Standards of Significance

The proposed General Plan Update will establish development guidelines against which future projects will be judged for consistency. The significance criteria for this analysis were developed from criteria presented in Appendix G, “Environmental Checklist Form”, of the CEQA Guidelines and based on the professional judgment of the County of Tulare and its consultants. The project (or the project alternatives) would result in a significant impact if it would:

- Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan.

Impacts and Mitigation Measures

Impact HS-12: The General Plan Update could impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan.

Impact Summary

Level of Significance Before Mitigation: <i>Potentially Significant</i>
Required Mitigation Measures: <i>No additional mitigation is currently available</i>
Level of Significance After Mitigation: <i>Significant and Unavoidable</i>

Impact Analysis

As more fully described in Chapter 5.2 “Transportation & Circulation” of this EIR, implementation of the General Plan Update would increase the current number of vehicle trips and miles of vehicular travel within the County. Consequently, several local roadway facilities would experience deterioration in their level of service to an unacceptable level. The General Plan Update addresses these traffic impacts through a combination of policies and several physical roadway improvements. However, the traffic impact is still considered “significant and unavoidable” because the proposed policies allow for the deterioration of their level of service beyond what is allowed under the current General Plan and because implementation of several proposed roadway improvements is contingent on a variety of factors outside the County’s control. Roadways operating at unacceptable levels of service could contribute to the physical interference of an adopted emergency response plan or evacuation plan.

Policies included as part of the General Plan Update that would minimize this impact are summarized below by general plan element. The draft Health & Safety Element provides a number of these policies that address conformance with local emergency response programs and continued cooperation with emergency response service providers. For example, policies have been developed to ensure that the County continues to maintain emergency evacuation plans (see Policy HS-7.3) and a coordinated emergency response system is maintained with other agencies (see Policy HS-7.1). Policy HS-1.12 directs the County to expand home addressing requirements for emergency service response. Policy HS-7.2 requires the County to maintain current and effective mutual aid or Joint Power Agreements for fire, police, medical response, mass care, and heavy rescue functions as appropriate. However, even with implementation of the below mentioned policies and implementation measures, this impact is considered *potentially significant*.

Health & Safety Element
Policies designed to ensure a coordinated approach to emergency response and evacuation planning include the following:
HS-1.12 Addressing HS-7.1 Coordinate Emergency Response Services with Government Agencies HS-7.2 Mutual Aid Agreement HS-7.3 Maintain Emergency Evacuation Plans HS-7.4 Upgrading for Streets and Highways HS-7.5 Emergency Centers HS-7.6 Search and Rescue HS-7.7 Joint Exercises

Required Mitigation Measures

As stated above, the County will implement a variety of policies and implementation measures designed to address conformance with local emergency response programs and continued cooperation with emergency response service providers. However, roadways operating at unacceptable levels of service (through increased vehicle traffic associated with the General Plan Update) could physically impede the response times of emergency response vehicles or delay implementation of an evacuation plan. As a result, this impact remains *significant*. No additional feasible mitigation is currently available.

Significance after Implementation of Mitigation for Impact HS-12

As stated above, no additional feasible mitigation measures are currently available to reduce this impact to a less than significant level. Consequently, this impact is considered *significant and unavoidable*.

Noise

Primary noise sources within the County include traffic, railroad operations, and the various airports. Industrial and commercial activities also contribute to background noise. However, roadway and traffic noise contribute a majority of the noise in the County. No comments specific to noise issues were received during the NOP public scoping phase of the General Plan Update.

Environmental and Regulatory Setting

The General Plan Update included preparation of several major documents including preparation of a Background Report, which serves to chronicle the existing environmental and regulatory setting conditions applicable to the County. A discussion of noise issues can be found in the General Plan 2030 Background Report (see Appendix B, Chapters 8.0 “Safety”).

Methodology

Noise impacts are assessed based on a comparative analysis of the noise levels resulting from the General Plan Update and the noise levels under baseline or existing conditions. The traffic-related noise analysis is based on the traffic volumes reported in the traffic analysis (see Chapter 5.2 “Transportation and Circulation” of the EIR). An increase of three decibels is considered to be a significant increase in traffic-related noise, and it requires a doubling of traffic volumes (a 100 percent increase) for noise levels to increase by three decibels.

Standards of Significance

The proposed General Plan Update will establish development guidelines against which future projects will be judged for consistency. The significance criteria for this analysis were developed from criteria presented in Appendix G, “Environmental Checklist Form”, of the CEQA Guidelines and based on the professional judgment of the County of Tulare and its consultants. The project (or the project alternatives) would result in a significant impact if it would:

- Expose persons to or generate noise levels in excess of standards established in a local general plan or noise ordinance or applicable standards of other agencies;
- Expose persons to or generate excessive groundborne vibration or groundborne noise levels;
- Result in a substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project;

- Result in a substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project;
- Be located within an airport land use plan area, or, where such a plan has not been adopted, within two miles of a public airport or publicly used airport and expose people residing or working in the project area to excessive noise levels; or
- Be located in the vicinity of a private airstrip and expose people residing or working in the project area to excessive noise levels.

This EIR considers changes in ambient noise levels as a result of the General Plan Update. A sliding scale is commonly used for this purpose, allowing greater increases at lower absolute sound levels than at higher levels. As more fully described in the General Plan Background Report (see Appendix B, Chapters 8.0 “Safety”), a 3 dBA noise increase is barely perceptible to the average healthy ear and a 5 dBA increase is readily perceptible. Thus the significance criteria for changes in noise from the project are as follows:

- If the noise level resulting from implementation of the General Plan Update or its alternatives would exceed the “normally acceptable” range for a given land use where the existing noise level exceeds the normally acceptable range, a 3 dBA or greater increase due to the project is considered significant.
- If the noise level resulting from implementation of the General Plan Update or its alternatives would exceed the “normally acceptable” range for a given land use where the existing noise level is within the normally acceptable range, a 5 dBA or greater increase due to the project is considered significant.
- If the noise level resulting from implementation of the General Plan Update or its alternatives would be within the “normally acceptable” range for a given land use, a 10 dBA or greater increase due to the project is considered significant.

Impacts and Mitigation Measures

Impact HS-13: The General Plan Update would result in the exposure of persons to or generation of noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies; or would result in a substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project; or would result in a substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project.

Impact Summary

Level of Significance Before Mitigation: <i>Potentially Significant</i>
Required Mitigation Measures: <i>New policies HS-8.12 “Noise Analysis”, HS-8.13 “Sound Attenuation Features”, HS-8.14 “Noise Buffering”, HS-8.15 “State Noise Insulation Standards”, HS-8.16 “Coordinate with Caltrans”, and HS-8.17 “Construction Noise”</i>
Level of Significance After Mitigation: <i>Significant and Unavoidable</i>

Impact Analysis

Construction Noise. Construction related noise is considered a short-term noise impact associated with demolition, site preparation, grading, and other construction-related activities. Two types of short-term noise impacts could occur during these construction-related activities. First, the transport of workers and the movement of materials to and from the construction site could incrementally increase noise levels along local access roads. The second source of noise would result from the physical activities (e.g., grading, etc.) associated with any construction-related activities. Construction is performed in various distinct steps, each with its own mix of equipment, workers, and activities. Consequently, each step has its own noise characteristics. However, despite the variety in the type and size of construction equipment, similarities in the dominant noise sources and patterns of operation allow construction-related noise ranges to be categorized by work phase. Table 4-3 provides a list of typical construction equipment noise levels recommended for noise impact assessments, based on a distance of 50 feet between a particular piece of equipment and a noise receptor. Implementation of the General Plan Update would result in additional residential and non-residential land use developments in designated growth areas that have the potential to result in all of these types of construction-related noises at varying times and intensities throughout the planning period.

**TABLE 4-3
NOISE LEVELS GENERATED BY TYPICAL CONSTRUCTION EQUIPMENT**

Type of Equipment	Range of Sound Levels Measured (dBA of 50 feet)	Suggested Sound Levels for Analysis (dBA of 50 feet)
Pile Drivers, 12,000 to 18,000 ft –lb/blow	81 to 96	93
Rock Drills	83 to 99	96
Jack Hammers	75 to 85	82
Pneumatic Tools	78 to 88	85
Pumps	68 to 80	77
Dozers	85 to 90	88
Tractor	77 to 82	80
Front-End Loaders	86 to 90	88
Hydraulic Backhoe	81 to 90	86
Hydraulic Excavators	81 to 90	86
Graders	79 to 89	86
Air Compressors	76 to 86	86
Trucks	81 to 87	86

Source: Noise Control for Buildings and Manufacturing Plants (Bolt, Beranek and Newman, 1987).

Using the information provided in Table 4-3, an estimate of composite construction noise for commercial and industrial development can be characterized as 89 dBA Leq when measured at a distance of 50 feet from the construction area. Residential development is slightly lower with a composite noise level of 88 dBA Leq. These values take into account the number, pieces, and spacing of the types of equipment used for each type of activity. Additionally, during the later phases of building construction, noise levels typically are reduced from these values and the physical structures themselves may further break-up line-of-sight noise propagation.

Using the 89 dBA Leq value and assuming that construction would occur for approximately 8 hours per day, the CNEL is estimated at 84 dBA at 50 feet (83 dBA CNEL for residential construction). Consequently, construction-related noise associated with the General Plan Update could exceed the “normally acceptable” range for a given land use and result in a significant impact. It is expected that subsequent CEQA documentation prepared for individual projects would have project-specific data and will be required to address, and if possible, mitigate any potential construction-related noise impacts to a less-than-significant level. Examples of mitigation that may be proposed include shielding of construction equipment and limitations on construction hours. However, it should be noted, the ability to mitigate this potential impact is contingent on a variety of factors including the severity of the noise impact, existing land use conditions and the technical feasibility of being able to implement any proposed mitigation measures.

Operational Noise (On-Road Mobile Sources). Potential impacts on existing land uses are the result of additional on-road mobile sources (vehicles) traveling along local roadways. Table 7-4 (see Chapter 7.0 “Alternatives to the General Plan Update” of this EIR) identifies the various routes for which traffic data was generated using the TCAG’s traffic model prepared for the General Plan Update (see Chapter 5.2 “Transportation & Circulation”) and the project alternatives. The table provides information for both existing and proposed roadway segments and identifies the potential for a significant increase in noise due to buildout of the General Plan Update. However,

the actual level of impact would depend on the presence and location of any existing or proposed land uses in relation to the noise source. While an increase of 3 to 5 dBA is considered potentially significant, it is only significant if it affects sensitive land uses. It is expected that subsequent CEQA documentation prepared for individual projects would have project-specific data and will be required to address, and if possible, mitigate any potential operations-related noise impacts to a less-than-significant level. Examples of mitigation that may be proposed include various types of shielding (e.g., vegetation, etc.) or sound walls. However, it should be noted, the ability to mitigate this potential impact is contingent on a variety of factors including the severity of the noise impact, existing land use conditions and the technical feasibility of being able to implement any proposed mitigation measures.

Operational Noise (Railroad Sources). Railroad noise primarily occurs from existing operations along the Union Pacific Railroad (UPRR) line, which runs north-south through the County. Other rail lines that serve the County include the San Joaquin Valley Railroad and the Burlington Northern Santa Fe. Because of the uncertainties associated with future operational details, no

comprehensive noise predictions are included in this analysis. However, buildout of the General Plan Update could locate residential land uses in the vicinity of the UPRR (or other railroad) corridor, which could result in the exposure of sensitive receptors to noise levels that exceed County standards. The actual level of impact would depend on the presence and location of any existing or proposed land uses in relation to the noise source. While an increase of 3 to 5 dBA is considered potentially significant, it is only significant if it affects sensitive land uses. It is expected that subsequent CEQA documentation prepared for individual projects would have project-specific data and will be required to address, and if possible, mitigate any potential operations-related noise impacts to a less-than-significant level. Examples of mitigation that may be proposed include various types of shielding (e.g., vegetation, etc.), sound walls, or noise-reducing building treatments. The County may also consider the establishment of “Quiet Zones” or setback areas adjacent to railroad crossings in an effort to minimize noise impacts (e.g., train whistles, etc.) to a variety of sensitive land uses. However, it should be noted, the ability to mitigate this potential impact is contingent upon a variety of factors including the severity of the noise impact, existing land use conditions and the technical feasibility of being able to implement any proposed mitigation measures.

Stationary Noise (Industrial Noise Sources). The siting of new industrial development and designated growth areas may increase noise levels in their proximity. This could occur due to the continual presence of heavy trucks used for the distribution of goods and supplies; or from the use of equipment actually used in the manufacturing process or on the site to transport goods (primarily forklifts). Potential areas of land use noise conflict could occur at the borders of these industrial areas with other sensitive land uses (i.e., residential, schools, etc.) or along roadways leading to these industrial areas.

It is expected that subsequent CEQA documentation prepared for individual projects would have project-specific data and will be required to address, and if possible, mitigate any potential operations-related noise impacts to a less-than-significant level. Examples of mitigation that may be proposed include various types of shielding (e.g., vegetation, etc.), sound walls, or noise-reducing building treatments. However, it should be noted, the ability to mitigate this potential impact is contingent upon a variety of factors including the severity of the noise impact, existing land use conditions and the technical feasibility of being able to implement any proposed mitigation measures.

Policies included as part of the General Plan Update that would minimize this impact are summarized below by general plan element. The draft Health and Safety Element provide a number of policies that have been developed to address noise and land use compatibility issues associated with the General Plan Update. For example, policies have been developed to provide guidance on the analysis and mitigation of future project-related noise issues. These policies include identifying appropriate noise levels for sensitive receptors (policy HS-8.3), noise compatibility guidelines (policies HS-8.5, HS-8.6, HS-8.8), and criteria for peak generating land uses (see policy HS-8.11). Additional policies have been designed to promote compatible development that minimizes a variety of nuisance related impacts (i.e., visual, noise, etc.). Additional policies from both the draft Land Use and Health and Safety Elements (see Policies LU-1.3, LU-5.4, HS-8.1, HS-8.3, and HS-8.4) prevent the placement of incompatible noise

generating land uses (i.e., industrial, railroads, airports, etc.) within residential areas. However, even with implementation of the below mentioned policies and implementation measures, this impact is considered *potentially significant*.

Health & Safety Element	
Policies designed to provide guidance on the analysis, mitigation and monitoring of a variety of noise-related impacts that could occur within the County include the following:	
HS-8.2 Noise Impacted Areas HS-8.5 State Noise Standards HS-8.6 Noise Level Criteria HS-8.7 Inside Noise	HS-8.8 Adjacent Uses HS-8.9 County Equipment HS-8.10 Automobile Noise Enforcement HS-8.11 Peak Noise Generators
Health and Safety	Land Use Elements
Policies designed to promote compatible development within areas that minimize impacts (including noise) to surrounding land uses include the following:	
HS-8.1 Economic Base Protection HS-8.3 Noise Sensitive Land Uses HS-8.4 Airport Noise Contours	LU-1.3 Prevent Incompatible Uses LU-5.4 Compatibility with Surrounding Land Use

Required Mitigation Measures

In addition to the above mentioned policies and implementation measures, the following new policies are required to address this impact:

- HS-8.12 Noise Analysis.** The County shall require a detailed noise impact analysis in areas where current or future exterior noise levels from transportation or stationary sources have the potential to exceed the adopted noise policies of the Noise Element, where there are development of new noise sensitive land uses or the development of potential noise generating land uses near existing sensitive land uses. The noise analysis shall be the responsibility of the project applicant and be prepared by a qualified acoustical engineer (i.e., a Registered Professional Engineer in the State of California, etc.). The analysis shall include recommendations and evidence to establish mitigation that will reduce noise exposure to acceptable levels. *[New Policy – Draft EIR Analysis]*.
- HS-8.13 Sound Attenuation Features.** The County shall require sound attenuation features such as walls, berming, heavy landscaping, and between commercial, industrial, and residential uses to reduce noise and vibration impacts. *[New Policy – Draft EIR Analysis]*.
- HS-8.14 Noise Buffering.** The County shall require noise buffering or insulation in new development along major streets, highways, and railroad tracks. *[New Policy - Draft EIR Analysis]*.
- HS-8.15 State Noise Insulation Standards.** The County shall enforce the State Noise Insulation Standards (California Administrative Code, Title 24) and Chapter 35 of the Uniform Building Code. *[New Policy - Draft EIR Analysis]*.
- HS-8.16 Coordinate with Caltrans.** The County shall work with Caltrans to mitigate noise impacts on sensitive receptors near state roadways, by requiring noise buffering or insulation in new construction. *[New Policy - Draft EIR Analysis]*.

- **HS-8.17 Construction Noise.** The County shall seek to limit the potential noise impacts of construction activities on surrounding land uses. [*New Policy - Draft EIR Analysis*].

As stated above, the County will implement a variety of policies designed to address noise issues (including the new policies HS-8.12 “Noise Analysis”, HS-8.13 “Sound Attenuation Features”, HS-8.14 “Noise Buffering”, HS-8.15 “State Noise Insulation Standards”, HS-8.16 “Coordinate with Caltrans”, and HS-8.17 “Construction Noise”). The County will also continue to discourage the siting of industrial uses near sensitive land uses. In addition, the County will ensure that future CEQA documentation be prepared for individual projects (with project-specific data) that will (if technically possible) mitigate any potential noise impacts to a less-than-significant level. However, it should be noted, the ability to mitigate this potential impact is contingent upon a variety of factors including the severity of the noise impact, existing land use conditions and the technical feasibility of being able to implement any proposed mitigation measures. Given the uncertainty as to whether future noise impacts could be adequately mitigated for all the individual projects that will be implemented as part (i.e., establishment of setbacks near at-grade railroad crossings, etc.) of the General Plan Update, this impact remains **significant**. No additional feasible mitigation is currently available.

Significance after Implementation of Mitigation for Impact HS-13

As stated above, no additional feasible mitigation measures are currently available to reduce this impact to a less than significant level. Consequently, this impact is considered **significant and unavoidable**.

Impact HS-14: The General Plan Update will result in the exposure of persons to or generation of excessive groundborne vibration or groundborne noise levels.

Impact Summary

Level of Significance Before Mitigation: <i>Potentially Significant</i>
Required Mitigation Measures: <i>New policies HS-8.12 “Noise Analysis”, HS-8.13 “Sound Attenuation Features”, HS-8.14 “Noise Buffering”, HS-8.15 “State Noise Insulation Standards”, HS-8.16 “Coordinate with Caltrans”, and HS-8.17 “Construction Noise”</i>
Level of Significance After Mitigation: <i>Significant and Unavoidable</i>

Impact Analysis

Similar to Impact HS-13, buildout of the General Plan and designated growth areas could potentially expose more people to the impacts of excess groundborne vibration or noise levels. Increased exposure to sources of groundborne vibration could occur through increased residential or employment densities on lands within proximity to noise generating activities (i.e., industrial, airport, etc.). Specifically, vibration created through construction and industrial activities or through the operation of motor vehicles and railways could result in potentially significant impacts on local residents. It is expected that subsequent CEQA documentation prepared for

individual projects would have project-specific data and will be required to address, and if possible, mitigate any potential construction/operations-related vibration and noise impacts to a less-than-significant level. Examples of mitigation that may be proposed include various types of shielding (e.g., vegetation, etc.), sound walls, or noise-reducing building treatments. However, it should be noted, the ability to mitigate this potential impact is contingent upon a variety of factors including the severity of the vibration impact, existing land use conditions and the technical feasibility of being able to implement any proposed mitigation measures.

Policies included as part of the General Plan Update that would minimize this impact are summarized below by general plan element. The draft Health and Safety Element provide a number of policies that have been developed to address noise and land use compatibility issues associated with the General Plan Update. For example, policies have been developed to provide guidance on the analysis and mitigation of future project-related noise issues. These policies include identifying appropriate noise levels for sensitive receptors (policy HS-8.3), noise compatibility guidelines (policies HS-8.5, HS-8.6, HS-8.8), and criteria for peak generating land uses (see policy HS-8.11). Additional policies have been designed to promote compatible development that minimizes a variety of nuisance related impacts (i.e., visual, noise, etc.). Additional policies from both the draft Land Use and Health and Safety Elements (see Policies LU-1.3, LU-5.4, HS-8.1, HS-8.3, and HS-8.4) prevent the placement of incompatible noise generating land uses (i.e., industrial, railroads, airports, etc.) within residential areas. However, even with implementation of the below mentioned policies and implementation measures, this impact is considered *potentially significant*.

Health & Safety Element	
Policies designed to provide guidance on the analysis, mitigation and monitoring of a variety of noise-related impacts that could occur within the County include the following:	
HS-8.2 Noise Impacted Areas HS-8.5 State Noise Standards HS-8.6 Noise Level Criteria HS-8.7 Inside Noise	HS-8.8 Adjacent Uses HS-8.9 County Equipment HS-8.10 Automobile Noise Enforcement HS-8.11 Peak Noise Generators
Health and Safety	Land Use Elements
Policies designed to promote compatible development within areas that minimize impacts (including noise) to surrounding land uses include the following:	
HS-8.1 Economic Base Protection HS-8.3 Noise Sensitive Land Uses HS-8.4 Airport Noise Contours	LU-1.3 Prevent Incompatible Uses LU-5.4 Compatibility with Surrounding Land Use

Required Mitigation Measures

In addition to the above mentioned policies and implementation measures, the following new policies are required to address this impact:

- HS-8.12 Noise Analysis.** The County shall require a detailed noise impact analysis in areas where current or future exterior noise levels from transportation or stationary sources have the potential to exceed the adopted noise policies of the Noise Element, where there are development of new noise sensitive land uses or the development of potential noise generating land uses near existing sensitive land uses. The noise analysis shall be the responsibility of the project applicant and be prepared by a qualified

acoustical engineer (i.e., a Registered Professional Engineer in the State of California, etc.). The analysis shall include recommendations and evidence to establish mitigation that will reduce noise exposure to acceptable levels. *[New Policy – Draft EIR Analysis]*.

- **HS-8.13 Sound Attenuation Features.** The County shall require sound attenuation features such as walls, berming, heavy landscaping, and between commercial, industrial, and residential uses to reduce noise and vibration impacts. *[New Policy – Draft EIR Analysis]*.
- **HS-8.14 Noise Buffering.** The County shall require noise buffering or insulation in new development along major streets, highways, and railroad tracks. *[New Policy - Draft EIR Analysis]*.
- **HS-8.15 State Noise Insulation Standards.** The County shall enforce the State Noise Insulation Standards (California Administrative Code, Title 24) and Chapter 35 of the Uniform Building Code. *[New Policy - Draft EIR Analysis]*.
- **HS-8.16 Coordinate with Caltrans.** The County shall work with Caltrans to mitigate noise impacts on sensitive receptors near state roadways, by requiring noise buffering or insulation in new construction. *[New Policy - Draft EIR Analysis]*.
- **HS-8.17 Construction Noise.** The County shall seek to limit the potential noise impacts of construction activities on surrounding land uses. *[New Policy - Draft EIR Analysis]*.

Required Mitigation Measures

As stated above, the County will implement a variety of policies and implementation measures designed to address noise issues (including the new policies HS-8.12 “Noise Analysis”, HS-8.13 “Sound Attenuation Features”, HS-8.14 “Noise Buffering”, HS-8.15 “State Noise Insulation Standards”, HS-8.16 “Coordinate with Caltrans”, and HS-8.17 “Construction Noise”). The County will also continue to discourage the siting of industrial uses near sensitive land uses. In addition, the County will ensure that future CEQA documentation be prepared for individual projects (with project-specific data) that will (if technically possible) mitigate any potential noise and vibration impacts to a less-than-significant level. However, it should be noted, the ability to mitigate this potential impact is contingent upon a variety of factors including the severity of the vibration impact, existing land use conditions and the technical feasibility of being able to implement any proposed mitigation measures. Given the uncertainty as to whether future noise impacts could be adequately mitigated for all the individual projects that will be implemented as part of the General Plan Update, this impact remains *significant*. No additional feasible mitigation is currently available.

Significance after Implementation of Mitigation for Impact HS-14

As stated above, no additional feasible mitigation measures are currently available to reduce this impact to a less than significant level. Consequently, this impact is considered *significant and unavoidable*.

Impact HS-15: The General Plan Update will be located within an airport land use plan area or within the vicinity of a private airstrip and could expose people residing or working within the project area to excessive noise levels.

Impact Summary

Level of Significance Before Mitigation: <i>Potentially Significant</i>
Required Mitigation Measures: <i>No additional mitigation is currently available</i>
Level of Significance After Mitigation: <i>Significant and Unavoidable</i>

Impact Analysis

Implementation of the General Plan Update would result in additional residential and non-residential land use developments. Although the exact location of this new development is not currently known at this time and would be planned over the next twenty years, these land use developments could result in new urban development, including new urban land uses in the vicinity of airports and private airstrips, of which the County has nine public airports. New development near aviation facilities could be exposed to excessive airport-related noise levels.

The Airport Land Use Commission (ALUC) was established to ensure that there are no direct conflicts with land uses, noise, or other issues that would impact the functionality and safety of airport operations. One of the key functions of the ALUC is to require that cities’ and counties’ general plans and zoning ordinances are consistent with Comprehensive Airport Land Use Plans (CALUP), which contain noise contours, restrictions for types of construction and building heights in navigable air space, as well as requirements impacting the establishment or construction of sensitive uses within close proximity to airports.

Overall, the intent of the proposed General Plan is to ensure that existing and future land uses function without imposing a nuisance, hazard, or unhealthy condition upon adjacent uses. Policies included as part of the General Plan Update that would minimize conflicts with local airports are summarized below by general plan element. The draft Land Use Element provides a number of policies that establish requirements for compatible development, including buffering, screening, controls and performance standards, and the siting of compatible land uses (see Policies LU-1.3, LU-3.6, and LU-5.4). Other policies from the draft Transportation and Circulation and Health and Safety Elements (see Policies TC-3.4, TC-3.6, HS-3.1, HS-3.2, and HS-8.4) require the County to ensure that all development within the vicinity of local airport

facilities is consistent with the policies adopted by the Tulare County Airport Land Use Commission and the most recently adopted Airport Land Use Compatibility Plan. However, even with implementation of the below mentioned policies and implementation measures, this impact is considered *potentially significant*.

Land Use Elements	
Policies designed to promote compatible land use development and patterns that minimize impacts to surrounding land uses (including open space uses) include the following:	
LU-1.3 Prevent Incompatible Uses LU-3.6 Project Design LU-5.4 Compatibility with Surrounding Land Use	
Transportation & Circulation Element	Health & Safety Element
Policies designed to promote development compatible with local airport land use compatibility plans, include the following:	
TC-3.4 Airport Compatibility TC-3.6 Airport Encroachment	HS-3.1 Airport Land Use Compatibility Plan HS-3.2 Compliance with FAA Regulations HS-8.4 Airport Noise Contours

Required Mitigation Measures

As stated above, the County will implement a variety of policies designed to address airport noise and land use compatibility issues. In addition, the County will ensure that future CEQA documentation be prepared for individual projects (with project-specific data) that will (if technically possible) mitigate any potential airport-related noise impacts to a less-than-significant level. However, it should be noted, the ability to mitigate this potential impact is contingent upon a variety of factors including the severity of the noise impact, existing land use conditions and the technical feasibility of being able to implement any proposed mitigation measures. Given the uncertainty as to whether future airport noise-related impacts could be adequately mitigated for all the individual projects that will be implemented as part of the updated General Plan, this impact remains *significant*. No additional feasible mitigation is currently available.

Significance after Implementation of Mitigation for Impact HS-15

As stated above, no additional feasible mitigation measures are currently available to reduce this impact to a less than significant level. Consequently, this impact is considered *significant and unavoidable*.

4.6 Water Resources

The Water Resources section of the Goals and Policies Report (Section 11.2 and 11.3) focuses on providing for the current and long-range water needs of the County and for the protection of the quality and quantity of surface water and groundwater resources.

Water Supply

As a result of comments (see Table 1-2 of Chapter 1.0 “Introduction”) received during the NOP public scoping phase of the General Plan Update, the following water-related issues have been

considered as part of the impact analysis. For example, the California Regional Water Quality Control Board suggested that the General Plan include a map at a regional scale of all waters of the State potentially effected by development, document potential cumulative watershed hydrology from existing and planned development, and include measures to maintain the pre-project hydrograph. Carole Clum suggested that the EIR consider stringent water conservation measures. Several other commenters suggested that the General Plan and EIR address water quantity concerns that conserve groundwater and promote surface water use over groundwater use.

Environmental and Regulatory Setting

The General Plan Update included the preparation of several major documents including preparation of a very detailed Background Report, which serves to chronicle the existing environmental and regulatory setting conditions applicable to the County. A detailed discussion of County-wide water supply and water resource issues can be found in the General Plan Background Report (see Appendix B, Section 7.2 “Domestic Water Supply”).

Methodology

Adequate domestic water infrastructure is essential if the County is to sustain growth and serve projected increases in employment and population. The main purpose of this section is to address domestic water infrastructure availability provided by government agencies. There are a multitude of domestic water service providers (both public and private) in Tulare County including community service districts (CSDs), irrigation districts (IDs), public utility districts (PUDs), and mutual water companies. These Districts are self governing and are not subject to County control. The County must coordinate its plans for growth and development with these districts in order to assure that services can be provided on a timely basis to areas planned for development, including areas within designated Urban Development Boundaries (UDBs).

Implementation of the General Plan Update would result in varying levels of impacts on each special district which provides domestic water service to a particular community. The first step in the impact analysis was to establish significance criteria consistent with CEQA and Tulare County Guidelines that was used as a basis for identifying impacts.

After establishing the significance criteria, an overview of domestic water service providers in unincorporated communities within the County was compiled (see section below). This overview first identifies General Plan population projections for the General Plan Update (and each build-out alternative) by unincorporated community. Since ongoing implementation and necessary updates of community plans are an important aspect of infrastructure planning and development to support continued growth within a specific community, the most recent update to each community plan was also noted. A qualitative assessment of the existing domestic water infrastructure for each community is also provided which outlined whether a water system is capable of serving growth associated with build-out of the General Plan Update. The qualitative assessment identifies whether individual water systems are more than adequate, adequate, adequate with concerns, or if there are significant concerns. A brief description of each community water system is then provided which

outlines available information including existing capacity, planned improvements, and potential constraints.

Following the overview of the community water systems, an overall impact analysis was performed, which identified potentially significant environmental impacts associated with the General Plan Update along with policies and implementation measures that would reduce these impacts. Impacts that were found to be significant and unavoidable are also identified.

Domestic Water Service Overview

As previously described above, this overview of the County's domestic water service providers is included in an effort to provide the necessary background for the discussion of domestic water-related impacts.

The General Plan Update includes several major documents including a report entitled "*Water Resources General Plan Update County of Tulare*", prepared by Keller, Wegley & Associates as a part of the Background Report. The report provides an overview of the water resources within Tulare County and their relationship to existing and projected development within the County. The overview includes the status of each of the major sources of water and any anticipated change in status over the planning horizon covered by the updated General Plan. Issues addressed include groundwater quality, groundwater overdraft and the reliability of identified surface water sources.

Section 15150 of the CEQA Guidelines permits documents of lengthy technical detail to be incorporated by reference in an EIR. Specifically, Section 15150 states that an EIR may "incorporate by reference all or portions of another document which is a matter of public record or is generally available to the public" Consequently, the report entitled "*Water Resources General Plan Update County of Tulare*" is incorporated by reference. To some extent, the text of the referenced report has been incorporated where applicable however, the contents of this analysis shall not supersede any of the documentation contained in the report that has been incorporated by reference.

Growth Projections

Demands for water resources within Tulare County are met from four major sources. These sources include groundwater, local streams and rivers, imported surface water and imported surface water by exchange. The predominant water supply for domestic use within the unincorporated communities of Tulare County is groundwater. Large and small water systems that provide domestic water service to unincorporated communities in the County are typically operated and managed by CSDs, IDs, PUDs, and mutual water companies. These Districts are self governing and are not subject to County control. Although these Districts are not subject to County control, the County must coordinate its plans for growth and development with these districts in order to assure that services can be provided on a timely basis to areas planned for development, including areas within designated Urban Development Boundaries (UDBs).

Table 4-4 identifies unincorporated communities within the County, and the special districts that provide domestic water service to those communities. The table also identifies the existing (2003) population (as contained in the Tulare County Association of Governments Traffic Model) and the range of general plan population growth estimates for each unincorporated community. Since ongoing implementation and necessary updates of community plans are an important aspect of infrastructure planning and development to support continued growth within a specific community, the most recent update to each community plan is also noted in Table 4-4.

**TABLE 4-4
GENERAL PLAN POPULATION ESTIMATES BY UNINCORPORATED COMMUNITY**

Community	Domestic Water Service Provider	Existing Population (2003 TCAG Model)	Range of General Plan Population Estimates	Community Plan Last Updated
Alpaugh	Alpaugh JPA	761	849 to 975	None to Date
Cutler	Cuter PUD	4,962	10,245 to 11,763	1988
Orosi	Orosi PUD	8,086	16,694 to 19,169	1988
Ducor	Ducor CSD	504	592 to 680	2004
Earlilmart	Earlilmart PUD	7,393	13,034 to 14,965	1988
East Orosi	East Orosi CSD	426	N/A	None to Date
Goshen	Cal Water	2,473	4,258 to 4,889	1978
Ivanhoe	Ivanhoe PUD	4,524	6,302 to 7,236	1990
Lemon Cove	Lemon Cove SD	251	377 to 433	None to Date
London	London CSD	1,848	1,927 to 2,213	None to Date
Pixley	Pixley PUD	2,662	5,755 to 6,608	1997
Plainview	Plainview MWC	822	969 to 1,113	None to Date
Poplar-Cotton Center	Poplar CSD	1,789	3,067 to 3,521	1996
Richgrove	Richgrove CSD	2,723	3,315 to 3,806	1986
Springville	Springville PUD	2,755	3,274 to 3,759	1985
Strathmore	Strathmore PUD	2,800	4,166 to 4,783	1989
Terra Bella	Terra Bella ID	3,714	6,506 to 7,471	2004
Three Rivers	Mutual Water Companies/CSD	2,300	3,220 to 3,697	1980
Tipton	Tipton CSD	1,809	1,858 to 2,134	None to Date
Traver	Tito Balling, Inc. (Private Purveyor)	732	1,461 to 1,678	1989
Woodville	Woodville PUD	1,623	1,882 to 2,161	None to Date

Notes:

JPA: Joint Powers Authority
 Cal Water: California Water Service Company (Private)
 SD: Sanitary District
 MWC: Mutual Water Company
 N/A: Not Available

Sources: Existing Population obtained from 2000 Census Data; Range of General Plan Population Estimates based upon modeled General Plan Land Use Alternatives; Community Plan Status obtained from Goals & Policies Report (Revised July 8, 2007)

It should be noted that Tables 4-4 and 4-5 provide information for only “Community” water systems. Unincorporated areas that are formally designated as “Communities” are identified in Section 2.2 of the Draft General Plan. Individual water system descriptions and analysis for hamlets, and other unincorporated areas are not analyzed in detail as a part of this EIR analysis since projected growth for these areas has not been specifically modeled, and much of the information regarding these small water systems is still being obtained by Tulare County Local Agency Formation Commission (LAFCO) through the Municipal Service Review Process. Policy PF-3.3 of the General Plan would require the County to ensure that Hamlet Plans are updated and maintained for each of the identified hamlets. A discussion of the hamlet’s short- and long -term ability to provide necessary urban services is also to be provided within Hamlet Plans.

Through the Municipal Service Review process being undertaken by Tulare County LAFCO, thus far the only domestic water service providers that have responded to the Municipal Service Review questionnaire include the Ponderosa CSD and the Sultana CSD. Information regarding other small water systems is being gathered through the Municipal Service Review process, but is not yet available for reporting.

Domestic Water Service Providers

Table 4-5 provides a qualitative summary of the domestic water service providers for unincorporated communities in the County. Information in the table identifies whether individual water systems are more than adequate, adequate, adequate with concerns, or if there are significant concerns. Following the table, a brief description of each community water system (domestic water service provider) is provided, which supplements the information provided in the table.

**TABLE 4-5
SUMMARY OF DOMESTIC WATER SUPPLY CONDITIONS FOR
UNINCORPORATED COMMUNITIES IN TULARE COUNTY**

Domestic Water Service Provider	Water Supply Source From	Facilities Adequacy to Serve Projected General Plan Population Growth			
		More than Adequate ¹	Adequate ²	Adequate w/ Concerns ³	Significant Concerns ⁴
Alpaugh JPA	Groundwater			X	
Cutler PUD	Groundwater			X	
Orosi PUD	Groundwater		X		
Ducor CSD	Groundwater			X	
Earlimart PUD	Groundwater			X	
East Orosi CSD	Groundwater			X	
Cal Water - Goshen	Groundwater			X	
Ivanhoe PUD	Groundwater	X			
Lemon Cove SD	Groundwater				X
London CSD	Groundwater			X	
Pixley PUD	Groundwater				X
Plainview MWC	Groundwater				X
Poplar CSD	Groundwater	X			
Richgrove CSD	Groundwater			X	
Springville PUD	Surface Water	X			
Strathmore PUD	Groundwater/		X		
Terra Bella ID	Groundwater/	X			
Three Rivers CSD	Groundwater/			X	
Tipton CSD	Groundwater			X	
Tito Balling - Traver	Groundwater			X	
Woodville PUD	Groundwater		X		

Notes:

- 1) "More than Adequate" means that facilities appear capable of serving growth beyond build-out of the General Plan.
- 2) "Adequate" means (1) apparent capacity to serve build-out growth with little financial, technical or environmental difficulty; and (2) clear capacity to serve projected growth.
- 3) "Adequate with Concerns" means that the provider either has the capacity to serve projected growth or is likely to solve capacity issues within the time horizon of the General Plan.
- 4) "Significant Concerns" means that the provider lacks capacity to serve projected growth and is likely to experience significant difficulties in expanding the system to meet projected demand.
- 5) Source of information is from Municipal Service Reviews Adopted by the Tulare County Local Agency Formation Commission (for applicable Districts) and from discussions with District staff members.

Alpaugh Joint Powers Authority Water System

Alpaugh's problems with water have long been documented. The Alpaugh community water system had ongoing water quality problems that included high levels of arsenic and was deemed unsafe for cooking and drinking. The Alpaugh Joint Powers Authority (AJPA) has since addressed many of the health issues in regard to unsafe drinking water and the Department of Health Services rescinded a boil water order as of January 10, 2005.

The current infrastructure for domestic water service is the result of two former systems, previously owned and operated by the AID and TCWWD. When the two Districts formed the AJPA, rights to the domestic water infrastructure were relinquished to the AJPA, which is now a separate governing body. A new well, referred to as Well #10, was added to the AJPA system through funding obtained from a U.S. Department of Agriculture (USDA) grant and loan plus a State grant. The AJPA expects to have an additional well drilled in the near future, at which time Well #10 would function as the Authority's backup well.

Much of the AJPA water distribution system was constructed over 70 years ago. The pipeline system consists of steel, transite, and plastic pipe varying in size from 2 to 8 inches in diameter. Most of the AJPA water system is un-metered; only the Alpaugh School and Western Farms have water meters, although they are currently being charged flat rates. Although the water system is currently un-metered, AJPA staff has indicated that the water system will be metered in the future. The AJPA water system currently supports 295 connections including one industrial connection, a school connection, and 293 residential connections.

Since its formation, the AJPA has received over \$4 million in grants and loans from the USDA, and the Department of Water Resources (DWR), to improve the community's water system. The funds are being used to construct several improvements to the community's water system including drilling a new well, replacing several miles of water mains and constructing a new water tank.

The new well on the edge of town, Well #10, produces water that is safe to drink by government standards as indicated by State DHS officials. The arsenic maximum standard became more stringent as of January 2006 (10 PPB, previously 50 PPB).

While the Authority is unable to support additional connections at this time, ongoing system improvements will improve the system capacity and allow for additional service connections in the future.

Cutler Public Utility District Water System

The Cutler PUD is responsible for providing domestic water service within the Cutler PUD Boundary. Cutler's water supply, which is chlorinated but not treated, is derived from two deep underground wells, referred to as well #5 and well #6. District staff indicated the total production capacity for well #5 is 1,100 gallons per minute (GPM) and 1,000 GPM for well #6, for a total production capability of 2,100 GPM, or 3.024 million gallons per day (MGD). The Cutler PUD

also has an elevated water storage tank with a capacity of approximately 50,000 gallons. Currently, two wells (wells #3 and #4) are not in service due to high nitrate levels. Two new wells are expected to be brought online in the near future.

The Cutler PUD has three active grant/loan funding applications being processed, including an SRF Loan for which an NOAA has been issued. The District is securing funding for a water system rehabilitation project, a blending tank project, and to bring additional wells on-line. The blending tank project would mix water from one of the new wells (well #9) with wells #3 and #4 (which are currently not in service due to high nitrate levels). By mixing the water supply from wells that produce acceptable water quality with those which have contaminant levels which exceed maximum levels, the Cutler PUD's water supply capabilities will be increased, while bringing the water quality to within acceptable standards before entering the distribution system.

Lovell High School, which is operated by the Cutler-Orosi Joint Unified School District, has requested water capacity from the Cutler PUD. The Cutler PUD plans to provide the school with water service pending the approval and implementation of the blending tank project.

The Cutler PUD indicated the community water system (as of September 2004) supports 1,032 total connections to their system, including three industry packing houses and one box plant. Cutler PUD staff has indicated there are only thirteen connections that have a water meter; the Cutler PUD currently charges a flat rate for residential water service connections.

The Cutler PUD currently has a water conservation plan that limits when residents can water lawns and wash vehicles. Residents who violate the water conservation rules are warned on the first offense and fined for any additional offenses.

Cutler PUD has indicated that they are working with Alta Irrigation District officials to study the feasibility of constructing a regional water treatment facility that would use water from the Kings River by exchange out of the Friant-Kern Canal. The regional facility would provide domestic water to the communities of Cutler, Orosi, East Orosi, Sultana, and potentially the City of Dinuba. District staff indicated that a feasibility study would be a three to five year process, and that implementation of the project could be ten to fifteen years out.

Based upon available information, the Cutler PUD's water system is currently operating at or near its capacity, and cannot support additional connections at this time. The amount of developable land available, including the availability of infrastructure, are two factors that have limited community growth from occurring, including affordable housing objectives, and commercial enterprise. The Cutler PUD's plans to construct several upcoming water system improvement projects will significantly increase its ability to provide service to proposed development projects.

Orosi Public Utility District Water System

The Orosi PUD is responsible for providing domestic water service within their boundary. Orosi's water supply is derived from four deep underground wells located at various sites throughout the community. Three of the wells discharge into 10,000 gallon hydro-pneumatic

pressure tanks, and one well discharges into a 750,000 gallon storage tank with booster pumps that discharge into a hydro-pneumatic pressure tank. The water from each supply source is chlorinated and then distributed throughout the system. Currently, 40% of the Orosi PUD's water distribution system consists of asbestos-concrete pipe ranging in size from 2" to 6" in diameter. Ultimately, the Orosi PUD has indicated the need to replace the existing AC lines with 8" ductile iron piping. Orosi PUD staff also indicated the production capacity of the wells ranges between 520 and 850 GPM and that the four wells have a total maximum production capacity of approximately 2,930 GPM, or 4.22 MGD. Two additional existing wells are currently inactive due to nitrate contamination. A new well (#10) is expected to be brought online in the near future.

The Orosi PUD indicated that the community water system (as of October 2004) supports 1,788 total connections including 1,639 residential connections, 132 commercial connections, 3 agricultural connections, and 14 connections which are inactive. The Orosi PUD's water system also supports 164 fire hydrants located throughout the community and has been fully metered as of January 1, 2005. Since then the Orosi PUD has billed customers based upon a metered usage. Water consumption data provided by Orosi PUD staff indicated that there was an immediate decrease in domestic water usage as a result of metering. Prior to water metering, the Orosi PUD experienced a peak month flow of 62.742 MG in July 2004 and a max day flow of 2.172 MGD. After metering was implemented by the Orosi PUD, a peak flow rate of 48.102 MG in July 2005 was observed with a max day flow of 1.706 MGD. This equates to a reduction of 23.3% in the peak month flow and a 21.5% reduction in the max day flow.

Orosi PUD staff has indicated that they are working with Alta Irrigation District officials to study the feasibility of constructing a regional water treatment facility that would use water from the Kings River by exchange out of the Friant-Kern Canal. The regional facility would provide domestic water to the communities of Cutler, Orosi, East Orosi, Sultana, and potentially the City of Dinuba. District staff indicated that a feasibility study would be a three to five year process, and that implementation of the project could be ten to fifteen years out.

Based upon available information, it appears that the community water system has excess capacity to accommodate projected general plan growth. Although the Orosi PUD's water system has apparent capacity to meet general plan build-out population projections, growth in the community would result in increased demand for groundwater, an impact that would be considered significant. Should a regional water treatment facility be found to be feasible, this would result in a change in the Orosi PUD's water supply source from groundwater to surface water, and would minimize impacts to groundwater sources.

Ducor Community Service District Water System

The Ducor Community Service District (Ducor CSD) water supply originates from two underground wells with no use of surface water. Based on the current water quality of the wells, no chlorination or treatment is needed. The community water system supports approximately 150 service connections including a mix of residential and commercial uses.

Based upon available information, it is estimated that the Ducor CSD community water system is operating at or near its capacity. Based upon discussions with Ducor CSD staff, domestic water needs associated with projected General Plan population growth could be met, but that financial resources, and water quality concerns could have an impact on the future development of the water system. Ducor CSD staff indicated that capacity issues could be solved within the time horizon of the General Plan.

Earlimart Public Utility District Water System

Earlimart's water supply is derived from four 600 feet deep underground wells, which pump at a consistent water level of approximately 250 feet. The four wells provide high quality water requiring no chlorination or treatment. The four wells have a total maximum production capacity of 3,300 GPM, or 4.75 MGD. Wells are located at various sites throughout the community.

The community water system supports 1,485 total service connections including 57 commercial connections, 1,424 residential connections, and 4 school connections. In 2000, Earlimart PUD started requiring water meters for all new development; however, very little development has occurred since then indicating that the majority of the Earlimart PUD's water system is un-metered. Water meters are also to be installed when properties change ownership.

Based upon available information, it is estimated that the community water system is operating at approximately 88% of its capacity. The Earlimart PUD's water system will need additional capacity to accommodate population increases associated with the build-out of the general plan. These additional supplies would likely come from additional groundwater wells.

East Orosi Community Service District Water System

East Orosi's water supply is derived from groundwater sources. The district's water system currently supports 106 residential connections, and 2 commercial connections (the local store, and church). Based upon information provided by the East Orosi CSD, the water system is currently at or near maximum capacity. It is not likely that the district can support additional connections to their system without significant research and further planning.

The East Orosi CSD is working with Alta Irrigation District officials to study the feasibility of constructing a regional water treatment facility that would use water from the Kings River by exchange out of the Friant-Kern Canal. The regional facility would provide domestic water to the communities of Cutler, Orosi, East Orosi, Sultana, and potentially the City of Dinuba. Involved parties have indicated that a feasibility study would be a three to five year process, and that implementation of the project could be ten to fifteen years out.

If demonstrated to be a feasible alternative, the eventual construction of such a plant would resolve the groundwater quality issues which currently exist in each of the named communities and Dinuba. Without the construction of the water treatment facility, East Orosi's water supply would continue to be derived from groundwater sources.

California Water Service Company – Goshen Water System

The California Water Service Company (Water Company) operates a water supply and distribution system that serves the community of Goshen. The California Water Service Company water supply is derived from over 70 deep water wells (including water delivered to the City of Visalia). The Goshen Water system and the City of Visalia water system are interconnected, and operate as a single system.

There are concerns regarding the water quality of the local Goshen wells. The Water Company operates four wells in or near the community of Goshen. Three of the four wells are out of service due to water quality issues. Nitrate levels have caused the Water Company to blend wells to keep them open. The Water Company has a water storage project underway near Goshen that, when constructed will improve the water system including the ability to blend water sources to achieve acceptable water quality standards.

Conversations with the Water Company staff exposed some concerns for future growth in the area. Water Company staff indicated that with the projected population growth, the water supply is adequate with concerns. The Goshen area has a maintenance program that should keep pace with current population growth. The concerns are in regard to higher than historic growth as well as water quality concerns. Some of the water quality concerns are currently being addressed by adding storage capacity to the water system, allowing the Water Company to blend water sources to improve the overall water quality.

Ivanhoe Public Utility District Water System

The Ivanhoe PUD is responsible for providing domestic water service within their Boundary. The Ivanhoe PUD's water supply is derived from six deep underground wells that pump at a consistent water level between 250 and 350 feet. According to Ivanhoe PUD staff, the six wells provide an ample excellent water supply requiring no chlorination or treatment. Ivanhoe PUD staff indicated that the production capacity of the wells ranges between 500 and 1,000 GPM and that the six wells have a total maximum production capacity of approximately 3,600 GPM, or 5.18 MGD. Wells are located at various sites throughout the community.

Ivanhoe PUD staff indicated that the community water system (as of August 2004) supports 1,114 single and multi-family residential connections. The Ivanhoe PUD was unsure exactly how many commercial connections were on the system, but estimated that there is approximately 1,200 total connections to the system. The Ivanhoe PUD water system has been fully metered since 1991. Since then the Ivanhoe PUD has billed customers based upon a metered usage. Water consumption data indicated that there was an immediate decrease in domestic water usage as a result of metering.

Based upon available information, it is estimated that the community water system is operating at approximately 50% of its capacity. The community water system has excess capacity to accommodate projected general plan growth. Although the Ivanhoe PUD's water system has apparent capacity to meet general plan build-out population projections, growth in the community

would result in increased demand for groundwater, an impact that would be considered significant.

In 2004, the Ivanhoe PUD received a \$2 million State Revolving Fund (SRF) loan, a portion of which was used to replace old water lines with new water lines and relocate the lines from alleys to streets. Approximately \$1.4 million in water line replacements has been completed. The remaining \$600,000 was to be used to bring one new well online. Since the Ivanhoe PUD's water system has sufficient capacity, the Ivanhoe PUD's Board voted not to drill a new well at this time. It is anticipated that the \$600,000 that was to be used for a new well will be returned to the State.

Lemon Cove Sanitary District Water System

The Lemon Cove Sanitary District (Lemon Cove SD) is responsible for providing domestic water service within their Boundary. There are approximately 50 active domestic water service connections within the Lemon Cove SD.

The Lemon Cove SD's water system consists of a single well with a two horsepower submersible pump, a 30,000 gallon storage tank, booster pump, a 4,000 gallon pressure tank, and the water distribution system. The water system has no permanently installed treatment at this time. In addition, there is no backup water supply on the Lemon Cove SD's system.

According to the Sanitary Survey Report completed by the County of Tulare Health and Human Services Agency, the water system appears adequate to meet the needs of the Lemon Cove SD. The County Health Department is unaware of any complaints concerning water shortages or pressure problems. Fire hydrants on the Lemon Cove SD's system are used to fill tanker type fire trucks with no apparent negative effect to the system.

Items that were brought to the attention of the operator to bring the water system into compliance during the 2001 inspection by the County Health Department included repairing the leak at the turbine pressure tank site.

According to the Lemon Cove SD's 2004 Consumer Confidence Report, water samples taken in December 2004 contained nitrate levels of 55 mg/L, which exceeds the maximum contaminant level (MCL) of 45 mg/L. The Lemon Cove SD has been issued a compliance order (No. 04-95) to address the elevated nitrate levels, which exceed the current maximum contaminant level of 45 mg/L.

The Lemon Cove SD's water system is fully metered. The Lemon Cove SD's implementation of a metered water rate structure is indicative of the Lemon Cove SD's desire to promote water conservation, and continue to provide effective water service to its residents.

Based upon available information, improvements to the community water system would be needed in order to support growth associated with the build-out of the general plan. These improvements would include addressing existing water quality problems, the installation of a backup well, and additional supply and distribution system improvements. Additional water supplies would likely be derived from groundwater sources.

London Community Service District Water System

The London Community Service District (London CSD) is responsible for providing domestic water service within their Boundary. London CSD staff has indicated that there are approximately 430 connections to their water system.

The London CSD's water system consists of three active wells and one hydro-pneumatic pressure tank. The water system has no permanently installed treatment at this time. London CSD staff has indicated that the water system was constructed in 1952 and experiences minor leaks. Water system leaks have the potential for causing cross contamination problems. The London CSD received Proposition 13 funding in the amount of \$98,156 to prepare an infrastructure rehabilitation feasibility study to detect and evaluate leaks and determine the feasibility of replacing the distribution system. The London CSD is currently pursuing funding through the State Revolving Fund Program for construction of a new domestic water well and hydro-pneumatic tank, along with distribution system improvements. The London CSD water system is currently un-metered.

Specific capacity information for the community's water system is not available, however, it is likely that the London CSD would need to expand its water supply and improve the distribution system to support any significant growth associated with the build-out of the general plan.

Pixley Public Utility District Water System

The Pixley Public Utility District (Pixley PUD) is responsible for providing domestic water service to customers within its Boundary. Pixley PUD's water supply is derived from four deep underground wells. According to Pixley PUD staff, these four wells provide an ample excellent water supply requiring no chlorination or treatment. The four wells in operation have a total maximum production capacity of approximately 2,700 GPM, or 3.88 MGD.

As indicated by the Pixley PUD's Engineer, three of the existing four wells exceed the acceptable arsenic level for drinking water that became effective January 2006, and the water supply system will require treatment or replacement of wells to meet current water quality standards.

Pixley PUD staff indicated that there are slightly more than 800 hookups to the water system including 25 commercial connections. Approximately 320 of the residential connections are metered.

Based upon available information, there is only sufficient water supply to meet existing domestic demands without considering fire flow requirements. The Pixley PUD Engineer indicated that no additional connections could be supported by the water system when considering fire flows and the possibility of the maximum producing well being out of service. For this reason, the Pixley PUD Engineer concluded that additional wells will be required in order to increase capacity, and that fire flow requirements could be met with storage tanks. The Pixley PUD Engineer noted that the existing water system includes many 4-inch and 6-inch diameter lines, which may not be suitable for peak and fire flows.

Plainview Mutual Water Company Water System

The Plainview Mutual Water Company (Plainview MWC) is a small organization that provides water for the residents of Plainview, located west of Strathmore. Based upon discussions with Plainview MWC staff, there are significant concerns with respect to population growth in the future. The Plainview MWC is currently rebuilding their system as funds become available. Many of the existing pipes and water supply facilities are becoming dated. The concern for future growth is due in part to the existing capacity issues and deterioration of the current water system.

Poplar Community Service District Water System

The Poplar Community Service District (Poplar CSD) is responsible for providing domestic water service within its Boundary. Based upon information provided by Poplar CSD staff, there are approximately 640 connections to the Poplar CSD water system.

Poplar CSD's water supply, which is chlorinated but not treated, is derived from three active underground wells, with a total maximum production capacity of 2,280 GPM or about 3.3 MGD. The Poplar CSD also has an elevated water storage tank with a capacity of 300,000 gallons.

Water meters were installed in 1979, but the Poplar CSD has indicated that they need to be serviced before being put back into use. For this reason, the Poplar CSD uses a flat rate structure to bill its customers.

Based upon the District's 2004 Annual Drinking Water Quality Report, there are no indications that the Poplar CSD's water supply has contaminant levels exceeding the maximum contaminant levels. There is no evidence suggesting that the Poplar CSD's water supply does not meet Federal drinking water standards.

Based upon available information, the community water system has apparent excess capacity to accommodate projected general plan growth. Although the Poplar CSD's water system has apparent capacity to meet general plan build-out population projections, growth in the community would result in increased demand for groundwater, an impact that would be considered significant.

Richgrove Community Service District Water System

The Richgrove Community Service District (Richgrove CSD) is responsible for providing domestic water service within its Boundary. Richgrove CSD staff has indicated that there are 523 connections to their water system.

The Richgrove CSD's water system consists of two active wells, with an additional well currently under construction. The Richgrove CSD's water is chlorinated at the well sites, but has no permanently installed treatment at this time. There are nineteen (19) commercial customers which receive metered water from the Richgrove CSD. Residential connections are currently un-metered however the Richgrove CSD received a water meter retrofit grant in the amount of \$119,000 from the Department of Water Resources, and is currently working to install meters

throughout the community. A fully metered water system will help with water conservation, and minimize over usage and/or wasting of water.

Specific capacity information for the community's water system is not available however a new well was recently added to the system. For this reason, it is likely that the community water system has excess capacity, but the level to which it will meet projected growth associated with the build-out of the general plan cannot be determined at this time. Growth in the community would result in increased demand for groundwater, an impact that would be considered significant. Funding provided by the Community Development Block Grant (CDBG) program will rehabilitate an out of service well and put it back in service by 2008. This project will strengthen the District's ability to provide water service to future growth in the community.

Springville Public Utility District Water System

The Springville Public Utility District (Springville PUD) is responsible for providing domestic water service within their Boundary. Springville PUD's water supply is derived from surface water obtained from the Tule River. The Springville PUD operates and maintains a domestic water treatment facility that processes the surface water before entering the Springville PUD's distribution system. The Springville PUD's water system supports about 410 total connections (about 390 are currently active), all of which are metered.

Based upon information provided by the Springville PUD, current water system demands average approximately 0.30 million MGD or 210 GPM. The Springville PUD estimates its current water system capacity at 1.5 MGD, or 1,040 GPM, indicating that there is excess capacity available for additional connections. The Springville PUD's water system also includes a storage tank with a capacity of 150,000 gallons.

Based upon available information, it is estimated that community water system is operating at approximately 50% of its capacity. The community water system has excess capacity to accommodate projected general plan growth.

Strathmore Public Utility District Water System

The Strathmore Public Utility District (Strathmore PUD) is responsible for providing domestic water service within their Boundary. Based upon information provided by Strathmore PUD staff, the Strathmore PUD water system supports about 455 connections.

Strathmore PUD's water supply is derived from surface water obtained from the Friant-Kern Canal, and from underground water wells. A water filtration plant was constructed in Strathmore for treatment of the surface water from the Friant-Kern Canal. The Strathmore PUD constructed the plant in a joint venture with the Lindsay-Strathmore Irrigation District (LSID). The LSID has 22.8% ownership of the plant, and the Strathmore PUD has the remaining ownership. The Strathmore PUD also has underground water wells that are used to supplement their surface water supply. Based upon information provided by the Strathmore PUD, during the peak month, the Strathmore PUD's metered water deliveries total about 0.62 MGD, or 430 gallons per minute.

The majority of the Strathmore PUD's water comes from the water treatment plant, which on an annual basis, accounts for about 78% of the Strathmore PUD's total water deliveries.

Terra Bella Irrigation District Water System

The Terra Bella Irrigation District (Terra Bella ID) is responsible for providing domestic and irrigation water services within their designated Boundaries. The Terra Bella ID operates two separate water systems, one system which receives surface water from the Friant Kern Canal, which is treated before entering the distribution system. This system is the primary source for domestic water service within the urban area of the Terra Bella ID. This system has two standby wells that are used for backup supplies. Based upon information provided by Terra Bella ID staff, there are approximately 700 connections which receive treated surface water. The Terra Bella ID water treatment plant was constructed in 1998, and was constructed to allow for additional capacity (approximately double according to staff) above and beyond what the expected 1998 demands would be. The Terra Bella ID has a water contract with the U.S. Bureau of Reclamation to receive 29,000 acre feet of water per year from the Friant Kern Canal (water which is used for both domestic and irrigation purposes). The Terra Bella ID's treated domestic water system is in good operating condition, and could be expanded to support 600 to 700 additional connections, according to staff.

The Terra Bella ID also operates a second water system that has a primary function of providing irrigation water to the outlying rural areas of the community. Water for this rural water system is supplied from a series of underground wells and surface water from the Friant Kern Canal. This water is untreated. There are also domestic water connections to the Terra Bella ID's rural (irrigation) water system that primarily serve rural residential homes related to agricultural. The water supplied by this system does not meet Federal drinking water standards, and is therefore considered to be non-potable. The Terra Bella ID sends out a quarterly letter to all residents which receive tap water from this system indicating that the water does not meet Federal drinking water standards, is considered to be non-potable, and shall not be used for drinking or cooking. The potable water source for such connections is considered to be bottled water.

Three Rivers Community Service District Water System

The Three Rivers Community Service District (Three Rivers CSD) does not currently operate a water system. The Three Rivers CSD primarily monitors all three forks of the Kaweah River as well as inspects septic tank installations.

The Three Rivers CSD oversees the operation of Improvement District No. 1 that provides water for over 75 service connections. A majority of the connections are residential with one church, one multi-housing unit and one restaurant. Improvement District No. 1 pulls water from three underground wells and uses surface water in summer months when demand peaks. Based on the determination of the Improvement District No. 1 water supply infrastructure, they are currently seeking USDA loan assistance for needed improvements. The improvements would remedy the infrastructure issues as well as decrease the need for surface water. Future capacity would be increased slightly with the upgraded water system.

The Three Rivers CSD has contacted all of the private water districts in hopes of finding an organized approach for routine testing and maintenance. Based upon available information and conversations with the General Manager, the Three Rivers CSD expects that projected population growth can be adequately met with concerns.

Tipton Community Service District Water System

Tipton Community Service District's (Tipton CSD) water supply is derived from two active underground wells. The Tipton CSD has two additional wells which are currently inactive; one is currently non-operational due to oil contamination, and the other has been abandoned as a result of nitrate contamination. The two wells currently in use (referred to as well #2 and well #4) provide high quality water requiring no chlorination or treatment. Well #2 can produce water at a rate of 700 GPM, and well #4 can produce water at a rate of 800 GPM. Together the wells have a total maximum production capacity of 1,500 GPM, or 2.16 MGD. Wells are located at various sites throughout the community.

The Tipton CSD community water system currently supports 554 total service connections including 58 commercial connections and 496 residential connections. The Tipton CSD recently started requiring water meters to be installed for all new development projects although the Tipton CSD currently continues to charge a flat rate for water service. Based upon results other water districts have experienced by going to a metered water rate schedule, it is likely that metering will cause the usage to decrease.

Based upon available information, the community water system is operating at or near its capacity however the Tipton CSD has plans to bring a new well online in the near future, which will increase capacity. The Tipton CSD recently received a grant/loan in the amount of \$1,833,865 that will be used to implement several water system improvements including well drilling, water line replacement, a pipeline replacement program, and maintenance and improvements to existing well sites.

Traver Water System – Tito Balling, Inc.

The Traver water system is owned and operated by Tito Balling, Inc. (a private water purveyor located in City of Coalinga). Tito Balling, Inc. has indicated that the Traver water system currently supports approximately 190 connections, approximately 170 of which are currently active. All customers are currently billed based upon a flat rate, however the water purveyor is working towards the installation of water meters throughout the system. Tito Balling, Inc. indicated that water lines within the system are undersized, and will need upgrades to support future growth. It is likely that additional capacity will also be needed to support future growth associated with the build-out of the General Plan. A new well (Well #3) was drilled in July 2007, and improved local water pressures, and provided service to the local school. Future water system improvements will need to be coordinated with (and incorporated into as appropriate) the Traver Community Plan Update, and associated land uses, and development identified therein.

Woodville Public Utility District Water System

The Woodville Public Utility District (Woodville PUD) is responsible for providing domestic water service within its Boundary. Based upon information provided by Woodville PUD staff, the Woodville PUD water system supports about 480 connections.

Woodville PUD's water supply is derived from two deep underground water wells, which have a total maximum production capacity of approximately 1,500 gpm, according to information provided by the Woodville PUD. The Woodville PUD's water system is 100% metered, which helps promote water conservation. The Woodville PUD's water system has no elevated storage tank, and operates with hydro-pneumatic pressure tanks.

Based upon available information, the community water system has apparent excess capacity to accommodate projected general plan growth. Although the PUD's water system has apparent capacity to meet general plan build-out population projections, growth in the community would result in increased demand for groundwater, an impact that would be considered significant.

Standards of Significance

The General Plan Update will establish development guidelines against which future projects will be judged for consistency. The significance criteria for this analysis were developed from criteria presented in Appendix G, "Environmental Checklist Form", of the CEQA Guidelines and based on the professional judgment of the County of Tulare and its consultants. The project (or the project alternatives) would result in a significant impact if it would:

- Require or result in the construction of new water treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects;
- Need new or expanded water supply entitlements; or
- Deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table.

Impacts and Mitigation Measures

Impact WR-1: The General Plan Update would require or result in the construction of new water treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects.

Impact Summary

Level of Significance Before Mitigation: <i>Potentially Significant</i>
Required Mitigation Measures: <i>Revised Policy PFS-1.4 “Standards of Approval” and the new Policy HS-8.12 “Noise Analysis”</i>
Level of Significance After Mitigation: <i>Significant and Unavoidable</i>

Impact Analysis

Implementation of the General Plan Update would result in additional County-wide residential and non-residential land use developments. This future development consistent with the General Plan Update would result in the need for increased water supply facilities, either through the construction of new facilities or through the expansion or retrofitting of existing facilities operated by several of the water service providers identified above. These facilities could include water treatment facilities, pipelines, pump houses, wells, etc. As water use increases, facilities that recycle used water may also be needed depending upon the needs of each public water service provider. The site specific impacts of these facilities cannot be determined until such time that the specific types of facilities and their locations are identified and undergo their own specific environmental review. All anticipated water treatment and delivery infrastructure will require additional project-level CEQA environmental review and may result in the following potentially significant environmental impacts:

- Exposure of soils to erosion and loss of topsoil during construction;
- Surface water quality (cumulative impact);
- Construction-related air emissions;
- Construction and operations-related noise impacts;
- Visual and/or light and glare impacts;
- Loss of protected species and their habitats;
- Conversion of existing agricultural lands or resources;
- Fisheries (cumulative impact); and
- Exposure to pre-existing listed and unknown hazardous materials contamination.

The General Plan Update includes several policies designed to address a variety of environmental impacts. Similar to any other development in areas of new growth, the construction of any future required water supply treatment and delivery infrastructure could also result in a variety of environmental impacts (i.e., conversion of existing open space/agricultural lands, noise, traffic, light/glare, etc.) that can not be mitigated. Without definitive plans, it can not be determined at this time whether these impacts would be substantial and are therefore characterized as potentially significant. The General Plan Update includes several policies designed to minimize these impacts including the premature conversion or preservation of existing agricultural/open

space lands (see Policies LU-2.1, LU-2.4, AG-1.7, and ERM-1.2), analysis of air quality emissions (see AQ-1.5), visual resources (see SL-1.1), and traffic impacts (see TC-1.15).

Additionally, there are also a number of specific policies in the Air Quality and Water Resources Elements that would help limit potential impacts related to the construction of needed water infrastructure. Policy AQ-4.2 requires contractors to implement dust suppression measures during excavation, grading, and site preparation activities. Policy WR-1.10 discourages channel modification of streams and rivers where it would increase the rate of flow, rate of sediment transport, erosive capacity, or have adverse effect on aquatic life or modify necessary groundwater recharge. Policies WR-2.2, WR-2.3, and WR-2.4 relate specifically to monitoring construction activities through NPDES enforcement and requiring the use of BMPs and other mitigation measures designed to protect surface water and groundwater from the adverse effects of construction activities and urban runoff in coordination with the Water Quality Control Board.

There are also policies in the Planning Framework and Public Facilities and Services Element that would reduce potential impacts through smart growth planning the County's Development Review Process. Policy **PF-1.4** prohibits the County from approving development unless the applicant can demonstrate that all necessary infrastructure will be installed and adequately financed throughout the life of the project. Policies **PFS-1.3** and **PFS-2.2** require that the County review new development proposals to ensure the intensity and timing of growth is consistent with the availability of adequate production and delivery systems, and that the lack of available infrastructure to serve a project, which cannot be satisfactorily mitigated by the project, may be grounds for denial of a project or cause for the modification of size, density, and/or intensity of the project. Policies **PFS-1.11** and **PFS-1.15** ensure, that through the development review process, publicly-owned and operated facilities are designed to meet the projected capacity needed in their service area to avoid the need for future replacement to achieve upsizing, and allow for efficient expansion by giving development priority to infill discretionary projects where there is an efficient expansion of the infrastructure delivery system. However, even with implementation of the below mentioned policies, this impact is considered *potentially significant*.

Planning Framework, Land Use, Agriculture, Transportation & Circulation, and Public Facilities and Services Elements	Air Quality, Scenic Landscapes, Water Resources, and Environmental Resource Management Elements
Policies designed to minimize this impact through the development of new facilities that address all applicable public safety and environmental concerns include the following:	
LU-2.1 Agricultural Lands LU-2.4 Open Space Character LU-7.12 Historic Buildings and Areas AG-1.7 Preservation of Agricultural Lands TC-1.15 Traffic Impact Study	AQ-1.5 CEQA Compliance AQ-4.2 Dust Suppression Measures SL-1.1 Natural Landscapes WR-1.10 Channel Modification WR-2.2 NPDES Enforcement WR-2.3 Best Management Practices WR-2.4 Construction Site Sediment Control ERM-1.2 Development in Environmentally Sensitive Areas
Policies designed to minimize this impact through smart growth planning and the County's development review process include the following:	
PF-1.4 Available Infrastructure PFS-1.3 Impact Mitigation PFS-1.4 Standards of Approval PFS-1.11 Facility Sizing PFS-1.15 Efficient Expansion PFS-2.2 Adequate Systems	

Required Mitigation Measures

In addition to the above mentioned policies and implementation measures, the following revisions to Policy PFS-1.4 and the new Policy HS-8.12 “Noise Analysis” are required to address this impact:

- **PFS-1.4 Standards of Approval.** The County should not approve any development unless the following conditions are met:
 - The applicant can demonstrate all necessary infrastructure will be installed and adequately financed;
 - Infrastructure improvements are consistent with adopted County infrastructure plans and standards; ~~and~~
 - Funding mechanisms are provided to maintain, operate, and upgrade the facilities throughout the life of the project; *and*
 - *Facilities shall be developed in compliance with all applicable regulations designed to address public safety and environmental impacts that may result through the construction, operation, and maintenance of these facilities. [New/Revised Policy – Draft EIR Analysis].*
- **HS-8.12 Noise Analysis.** *The County shall require a detailed noise impact analysis in areas where current or future exterior noise levels from transportation or stationary sources have the potential to exceed the adopted noise policies of the Noise Element, where there are development of new noise sensitive land uses or the development of potential noise generating land uses near existing sensitive land uses. The noise analysis shall be the responsibility of the project applicant and be prepared by a qualified acoustical engineer (i.e., a Registered Professional Engineer in the State of California, etc.). The analysis shall include recommendations and evidence to establish mitigation that will reduce noise exposure to acceptable levels. [New Policy – Draft EIR Analysis].*

As stated above, the County will continue to implement a variety of policies (including the revised Policy PFS-1.4 and the new Policy HS-8.12 “Noise Analysis”) designed to address the range of potential environmental impacts that may be associated with the construction and operation of future water supply facilities or infrastructure. However, it should be noted, the ability to mitigate these potential impacts is contingent upon a variety of factors including the severity of the impact, existing land use conditions, and the technical feasibility of being able to implement any proposed mitigation measures. Due to these uncertainties, potential impacts resulting from the construction and/or expansion of any required public utility facilities or infrastructure remain *significant*. No additional feasible mitigation is currently available.

Significance after Implementation of Mitigation for Impact WR-1

As stated above, no additional feasible mitigation measures are currently available to reduce this impact to a less than significant level. Consequently, this impact is considered ***significant and unavoidable***.

Impact WR-2: The General Plan Update would require new or expanded water supply entitlements.

Impact Summary

Level of Significance Before Mitigation: <i>Potentially Significant</i>
Required Mitigation Measures: <i>No feasible mitigation available</i>
Level of Significance After Mitigation: <i>Significant and Unavoidable</i>

Impact Analysis

Implementation of the General Plan Update would result in additional County-wide residential and non-residential land use developments. These land uses and development consistent with the General Plan Update would increase the demand for water and, in some cases, result in insufficient water supplies available to serve some of the unincorporated areas designated for urban development from existing entitlements. New or expanded entitlements would be required.

Tulare County's surface water and groundwater supplies are finite but renewable. The long term sustainability of these supplies is dependent upon both natural conditions (e.g. climate, soil permeability, topography and hydrogeology) and water supply management practices aimed at the distribution, conservation, reuse, and enhancement of supplies, including groundwater recharge efforts and implementation of best management practices (BMP). Increases in water demand that would occur under the General Plan Update would be determined by future water use and management practices and the intensity and distribution of future land uses. Although both water supply and water demand vary over time, the long term objective is to ensure that these two variables are held in balance, and that demand does not exceed supply for a prolonged period of time.

Provision of adequate supplies of domestic water in Tulare County is largely the responsibility of public sector water suppliers and private water companies that are not under the jurisdiction of the County. These suppliers must not only maintain supplies and facilities to serve existing water users, but also must expand supplies and facilities needed to accommodate planned growth within each service area. It is not always possible to assure adequate supplies and facilities fifteen or twenty years in advance of growth due to funding limitations, permitting and environmental

entitlements, and competing water users. As a result, this analysis of the adequacy of future water supplies is based upon whether or not there is a reasonable likelihood that public water suppliers will be able to successfully bring future water supplies on line where it is necessary to serve their respective districts.

As indicated in Table 4-5, in the unincorporated areas of the County, domestic water supplies are almost entirely derived from groundwater via private groundwater wells and smaller municipalities and special districts that draw their supplies from local groundwater sources.

The following text from the report entitled “Water Resources General Plan Update” prepared by Keller, Wegley & Associates describes project development considerations that could affect future County planning efforts:

There are a number of projects in stages of investigation and/or development which could play a role in the future planning efforts of the County. The first of these are the coordinated efforts of Fresno County and Tulare County surface water entities in conjunction with specific cities, in a collaborative identified as the Integrated Regional Water Management Plan for the Kings River Basin. This collaboration covers efforts in Fresno County, Kings County and Tulare County. Of principal impact on Tulare County planning issues is the groundwater recharge efforts of the Alta Irrigation District which is in the implementation stage for some projects and in the planning stages for other projects, all designed to increase the amount of water being recharged into the area south of Avenue 384 and extending between Highway 99 on the west and Road 80 on the east.

In addition to these efforts, the Alta Irrigation District has entered into a Memorandum of Understanding with the Cutler Public Utility District and the Orosi Public Utility District for the initial evaluation of a surface water treatment plant. The evaluation which is to be conducted calls for the technical and economic feasibility evaluation of a surface water treatment plant located in proximity to the Friant-Kern Canal at Avenue 416. Utilizing water from the Kings River supplies of the Alta Irrigation District, introduced into the Friant-Kern Canal by exchange, the treatment facility would provide water to the communities of East Orosi, Orosi, Cutler and Sultana. Water could also be provided to the City of Dinuba, as currently proposed. The evaluation called for in the executed Memorandum of Understanding has just been initiated and the results of the evaluation procedures will not be available for several months. If demonstrated to be a feasible alternative, the eventual construction of such a plant would resolve the groundwater quality issues which currently exist in each of the named communities and the City of Dinuba.

Management of water rights within Tulare County continues to evolve in order to more efficiently manage water supply entitlements, and to ensure adequate water supplies continue to be available for agricultural as well as domestic use. As an example of this, the Ivanhoe Irrigation District and the Kaweah Delta Water Conservation District (KDWCD) have entered into an agreement calling for an exchange of resources. The agreement calls for dry year, low flow rights to accrue to the Ivanhoe Irrigation District along with a component of storage behind Terminus Dam. The storage component will allow for better management of water rights of the Ivanhoe Irrigation District. In exchange, the KDWCD would be allocated a portion of the Friant Division CVP contract of the Ivanhoe Irrigation District. In addition, entities within the Kaweah River Watershed have joined together to manage available water supply under an Integrated Regional Water

Management Plan. The participants have and are applying for funding under the provisions of Proposition 50 to further implement the specifics of the Integrated Regional Water Management Plan. At the current time, Exeter, Ivanhoe, and Woodlake have requested to participate in the area-wide Groundwater Management Plan conducted by the KDWCD.

The principal source of surface water available within the Tule River Watershed is the yield of the Tule River, which is controlled by the operations of Success Reservoir. The Tule River has been declared a fully appropriated stream by the SWRCB. The following text from the report entitled “Water Resources General Plan Update” (Keller, Wegley & Associates) describes water management efforts within the Tule River Watershed:

In an effort to further optimize the management of water within the Tule River Watershed, several of the entities within the Watershed have organized to form the Deer Creek and Tule River Authority. The Authority operates with both a Board of Directors and an Advisory Committee who have joined together to consider the optimization of the available water supplies, both local, as well as imported. Further, they have developed a Groundwater Management Plan which is currently undergoing its first major revision. One of the revisions being considered in the Plan is the inclusion of several of the domestic water purveyors located within the Tule River Watershed. A meeting has been held with the City of Porterville with regard to their potential interest in participation and discussions have taken place with regard to the inclusion of entities such as the Poplar Community Services District, the Tipton Community Services District and the Woodville Public Utility District. The goal is to coordinate, on a regional basis, issues related to both water quality and water quantity.

It is anticipated, over time, that an increase in the number of well head treatment and surface water treatment facilities will develop in order to address the demands associated with both existing population and increased population in unincorporated areas of the County that are located within the Tule River Watershed. Additional benefits are expected to be realized with the implementation of the seismic retrofit of Success Dam and the proposed enlargement of Success Reservoir.

Within the Deer Creek/White River watershed, considerable planning is underway relative to development proposals along the Highway 99 corridor. The maintenance of the groundwater reservoir through this area is dependent upon the continued capability to have available surface water sources available for delivery into the area. Natural recharge of the groundwater reservoirs underlying the communities of Earlimart and Pixley is insufficient to sustain the agricultural plantings in the area and the community water systems. This was the case prior to the introduction of the Friant Division CVP water to the subject area. As the outcome of litigation is currently unknown, the development of a response plan to address reduction of surface water deliveries to the area remains to be developed, if necessary. One alternative currently under consideration includes capturing White River runoff upstream of Earlimart for the purpose of recharging the local groundwater aquifer.

Additional information regarding water supply entitlements, potential impacts of pending litigation, and legislative actions can be found in the report entitled, “Water Resources General

Plan Update” (Keller, Wegley & Associates). Some of the information contained in said report has been incorporated into the above impact analysis.

As indicated in Table 4-5, three of the twenty unincorporated communities are deemed to have significant concerns with regards to the ability of their respective water supplies to meet future demand. Significant concerns means that they currently lack the capacity to serve projected growth and would be likely to experience significant difficulties in expanding their water treatment and delivery systems to meet projected demand. Ten of the unincorporated communities are deemed to be adequate with concerns, meaning that the provider either has the capacity to serve projected growth or would be likely to solve capacity issues within the time horizon of the General Plan Update. Some of the service providers have concerns related to infrastructure constraints related to the ability to store and convey available or allocated water to serve the projected demand. In some of the unincorporated communities, the availability of additional water supplies to serve land uses and development consistent with the General Plan Update would depend on the feasibility of constructing a new water treatment facility that would utilize water from the Kings River supplies of the Alta Irrigation District, introduced into the Friant-Kern Canal by exchange. In some unincorporated communities, there are concerns that adequate water supplies cannot be achieved through sustainable groundwater management, that is, with creating declining groundwater levels, and adversely affecting existing wells. Depletion of groundwater supplies is further discussed below under Impact WR-4.

Due to the fact that water supply sources are not always contained within jurisdictional boundaries, cooperation and coordination between all relevant regulatory agencies, municipalities, public and private water suppliers, and other stakeholders is critical. Policies included as part of the General Plan Update that would minimize this impact are summarized below by general plan element.

Policies PF-2.3, PF-2.4, PF-2.4A, PF-2.4B, and PF-3.3 would require the County to work with domestic water service providers as a part of the community and hamlet planning process. As a part of the community and hamlet planning process, the communities short and long term ability to provide necessary urban services is to be considered, which requires close coordination between the County, and special districts that provide urban services (such as domestic water) to the respective communities.

Policies PF-6.5, WR-1.1, WR-3.2, WR-3.4, WR-3.12 and WR-3.13 encourage the County to participate in regional planning efforts to address issues related to the management of water resources within the County. These policies support coordination with adjacent counties and their cities, regional councils of governments, state agencies, local water agencies, and management agencies, to ensure coordination on infrastructure efforts and funding in the region. The policies also support cooperation with water agencies on managing groundwater resources within the County through ordinances, project approvals, agreements, and groundwater management planning and implementation, to ensure an adequate, safe, and economically viable groundwater supply for existing and future development within the County. The policies support continued efforts to work with neighboring counties to implement joint water projects, such as a cross valley canal.

Policies ED-1.6, PFS-1.7, PFS-1.8, PFS-1.14 and PFS-1.16 encourage the County to pursue partnerships with water purveyors to work towards the development of public facilities and infrastructure improvements that benefit the community. Partnering with special districts is an important aspect of the provision of adequate public facilities, including identification of funding mechanisms to construct and maintain infrastructure improvements.

Policies WR-1.3, WR-3.1, WR-3.9, WR-3.11, and PFS-2.1 restrict the export of water to areas outside of the County, and encourage the development of additional water sources to ensure that there is “no net loss” of water for the County. Under these policies, the County would encourage the identification of additional water sources through the expansion of water storage reservoirs, development of groundwater banking, and promotion of water conservation programs. The County would also monitor actions taken at the federal and state levels which impact water resources in order to evaluate the effect that such actions may have on the County’s resources.

Policies WR-3.5, WR-3.6, WR-3.7, and WR-3.8 encourage water conservation through the use of drought tolerant landscaping, educational programs aimed at reducing water consumption on agricultural lands, and encouraging other public and private entities to develop educational programs targeting water conservation awareness and domestic use. Under Policy WR-3.7 the County would develop and emergency water conservation plan for County operated water systems to identify appropriate conservation policies that can be implemented during times of water shortages caused by drought, or other circumstances.

Current procedures and policies and programs contained in the General Plan Update would strive to secure adequate water supplies for unincorporated areas within the County that are designated for urban development through water use assessments and monitoring, determination of safe water yields, conservation, and reclamation and reuse. These policies and programs would reduce the onset and severity of water supply deficiencies which are presently not quantifiable. However, sufficient water supplies may not be available at this time to serve all future growth consistent with the General Plan Update within some of the unincorporated communities. New or expanded entitlements or facilities as previously described may be required.

As development proceeds over time, public water suppliers are afforded the opportunity to review projects within their respective service area to determine whether or not water supplies are available. At any time that sufficient water is not available, the supplier can notify the County of that fact and provide the basis for County denial of a project or projects until additional water supplies are available.

Nonetheless, the uncertainty over long-term availability of water supplies and facilities and the lack of direct County jurisdiction over public water suppliers results in a level of unpredictability about the adequacy of future supplies in some urban areas. Therefore, even with implementation of the below mentioned policies, this impact is considered *potentially significant*.

Planning Framework, Economic Development, Public Facilities and Services, and Foothills Elements	Water Resources Element
Policies designed to minimize this impact through the early identification of required infrastructure and the orderly construction and rehabilitation of the facilities needed to serve existing and planned urban areas include the following:	
PF-2.3 UDB and Other Boundaries PF-2.4 Community Plans PF-2.4A Collaborative Community Planning Partnerships PF-2.4B Land Use Consistency PF-3.3 Hamlet Plans PF-6.5 Regional Planning Coordination ED-1.6 Develop Public/Private Partnerships PFS-1.7 Coordination with Service Providers PFS-1.8 Funding for Service Providers PFS-1.14 Capital Improvement Plans PFS-1.16 Joint Planning Efforts PFS-2.1 Water Supply F-10.1 Infrastructure Capacity F-10.2 Provision of Adequate Infrastructure	WR-1.3 Water Export Outside County WR-3.1 Develop Additional Water Sources WR-3.2 Develop an Integrated Regional Water Master Plan WR-3.3 Adequate Water Availability WR-3.4 Water Resource Planning WR-3.9 Establish Critical Water Supply Areas WR-3.10 Diversion of Surface Water WR-3.11 Policy Impacts to Water Resources WR-3.12 Joint Water Projects with Neighboring Counties WR-3.13 Coordination of Watershed Management on Public Lands WR Implementation Measure #14B, #14C and #23
Additional policies designed to minimize this impact through the provision and conservation of water resources and service include the following:	
	WR-3.4 Water Resource Planning WR-3.5 Use of Native and Drought Tolerant Landscaping WR-3.6 Agricultural Irrigation Efficiency WR-3.7 Emergency Water Conservation Plan WR-3.8 Educational Programs WR-3.11 Policy Impacts to Water Resources

Required Mitigation Measures

As stated above, the County will continue to implement a variety of policies designed to coordinate with local water service providers to ensure the provision of an adequate water supply. However, the uncertainty over long-term availability of water supplies and the lack of direct County jurisdiction over public water purveyors results in a level of unpredictability about the adequacy of future water supply availability (including long term sustainability) in some of the unincorporated urban areas throughout the County. In addition, several projects related to the acquisition of surface water for domestic use, construction of additional surface water conveyance facilities, and reservoir enlargement projects are currently pending and could significantly affect the long term availability of future water supplies throughout the County. For this reason, this impact remains *significant*. No additional feasible mitigation is currently available.

Significance after Implementation of Mitigation for Impact WR-2

As state above, no additional feasible mitigation measures are currently available to reduce this impact to a less-than-significant level. Consequently, this impact is considered *significant and unavoidable*.

Impact WR-3: The General Plan Update would have the potential, in the long-term, to deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table.

Impact Summary

Level of Significance Before Mitigation: <i>Potentially Significant</i>
Required Mitigation Measures: <i>No feasible mitigation available</i>
Level of Significance After Mitigation: <i>Significant and Unavoidable</i>

Impact Analysis

Implementation of the General Plan Update would result in an increased demand on groundwater supplies for urban and rural uses within the unincorporated areas of the County. Due to the lack of comprehensive information regarding the County's groundwater resources, it is uncertain if groundwater supplies would be sufficient to meet the future demand of rural private domestic, small municipal and agricultural wells. This uncertainty combined with the current regulatory approach could result in insufficient groundwater supplies in unincorporated areas of the County. Growth associated with the General Plan Update would require additional groundwater pumping for designated urban development areas of the County where surface water is not available.

In some of the unincorporated urban development areas, there are concerns that adequate water supplies cannot be achieved through sustainable groundwater management, that is, without creating declining groundwater levels, and adversely affecting existing wells. Such concerns are heightened by the fact that most of these areas are presently dependent upon groundwater supplies.

There are three major sub basins that yield groundwater within the Tulare County region, the Tule sub basin located in the southwest region of the County (Tule River, Deer Creek, and White River watersheds), the Kaweah sub basin located in the mid west region of the County (Kaweah River watershed), and the Kings sub basin located in the northwest region of the County (Kings River watershed).

The publication, "*California's Groundwater – Bulletin 118, Update 2003*", published by the California Department of Water Resources contains a wide range of information pertaining to groundwater basins and sub basins throughout California. *Box O Critical Conditions of Overdraft (reference Pg. 98 of California's Groundwater – Bulletin 118, Update 2003)*, identifies the Tule, Kaweah, and Kings sub-basins, along with eight other sub-basins throughout the State, as being in a "critical condition of overdraft". The information summarized below was derived from the referenced publication.

Tule Sub Basin: Groundwater recharge is primarily from stream recharge and from deep percolation of applied irrigation water. Changes in groundwater levels are based on annual water level measurements by DWR and cooperators. On average, the sub basin water level has increased about four feet from 1970 through 2000. The period from 1970 to 1978 showed a general decline, bottoming out at 13 feet below 1970 levels in 1978. There is a steep increase in water levels in the ten year period from 1978 to 1988, topping out at 20 feet above 1970 water levels in 1988. There is a very sharp decrease in water levels of 34 feet from 1988 to 1995, with the lowest level reached in 1993 at 16 feet below

1970 water levels. From 1995 to 2000, water levels generally increase, eventually reaching four feet above 1970 water levels in 2000. The natural recharge into the sub basin is estimated at 34,400 acre-ft. Artificial recharge and subsurface inflow are not determined. There is about 201,000 acre-ft. of applied water recharge into the sub basin. Annual urban extraction and annual agricultural extraction are estimated to be 19,300 acre-ft and 641,000 acre-ft, respectively. Other extractions and subsurface outflow are not determined.

Kaweah Sub Basin: Changes in groundwater levels are based on annual water level measurements by DWR and cooperators. On average, the sub basin water level has declined about 12 feet from 1970 through 2000. The period from 1970 to 1978 showed steep declines totaling about 25 feet. The ten year period from 1978 to 1988 saw stabilization and rebound of about 50 feet, bringing water levels above the 1970 water level by 25 feet. 1988 through 1995 again showed steep declines, bottoming out in 1995 at nearly 35 feet below the 1970 level. Water levels then rose about 22 feet from 1996 to 2000, bringing water levels to approximately 12 feet below 1970 levels. Natural recharge is estimated to be 62,400 acre-ft. Artificial recharge was not determined for all entities, but Lakeside Irrigation District has recharged about 7,000 acre-ft. per year and in wet years may recharge up to 30,000 acre-ft. There is approximately 286,000 acre-ft. of applied water recharge into the sub basin. Subsurface inflow was not determined. Annual urban and agricultural extraction is estimated to be 58,800 acre-ft. and 699,000 acre-ft, respectively. Other extractions and subsurface inflow were not determined.

Kings Sub Basin: Groundwater recharge occurs from river and stream seepage, deep percolation of irrigation water, canal seepage, and intentional recharge. Limited information is available regarding groundwater trends and estimated recharge and extractions in the sub basin. Most well water levels indicated a response to the 1976-77 drought. After the 1987-1992 drought, wells in the northeast showed water levels from 10 to 40 feet below pre-1976-77 drought water levels. Water levels in the western sub basin experienced declines of 10 to 50 feet during the 1987-92 drought and are in various stages of recovery to mid-1980s levels. Water levels in the southeast (Tulare County area), generally, recovered to mid-1980s levels.

The majority of domestic water purveyors in unincorporated areas of the County would continue to be dependent upon groundwater to meet their water needs. Until comprehensive assessments of groundwater and groundwater management efforts occur, it is not possible to conclude that the County's groundwater resources would be capable of meeting future water demands resulting from implementation of the General Plan Update.

Interpreting the success of groundwater management efforts throughout the State cannot be achieved at present time. While there are many examples of local agency successes, there are neither mandates to prepare groundwater management plans nor reporting requirements when plans are implemented, so a comprehensive assessment of local planning efforts is not possible. Additionally, many plans have been adopted only recently, during a period of several consecutive wet years, so many of the plan components are either untested or not implemented. At a minimum, successful groundwater management should be defined as maintaining and maximizing long term reliability of the groundwater resource, focused on preventing significant depletion of groundwater in storage over the long term and preventing significant degradation of groundwater quality.

With more than 200 agencies participating in plans and more than 120 of those involved in coordinated plans with other agencies, Assembly Bill 3030 (also termed the Groundwater Management Act) has resulted in a heightened awareness of groundwater management. Additionally, annual reports published by a few water agencies indicate that they are indeed moving toward better coordination throughout the basin and more effective management of all water supplies. Given the history of groundwater management in California, these seemingly small steps toward better management may actually represent significant steps forward.

More recently, financial incentives have played a large role in driving groundwater management activities. For example, under grant and loan programs resulting from Proposition 13 passed in 2000, local agencies submitted applications proposing a total increase in annual water yield of more than 300,000 acre feet through groundwater storage projects. Additional projects and programs would be developed with sufficient funding for feasibility and pilot studies. Unfortunately, not enough funding exists for all of the General Plan Updates, and many other legal and institutional barriers remain. It is clear that further incentives would help agencies move ahead more aggressively in their groundwater management planning efforts.

The Tule Groundwater sub-basin is made up of the Tule River, Deer Creek, and White River watersheds. At the current time, the Groundwater Management Plan for the Deer Creek and Tule River Authority is in the process of being updated. Policy considerations relative to the update have been addressed and the draft final document is in the process of preparation. A determination has been made to invite domestic water purveyors within the Tule River Watershed to participate in the implementation of the plan following the adoption of the final document. Agency participation would occur through approval and execution of a memorandum of understanding. Certain agencies (Deer Creek and Tule River Authority, Southern San Joaquin Valley Water Quality Coalition and Tulare County) involved in managing water resources throughout the Tulare Lake Basin have joined forces to develop an Integrated Regional Water Management Plan. An application was recently submitted to the state for the funding of the development of such a plan. Funding was not allocated in the initial round of competition, but efforts to fund and develop that plan continue with the support of the majority of the irrigation and drinking water purveyors within the Tule River Watershed. A new application has been authorized to be prepared and submitted. Coordination between the County and water purveyors is also proposed with the initial efforts directed at the County's efforts to implement an improved program related to the destruction of abandoned wells.

Within the southern portion of the Tule sub-basin (Deer Creek/White River watershed), dependable surface water supply became available with the construction of the Friant Division of the Central Valley Project. Contracts issued as a result of the construction of the Friant Dam and the Friant Kern Canal were designed to abate the groundwater overdraft which has been occurring in the area, and in some cases, to reduce the declining groundwater trend. As the overall recharge capabilities away from the Deer Creek and White River channels are limited due to geologic characteristics, the channels have become the primary focus for recharge activities. For example, the Delano-Earlimart Irrigation District has increased the White River channel capabilities by purchasing property adjacent to the channel and constructing about 80 acres of recharge facilities.

The Delano-Earlimart Irrigation District has initiated an evaluation of alternative water management strategies aimed at addressing the lack of capability of groundwater recharge on a District-wide basis and the continued conversion of lands from annual to permanent crops. Considerable planning is underway relative to development proposals along the Highway 99 corridor in the Deer Creek/White River watershed. The maintenance of the groundwater reservoir through this area is dependent on the continued capability to have surface water sources available for delivery into the area. Natural recharge of the groundwater reservoirs underlying the communities of Earlimart and Pixley is insufficient to sustain the agricultural plantings in the area and the community water systems.

Within the Kaweah sub-basin, the Kaweah Delta Water Conservation District (KDWCD) recently completed a Water Resources Investigation which specifically examined the groundwater conditions within the KDWCD boundaries. The investigation showed that the overall underground reservoir was over-drafted at level between 17,000 and 36,000 acre feet per year. The static groundwater trend within the Kaweah sub-basin is ever decreasing, as is the corresponding quantity of water being held in storage in the groundwater reservoir. Downward groundwater level trends have decreased somewhat as a result of the State Water Project and delivery of Project supplies to lands in Kings County. These water deliveries have also helped to further decrease the outflow of water from lands within Tulare County to lands within Kings County.

The City of Visalia (which lies within the Kaweah sub-basin) has adopted a very aggressive policy designed to mitigate the downward trend in static water elevations and declining quantity of water available in the groundwater reservoir. These procedures started with a Proposition 218 based process wherein \$100,000 per year was authorized to be generated, at a minimum, from a customer surcharge to develop groundwater management programs, purchase surface water for recharge and purchase water rights for delivery into areas impacting the groundwater reservoir underneath the City. Additionally, the City has imposed a land based charge on lands being converted from agricultural to urban uses to address the shift of water supply from a conjunctive use basis to that of exclusive groundwater. The funds are to be utilized for projects which address the mitigation steps required to reverse the decline in the groundwater elevations beneath the City. Furthermore, entities within the Kaweah sub-basin have joined forces to manage available water supply under an Integrated Regional Water Management Plan.

Within the Kings sub-basin, static groundwater levels exhibit a gradual decline over time. For this reason, the Groundwater Management Plans of each of the entities within the Kings sub-basin emphasize conjunctive use operations with each entity actively pursuing groundwater recharge as a function of the management aspects of the adopted Groundwater Management Plans. These plans include policies to encourage recharge where conditions are conducive to such recharge efforts and to allow for delivery of surface water to areas which are not able to enjoy such recharge conditions. The principal purpose of plan policies is to mitigate the general decline in the amount of water in storage within the groundwater reservoir and associated static levels. The Alta Irrigation District's participation in the Integrated Regional Water Management Plan for the Kings River Basin has led to significant groundwater recharge efforts and includes

both projects which are currently being implemented and additional projects in the planning stage. These projects are aimed at increasing the amount of water being recharged into the area south of Avenue 384 and extending between Highway 99 to the west and Road 80 to the east. Depending on the outcome of a study being completed to evaluate the feasibility of a surface water treatment plant that would provide domestic water to the communities of Cutler, Orosi, East Orosi, Sultana, and the City of Dinuba, continued reliance on groundwater for domestic use could be abated.

Several policies included in the Water Resources Element of the General Plan Update would strive to improve groundwater management practices through groundwater monitoring and research as well as protecting groundwater resources through revisions to current regulations regarding well permits and procedures. These policies are listed below. The General Plan Update also contains provisions to protect groundwater recharge areas and increase groundwater infiltration. The establishment of an ongoing groundwater monitoring program throughout the County would facilitate the evaluation of groundwater levels, storage, and recharge. This information would be compiled with groundwater data from public and private water suppliers well permit data, and other applicable sources.

Policies WR-1.1 and WR-1.3 relate to improving groundwater management through the development of an ordinance that will regulate the extraction and exportation of groundwater from Tulare County. The ordinance will set up a permit process for groundwater export. Some of the issues considered during the permit process will include a determination that the extraction will not substantially increase the overdraft of the groundwater underlying the County; will not adversely affect the long term ability for storage or transmission of groundwater within the aquifer; will not (together with other extractions) exceed the safe yield of the groundwater underlying the County unless the safe yield is exceeded only by extractions in connection with a conjunctive use program approved by the County. Policy WR-1.4 establishes specific criteria to be met in order to transfer water used agricultural purposes (within the prior ten years) for domestic consumption. This policy encourages the supplemental agricultural water supply to be used for other agricultural purposes or recharge efforts.

Policy WR-1.5 relates to encouraging groundwater recharge by clustering development to leave identified recharge areas in open space, avoid lining of channels and streams, alteration of existing agricultural practices, or substitution of drainage methods that will transport polluted waters away from identified recharge areas. Policy WR-1.6 would improve the County's building, zoning, and subdivision ordinances by incorporating provisions for the use of reclaimed wastewater, water conserving appliances, drought tolerant landscaping, and other water conservation techniques.

Policies WR-1.7, WR-1.8, WR-3.2, and WR-3.4 encourage the County to work with other agencies and organizations that share water management responsibilities in the County to enhance modeling efforts and ensure that comprehensive groundwater management plans and implementation programs for the entire valley floor area are maintained.

Policies WR-3.6 and WR-3.8 relate to the development of educational programs targeted at reducing water consumption on agricultural lands and enhancing groundwater recharge. Under the policies, the County would develop an education program to inform residents of water conservation techniques and the importance of water quality and adequate water supplies. Programs may include informational flyers, community workshops, technology transfer fairs, and other various means of education and information dissemination. Additionally, Policies WR-3.7 and WR-3.8 require the County to continue its implementation of water conservation measures which would also serve to protect groundwater resources.

Policies WR-3.9 and WR-3.10 would protect groundwater recharge areas in the County by carefully regulating the type of development within these areas. These policies would amend County ordinances to include development standards which protect groundwater basins and surface water drainage areas and provide incentives for use of conservation techniques. The County will also study the feasibility of establishing development or design standards for the protection of groundwater recharge areas, such as placing limitations on the amount of impervious surfaces. However, even with implementation of the below mentioned policies, this impact is considered *potentially significant*.

Water Resources Element
Policies designed to minimize groundwater impacts through the early identification of required infrastructure and the orderly construction and rehabilitation of the facilities needed to serve existing and planned urban areas include the following:
WR-1.1 Groundwater Withdrawal WR-1.2 Groundwater Monitoring WR-1.3 Water Export Outside County WR-1.4 Conversion of Agricultural Water Resources WR-1.5 Expand Use of Reclaimed Wastewater WR-1.6 Expand Use of Reclaimed Water WR-1.7 Collection of Additional Groundwater Information WR-1.8 Groundwater Basin Management WR-3.2 Develop an Integrated Regional Water Master Plan WR-3.6 Agricultural Irrigation Efficiency WR-3.9 Establish Critical Water Supply Areas WR-3.10 Diversion of Surface Water WR Implementation Measure #7A, #14B and #23
Additional policies designed to minimize this impact through the provision and conservation of water resources and service include the following:
WR-3.4 Water Resource Planning WR-3.7 Emergency Water Conservation Plan WR-3.8 Educational Programs WR-3.11 Policy Impacts to Water Resources

Required Mitigation Measures

As stated above, the County will continue to implement a variety of policies designed to improve groundwater management efforts throughout the County and the larger region. However, until definitive conclusions can be drawn regarding the effectiveness of groundwater management efforts, and whether or not these efforts will eventually reverse declining groundwater levels, this impact remains *significant*. No additional feasible mitigation is currently available.

Significance after Implementation of Mitigation for Impact WR-3

As state above, no additional feasible mitigation measures are currently available to reduce this impact to a less-than-significant level. Consequently, this impact is considered *significant and unavoidable*.

Water Quality

Impact WR-4: The General Plan Update could violate water quality standards or waste discharge requirements, or otherwise degrade water quality

Impact Summary

Level of Significance Before Mitigation: <i>Less-than-Significant</i>
Required Mitigation Measures: <i>No mitigation is required</i>
Level of Significance After Mitigation: <i>Not applicable</i>

Impact Analysis

Both point sources, such as direct drainage sources, and nonpoint source of water pollution, such as urban runoff, are usually discharged via separate storm drains to “Waters of the United States” and are therefore regulated under the federal Clean Water Act (CWA). Consequently, the County must comply with provisions of the CWA, including federal water quality, waste discharge, and total maximum daily load standards. Development proposed under the Preferred Alternative would potentially impact the quality of runoff and other pollutant loadings to receiving waters. Water quality impacts may also be significantly greater during the rainy season.

Policies included as part of the General Plan Update that would minimize this impact are summarized below by general plan element. Policies WR-1.9 and WR-2.1 through WR-2.8 require continued compliance with water quality standards and best management practices. Additional policies address water quality concerns by ensuring adequate stormwater drainage infrastructure (see PFS-4.1 through PFS-4.5). Additionally, policy PFS-1.3 and Public Facilities and Services Implementation Measures #1, #2, #3 and #3A provide for the funding mechanism to provide additional or expanded services in conjunction with new development. With implementation of the below mentioned policies and implementation measures, this impact is considered *less-than-significant*.

Environmental Resource Management, Foothills, Health and Safety, Planning Framework and Public Facilities and Services Elements	Water Resources Element
Policies designed to minimize this impact through adherence to appropriate levels of water, wastewater, and storm drainage infrastructure planning, financing and construction include the following:	
ERM-2.8 Minimize Adverse Impacts F-9.5 Protection of Lakes HS-4.4 Contamination Prevention PF-5.2 Criteria for New Towns PFS-1.3 Impact Mitigation PFS-2.5 New Systems or Individual Wells PFS-3.1 Private Sewage Disposal Standards PFS-3.5 Wastewater System Failures PFS-3.7 Financing PFS-4.7 NPDES Enforcement	WR-1.9 Collection of Additional Surface Water Information WR-2.1 Protect Water Quality WR-2.2 NPDES Enforcement WR-2.3 Best Management Practices WR-2.4 Construction Site Sediment Control WR-2.5 Major Drainage Management WR-2.6 Degraded Water Resources WR-2.7 Industrial and Agricultural Sources WR-2.8 Point Source Control WR-2.9 Private Wells WR Implementation Measure #14A and #14C
Policies designed to minimize water quality impacts associated with stormwater, water, and wastewater utility infrastructure needed to serve existing and planned urban areas include the following:	
ERM-5.7 Public Water Access ERM-7.3 Protection of Soils on Slopes F-9.2 Development Drainage Patterns F-9.6 Development in the Frazier Valley Watershed HS-5.8 Road Location HS-5.9 Floodplain Development Restrictions PF-5.2 Criteria for New Towns PFS-2.5 New Systems or Individual Wells PFS-4.1 Stormwater Management Plans PFS-4.2 Site Improvements PFS-4.3 Development Requirements PFS-4.4 Stormwater Retention Facilities PFS-4.5 Detention/Retention Basins Design PFS-4.6 Agency Coordination PFS-4.7 NPDES Enforcement	WR-1.9 Collection of Additional Surface Water Information WR-2.1 Protect Water Quality WR-2.2 NPDES Enforcement WR-2.3 Best Management Practices WR-2.4 Construction Site Sediment Control WR-2.5 Major Drainage Management WR-2.6 Degraded Water Resources WR-2.7 Industrial and Agricultural Sources WR-2.8 Point Source Control WR-2.9 Private Wells WR-3.10 Diversion of Surface Water WR Implementation Measure #14A and #14C Foothills Implementation Measure #33
Public Facilities and Services Implementation Measures designed to ensure funding for County utilities to provide adequate service levels.	
Public Facilities and Services Implementation Measure #1 Public Facilities and Services Implementation Measure #2 Public Facilities and Services Implementation Measure #3 Public Facilities and Services Implementation Measure #3A	

Required Mitigation Measures

This impact is considered *less-than-significant*. No additional mitigation measures are required.

Chapter 5

Infrastructure



CHAPTER 5.0

Infrastructure

5.1 Introduction

As noted in Chapter 1, “Introduction and Reader’s Guide to the EIR,” Section 15150 of the CEQA Guidelines permits documents of lengthy technical detail to be incorporated by reference in an EIR. Specifically, Section 15150 states that an EIR may “incorporate by reference all or portions of another document which is a matter of public record or is generally available to the public...” Consequently, the General Plan Background Report is incorporated by reference.

Additionally, Section 15146(b) of the CEQA Guidelines states that an EIR on a project such as the adoption or amendment of a local general plan “should focus on the secondary effects that can be expected to follow from the adoption or amendment, but the EIR need not be as detailed as an EIR on the specific construction projects that might follow.” The purpose of this EIR is to provide analysis on the effects that can be expected from implementation of the General Plan Update, but will not provide detail on the impacts of specific construction projects that might follow.

This General Plan EIR is organized to reflect the Goals and Policies Report of the General Plan Update in order to allow readers to easily find related information throughout the documents. In the General Plan Update, the Tulare County Infrastructure component covers topics related to transportation and circulation and to public facilities and services. Consequently, this chapter addresses the following elements:

- Section 5.2 Transportation and Circulation
 - Roads and Highways
 - Rail Transportation
 - Aviation
 - Public Transportation
 - Bicycle Routes and Trails

- Section 5.3 Public Facilities and Services
 - Wastewater
 - Storm Drainage
 - Solid Waste
 - Communications Systems
 - Fire Protection and Law Enforcement
 - Community Facilities
 - Energy Facilities

5.2 Transportation and Circulation

Roadways and Highways

As a result of comments (see Table 1-2 of Chapter 1.0 “Introduction”) received during the NOP public scoping phase of the General Plan Update, the following transportation issues have been considered as part of the impact analysis. For example, the Center on Race, Poverty and the Environment stated that the EIR should address several transportation impacts including those related to a substantial increase of hazards due to a traffic design feature or inadequate emergency access. The California Department of Transportation (Caltrans) provided several suggestions including the identification of any required improvements to State transportation facilities, the adoption of future Caltrans improvement plans, the need for traffic and financial studies to determine interchange configurations, and the need to obtain encroachment permits for all anticipated activities within State highway rights-of-ways. The City of Dinuba suggested that the EIR include a discussion of other significantly traveled east-west and north-south country roads.

Environmental and Regulatory Setting

The General Plan Update included the preparation of several major documents including preparation of a very detailed Background Report, which serves to chronicle the existing environmental and regulatory setting conditions applicable to the County. A detailed discussion of the County-wide roadway and highway system can be found in the General Plan Background Report (see Appendix B, Chapter 5.0 “Transportation and Circulation”).

Methodology

Transportation and circulation needs are closely tied to the location and distribution of land uses. Section 65302(b) of the Government Code requires that a circulation element must be included in a general plan. The circulation element must address the general location and extent of existing and proposed major thoroughfares, transportation routes, terminals, and other local public utilities and facilities, all correlated with the land use element.

In order to determine the magnitude of impact on streets and highways for each alternative, OMNI-MEANS utilized the Tulare County Association of Governments (TCAG) Regional Travel Demand Forecast Model. The TCAG model contains many socioeconomic data attributes including information related to number of households and number of employees per traffic analysis zone (TAZ). A TAZ is a special area delineated by TCAG for tabulating traffic-related data- especially journey-to-work and place-of-work statistics. A TAZ usually consists of one or more census blocks, block groups, or census tracts. The household and employee data is run as part of a model of the County roadway network that contains number of lanes, speed, capacity class, etc.

The future roadway system has been developed and is assumed in the TCAG model. The roadway system is based upon individual city's general plan circulation elements and projects contained in the Regional Transportation Plan (RTP). A list of future transportation projects (i.e., widening roadways) is contained in Appendix B of this EIR (see General Plan Background Report, Chapter 5.0 "Transportation and Circulation").

Roadway Level of Service

To measure and describe the operational status of a local roadway network, transportation engineers and planners commonly use a grading system called level of service (LOS). Level of service is a description of a facility's operation, ranging from LOS A (indicating free flow traffic conditions with little or no delay) to LOS F (representing over-saturated conditions where traffic flows exceed design capacity, resulting in long queues and delays).

According to the Highway Capacity Manual (HCM), LOS is categorized by two parameters of traffic: uninterrupted and interrupted flow. Uninterrupted flow facilities do not have fixed elements such as traffic signals that impede traffic flow. Examples of such facilities would be freeways, including State Routes 65, 99, and 198 within Tulare County. Interrupted flow facilities have fixed elements that cause an interruption in the flow of traffic, such as stop signs and signalized intersections along arterial roads. The LOS threshold volumes for roadway segments are defined below in Table 5-1.

**TABLE 5-1
LOS METHODOLOGY**

Roadway Type	Total Average Daily Traffic (Both Directions)				
	Level of Service A	Level of Service B	Level of Service C	Level of Service D	Level of Service E
6-Lane Freeway	36,900	61,100	85,300	103,600	115,300
4-Lane Freeway	23,800	39,600	55,200	67,100	74,600
6-Lane Arterial	7,300	44,700	52,100	53,500	----
4-Lane Expressway	5,280	32,230	38,710	39,270	----
4-Lane Arterial	4,800	29,300	34,700	35,700	----
2-Lane Collector	----	4,200	13,800	16,400	16,900

Notes:

1. Based on Florida DOT Tables (2000 HCM).
2. All volumes are approximate and assume ideal roadway characteristics. Actual threshold volumes for each LOS listed above may vary depending on a number of factors including curvature and grade, intersection or interchange spacing, percentage of trucks and other heavy vehicles, lane widths, signal timing, on-street parking, amount of cross traffic and pedestrians, driveway spacing, etc.
ADT = Average Daily Traffic.

4-Lane Expressway has 10% more capacity than a 4-Lane Arterial.

An important goal is to maintain an acceptable LOS on the highway, street and road networks. To accomplish this, the County, Caltrans, and local agencies adopt minimum LOS standards in an attempt to manage congestion that may result as new development occurs.

LOS standards vary throughout the county and its eight incorporated cities. The 1995 Tulare County Congestion Management Program (CMP), prepared by TCAG, identified that the “minimum” LOS standard within the county shall be no lower than LOS “E” for urban areas and LOS “D” for rural areas. However, each local agency that owns and operates transportation facilities may select a LOS standard more stringent than the minimum LOS standards identified in the CMP. Although TCAG rescinded the CMP, it kept some of the components of the program including the LOS threshold, review of traffic impact studies, and the monitoring of intersections throughout the county. For purposes of this report, a peak -hour LOS of “D” is taken as the threshold for acceptable traffic operations for the Tulare County road and state highway system.

To determine the existing LOS for each segment of the street and highway network, segment LOS was identified from information referenced in the existing Regional Transportation Plan (RTP), and from data provided by TCAG from their annual monitoring program. LOS was also estimated using the Modified HCM-Based LOS Tables (Florida Tables). These tables consider the capacity of individual street and highway segments based on numerous roadway variables (freeway design speed, signalized intersections per mile, number of lanes, saturation flow, etc.). These variables were identified and applied to reflect existing traffic LOS conditions in Tulare County. The variables are consistent with HCM variables referenced above in Table 5-1.

Analysis Results

Given that the General Plan Update is considered a long-range planning document that includes some level of new development predominately within the County's existing communities, hamlets, or rural areas, it is expected that the existing transportation system will require improvements in order to accommodate the proposed levels of development.

A series of model runs were conducted to evaluate the effectiveness of the draft circulation plan. As a result of this analysis, it was determined that the following roadways (with several outside the immediate jurisdiction of the County) would require future improvements (mitigation in the form of widening, additional lanes, etc.):

- *State Route 63 (Mooney Boulevard) between Avenue 272 and Avenue 248*: widen from 4 to 6 lanes.
- *State Route 137 between State Route 99 and State Route 63*: widen from 4 to 6 lanes. Due to existing residential, commercial, and school developments along this corridor, widening to 6 lanes may be unlikely to occur. Alternative capacity increasing projects on adjacent corridors should be considered.
- *State Route 190 between State Route 65 and Road 265*: widen from 4 to 6 lanes.
- *State Route 198 between Kings Co. line and Road 68*: widen from 4 to 6 lanes.
- *State Route 198 between Akers Street and State Route 63 (south)*: widen from 4 to 6 lanes.
- *State Route 198 between State Route 63 (south) and Road 168*: widen from 4 to 6 lanes.
- *Caldwell Avenue between Fairway Street and Lovers Lane (City of Visalia)*: widen from 4 to 6 lanes.
- *Demaree Street between Goshen Avenue and State Route 198 (City of Visalia)*: due to existing residential and commercial development along the corridor, it is unlikely that this roadway would be widened from 4 to 6 lanes between Goshen Avenue and State Route 198. Additional north-south access should be considered; currently, Demaree Street is the only north-south crossing over the railroad (just north of Goshen Avenue) that exists between Akers Street and Mooney Boulevard. This results in excessive travel demand on the Demaree Street corridor. Additional north-south access along the Linwood Street or Chinowth Street alignments should be considered.
- *Lovers Lane between State Route 198 and Caldwell Avenue (City of Visalia)*: widen from 4 to 6 lanes.
- *State Route 63 (Dinuba Highway) between Avenue 402 and Avenue 368*: widen from 2 to 4 lanes.
- *State Route 65 between Road 204 (Spruce) and Hermosa Street*: widen from 4 to 6 lanes.

- Demaree Street between State Route 198 – Walnut Avenue (City of Visalia):* due to existing residential and commercial development along the corridor, it is unlikely that this roadway would be widened from 4 to 6 lanes between State Route 198 and Walnut Avenue. Based upon review of the traffic models for each alternative, additional north-south capacity is available on County Center Drive and Chinowth Street that would provide adequate relief of the Demaree Street corridor.

Interchange improvements are also important to the regional transportation system. Although interchanges were not analyzed quantitatively for each alternative – i.e., too specific for a general plan – it is important that the EIR address interchanges in Tulare County that should be considered for improvements within the life of the General Plan Update. Table 5-2, below, is from the Measure R ½ cent transportation expenditure plan and summarizes regional interchange projects.

**TABLE 5-2
SUMMARY OF REGIONAL INTERCHANGE PROJECTS**

Location	Community	Description	Costs¹
Betty Drive/State Route 99	Goshen	Major Interchange Improvements	\$37,000,000
Caldwell Avenue/State Route 99	Visalia	Major Interchange Improvements	\$25,000,000
Cartmill Avenue/State Route 99	Tulare	Major Interchange Improvements	\$25,000,000
Agri-Center/State Route 99	Tulare	New Interchange	\$17,000,000
Paige Avenue/State Route 99	Tulare	Interchange Improvements	\$25,000,000
State Route 99 (South County) ²	Pixley, Earlimont,	Various Interchange Improvements	\$6,000,000
Shirk Street/State Route 198	Visalia	Interchange Improvements	\$9,000,000
Akers Street/State Route 198	Visalia	Interchange Improvements	\$1,500,000
Visalia State Route 198 Corridor ³	Visalia	Interchange Improvements	\$20,000,000
Lovers Lane/State Route 198	Visalia	Interchange Improvements	\$18,500,000
Road 148 Alignment/State Route 198	Visalia	New Interchange	\$25,000,000
Farmersville Blvd./State Route 198	Farmersville	Interchange Improvements	\$30,000,000
Main Street/State Route 190	Porterville	Interchange Improvements	\$18,000,000
North Grand Avenue/State Route 65	Porterville	Interchange Improvements	\$20,000,000

Source: *Final 2006 ½ Cent Transportation Sales Tax Measure Expenditure Plan (Measure R).*

¹ *In Today's Dollars (2007).*

² *State Route 99 Interchange Analysis – Southern Tulare County (OMNI-MEANS – November 2006).* This study identified improvements at interchanges located at Avenue 24, Avenue 48 and State Route 99 median guard rail.

³ Various interchange improvements on State Route 198 at Ben Maddox Way and Lovers Lane.

Standards of Significance

The General Plan Update will establish development guidelines against which future projects will be judged for consistency. The significance criteria for this analysis were developed from criteria presented in Appendix G, “Environmental Checklist Form”, of the CEQA Guidelines and based on the professional judgment of the County of Tulare and its consultants. The project (or the project alternatives) would result in a significant impact if it would:

- Cause an increase in traffic which is considered substantial in relation to the existing traffic load and capacity of the street system; or
- Exceed, either individually or cumulatively, a level of service standard established by the county congestion management agency for designated roads or highways.

Impacts and Mitigation Measures

Impact TC-1: The General Plan Update would result in a substantial increase in vehicular traffic.

Impact Summary

Level of Significance Before Mitigation: <i>Potentially Significant</i>
Required Mitigation Measures: No additional feasible mitigation available
Level of Significance After Mitigation: <i>Significant and Unavoidable</i>

Impact Analysis

Implementation of the General Plan Update would result in additional County-wide residential and non-residential land use developments, with many of the resulting population growth contributing additional vehicle use on local and regional streets and highways. Table 5-3 identifies traffic impacts to streets and roads in the County under the General Plan Update. It should be noted that the LOS standard for Tulare County is “D” as stated in Policy TC-1.6-County LOS Standard. As shown in the table and as more fully described above under the “Methodology” section, there are some roadway facilities where it is not possible to achieve the County’s desired level of service (LOS D) given the presence of local physical and environmental constraints. Table 5-3 identifies those facilities where operations at LOS E or F are projected.

**TABLE 5-3
GENERAL PLAN UPDATE ROADWAY SEGMENT ANALYSIS**

Roadway Segment	Limits	No. of Lanes	Facility Type	General Plan Update	
				AADT	LOS
State Route 43	Kern Co. Line - Kings Co. Line	2	Collector	13,080	C
State Route 63	Fresno Co. Line - Avenue 419	2	Collector	6,920	C
State Route 63	Avenue 419 - Avenue 416 (El Monte)	4	Arterial	10,060	B
State Route 63	Avenue 416 (El Monte) - Avenue 402	4	Arterial	25,100	B
State Route 63	Avenue 402 - Avenue 384	2	Collector	20,050	F
State Route 63	Avenue 384 - Avenue 368	2	Collector	16,920	F
State Route 63	Avenue 368 - Avenue 320	2	Collector	15,490	D
State Route 63	Avenue 320 - Ferguson	4	Arterial	24,890	B
State Route 63	Ferguson - Houston	4	Arterial	29,400	C
State Route 63 (Court/Locust)	Houston - Oak	4	Arterial	30,860	C
State Route 63 (Court/Locust)	Oak - State Route 198	6	Arterial	40,950	B
State Route 63 (Mooney)	State Route 198 – Walnut	6	Divided Arterial	51,170	C
State Route 63 (Mooney)	Walnut – Caldwell	6	Divided Arterial	47,640	C
State Route 63 (Mooney)	Caldwell - Avenue 272	6	Divided Arterial	50,850	C
State Route 63 (Mooney)	Avenue 272 - Avenue 248	4	Divided Arterial	36,100	F
State Route 63 (Mooney)	Avenue 248 - State Route 137	4	Divided Arterial	35,630	D
State Route 65	State Route 198 – Pine	2	Collector	11,490	C
State Route 65 (Kaweah)	Pine - D Street.	2	Collector	4,450	C
State Route 65	D Street. - State Route 137 (West)	2	Collector	10,930	C
State Route 65	Road 204 (Spruce) – Hermosa	4	Arterial	41,300	F
State Route 65	Hermosa - Grand	4	Expressway	36,040	C
State Route 65	Grand - Porterville S. Limits	4	Freeway	47,950	C
State Route 65	Porterville S. Limits - Avenue 96	4	Arterial	28,680	B
State Route 65	Avenue 96 - Kern Co. Line	4	Arterial	26,340	B
State Route 99	Fresno Co. Line - Avenue 368	6	Freeway	67,490	C
State Route 99	Avenue 368 - State Route 198	6	Freeway	98,020	D
State Route 99	State Route 198 - State Route 137	6	Freeway	100,430	D
State Route 99	State Route 137 - State Route 190	6	Freeway	98,440	D
State Route 99	State Route 190 - Kern Co. Line	6	Freeway	103,500	D
State Route 137	Kings Co. Line - Road 68	2	Collector	7,110	C
State Route 137	Road 68 - West	2	Collector	7,030	C
State Route 137	West - J Street	2	Collector	13,730	C
State Route 137	J Street - Kern	2	Collector	12,260	C
State Route 137	Kern - State Route 99	4	Arterial	30,380	C
State Route 137	State Route 99 - State Route 63	4	Divided Arterial	35,750	F
State Route 137	State Route 63 - State Route 65	4	Arterial	29,990	C
State Route 190	State Route 99 - State Route 65	2	Collector	15,190	D
State Route 190	State Route 65 - Road 265	4	Divided Arterial	46,900	F
State Route 190	Road 265 - Sequoia Nat'l Forest	2	Collector	13,610	C
State Route 198	Kings Co. Line - State Route 99	4	Arterial	48,830	F

**TABLE 5-3
GENERAL PLAN UPDATE ROADWAY SEGMENT ANALYSIS**

Roadway Segment	Limits	No. of Lanes	Facility Type	General Plan Update	
				AADT	LOS
State Route 198	State Route 99 - Akers	4	Freeway	62,100	D
State Route 198	Akers - State Route 63 (south)	4	Freeway	91,400	F
State Route 198	State Route 63 (south) - Road 168	4	Freeway	69,600	E
State Route 198	Road 168 - Spruce	4	Expressway	29,710	B
State Route 198	Spruce - State Route 216	2	Collector	12,950	C
State Route 198	State Route 216 - North Fork	2	Collector	12,070	C
State Route 198	North Fork - Mineral King	2	Collector	4,960	C
State Route 198	Mineral King - Sequoia Nat'l Park	2	Collector	3,450	B
State Route 201	Fresno Co. Line - State Route 63	2	Collector	10,190	C
State Route 201	State Route 63 - State Route 245	2	Collector	13,270	C
State Route 216	State Route 198 (Visalia) - Houston	4	Divided Arterial	31,200	C
State Route 216	Houston - Road 144	4	Arterial	14,470	B
State Route 216	Road 144 - Road 158	2	Collector	10,530	C
State Route 216	Road. 158 - Avenue. 344	2	Collector	12,420	C
State Route 216	Road 196 - Castlerock	2	Collector	11,780	C
State Route 216	Castlerock - State Route 198 (Lemon Cove)	2	Collector	6,520	C
State Route 245	Fresno Co. Line - State Route 201	2	Collector	1,030	B
State Route 245	State Route 201 - Avenue 352 (Cajon)	2	Collector	7,670	C
State Route 245	Avenue 352 (Cajon) - Woodlake S. Limits	2	Collector	7,700	C
State Route 245	Woodlake S. Limits - State Route 198	2	Collector	9,680	C
Avenue 54	Kings Co. Line - State Route 43	2	Collector	5,220	C
Avenue 56	State Route 43 - State Route 99	2	Collector	8,340	C
Avenue 56	State Route 99 - Road 192	2	Collector	13,210	C
Avenue 56	Road 192- State Route 65	2	Collector	2,190	B
Avenue 56/M56	State Route 65 - Old Stage Road	2	Collector	3,130	B
Avenue 56/M56	Old Stage Road - Sequoia National Forest	2	Collector	2,970	B
Avenue 96	Road 96 - State Route 99	2	Collector	2,350	B
Avenue 96	State Route 99 - Road 192	2	Collector	6,810	C
Avenue 96	Road 192- State Route 65	2	Collector	7,380	C
Avenue 96	State Route 65 - M109	2	Collector	6,700	C
Avenue 152	State Route 99 - Road 192	2	Collector	5,220	C
Avenue 152	Road 192- Road 222	2	Collector	4,640	C
Avenue 152 (Olive)	Road 222 - Newcomb	4	Divided Arterial	12,750	B
Avenue 152 (Olive)	Newcomb - Main	6	Divided Arterial	25,790	B
Avenue 152 (Olive)	Main - Road 252 (Plano)	4	Divided Arterial	4,560	A
Avenue 184	Road 28 - Road 96	2	Collector	3,470	B
Avenue 196	Road 196 - State Route 65	2	Collector	6,380	C
Avenue 196	State Route 65 - Road 236	2	Collector	11,480	C
Avenue 196	Road 236 - State Route 190	2	Collector	3,410	B
Avenue 216	Road 84 - K Street.	2	Collector	5,820	C

**TABLE 5-3
GENERAL PLAN UPDATE ROADWAY SEGMENT ANALYSIS**

Roadway Segment	Limits	No. of Lanes	Facility Type	General Plan Update	
				AADT	LOS
Avenue 216	K Street - State Route 99	2	Collector	7,330	C
Avenue 232	Kings Co. Line - Road 92	2	Collector	7,100	C
Avenue 232 (Tulare Avenue)	Road 92 (West) - I Street	2	Collector	11,070	C
Avenue 256	State Route 99 - Road 216	2	Collector	8,690	C
Avenue 280 (Caldwell)	Kings Co. Line - State Route 99	2	Collector	5,920	C
Avenue 280	State Route 99 - Akers	4	Arterial	21,350	B
Avenue 280 (Caldwell)	Akers - Shady	4	Divided Arterial	33,100	C
Avenue 280 (Caldwell)	Shady - Fairway	6	Divided Arterial	47,840	C
Avenue 280 (Caldwell)	Fairway - Lovers Lane (divided to West)	4	Divided Arterial	44,000	F
Avenue 280	Lovers Lane - Stevens	4	Divided Arterial	26,070	B
Avenue 280	Stevens - Brundage	4	Divided Arterial	23,790	B
Avenue 280	Brundage - Road 180	4	Divided Arterial	15,410	B
Avenue 280	Road 180 - Elberta	4	Divided Arterial	21,400	B
Avenue 280	Elberta - Belmont	4	Divided Arterial	11,830	B
Avenue 304	Kings Co. Line - State Route 99	2	Collector	16,200	D
Avenue 304	State Route 99 - Road 76	2	Collector	10,490	C
Avenue 304 (Goshen)	Road 76 - Road 80	4	Divided Arterial	10,830	B
Avenue 304 (Goshen)	Road 80 - Shirk	4	Divided Arterial	15,760	B
Avenue 304 (Goshen)	Shirk - Giddings (divided to Demaree)	4	Divided Arterial	25,820	B
Avenue 304 (Murray)	Giddings - Locust	4	Arterial	23,270	B
Avenue 312 (Riggin)	Road 80 - State Route 63	4	Arterial	26,850	B
Avenue 328	State Route 99 - State Route 63	2	Collector	11,200	C
Avenue 328	State Route 63 - Road 132	2	Collector	5,250	C
Avenue 328	Road 132 - State Route 216	2	Collector	7,100	C
Avenue 384	State Route 99 - Road 80	2	Collector	12,430	C
Avenue 384	Road 80 - State Route 63	2	Collector	6,070	C
Avenue 416	Fresno Co. Line - Road 72	4	Divided Arterial	25,060	B
Avenue 416 (El Monte)	Road 72 - Euclid	4	Divided Arterial	29,130	B
Avenue 416 (El Monte)	Euclid - Nichols	4	Divided Arterial	31,910	C
Avenue 416 (El Monte)	Nichols - Perry	4	Divided Arterial	23,870	B
Avenue 416 (El Monte)	Perry - Road 92	4	Expressway	33,340	C
Avenue 416	Road 92 - Road 120	4	Expressway	31,250	B
Avenue 416	Road 120 - State Route 63	2	Collector	12,730	C
Avenue 416/Boyd Drive	State Route 63 - State Route 245	2	Collector	6,840	C
Road 56	Avenue 384 - Fresno Co. Line	2	Collector	13,430	C
Road 68	State Route 99 - State Route 198	2	Collector	680	B
Road 68	State Route 198 - State Route 137	2	Collector	5,620	C
Road 80	Avenue 384 - Goshen	4	Arterial	21,430	B
Road 80 (Plaza)	Goshen - Neeley Street	4	Arterial	22,170	B
Road 80 (Plaza)	Neeley Street - State Route 198	4	Arterial	25,620	B

**TABLE 5-3
GENERAL PLAN UPDATE ROADWAY SEGMENT ANALYSIS**

Roadway Segment	Limits	No. of Lanes	Facility Type	General Plan Update	
				AADT	LOS
Road 92	Avenue 320 - State Route 198	4	Arterial	22,110	B
Road 92	State Route 198 - Avenue 276	4	Arterial	13,480	B
Road 92	Avenue 276 - Avenue 272	2	Collector	880	B
Road 96	Avenue 224 - Avenue 200	4	Arterial	2,760	A
Road 96	Avenue 200 - Avenue 96	2	Collector	2,580	B
Road 108 (Demaree)	Avenue 328 - Avenue 316	2	Collector	12,130	C
Road 108 (Demaree)	Avenue 316 - Houston	4	Divided Arterial	24,900	B
Road 108 (Demaree)	Houston - Goshen	4	Divided Arterial	35,000	D
Road 108 (Demaree)	Goshen - State Route 198	4	Arterial	39,600	F
Road 108 (Demaree)	State Route 198 - Walnut	4	Arterial	36,900	F
Road 108 (Demaree)	Walnut - Caldwell	4	Arterial	34,210	C
Road 108	Caldwell - Cartmill	4	Divided Arterial	27,830	B
Road 108 (Hillman)	Cartmill - Leland	4	Divided Arterial	23,570	B
Road 108 (Hillman)	Leland - Prosperity	6	Divided Arterial	32,780	B
Road 132	State Route 201 - Avenue 328	2	Collector	7,360	C
Road 132	Avenue 328 - Saint John's Pkwy	4	Arterial	7,130	B
Road 132 (Ben Maddox)	Saint John's Pkwy - Houston	4	Arterial	13,870	B
Road 132 (Ben Maddox)	Houston - State Route 198	4	Arterial	29,750	C
Road 140 (Lovers Lane)	State Route 216 - State Route 198	4	Divided Arterial	31,200	C
Road 140 (Lovers Lane)	State Route 198 - Caldwell	4	Divided Arterial	38,400	F
Road 140	Caldwell - Avenue 272	4	Arterial	20,650	B
Road 140	Avenue 272 - State Route 137	2	Collector	13,770	C
Road 152	State Route 137 - Avenue 192	2	Collector	4,410	C
Road 152	Avenue 192 - State Route 190	2	Collector	4,040	B
Road 152	State Route 190 - Avenue 96	2	Collector	3,430	B
Road 160	Avenue 56 - Kern Co. Line	2	Collector	3,060	B
Road 164 (Farmersville Blvd)	State Route 198 - Walnut	4	Arterial	14,220	B
Road 164 (Farmersville Blvd)	Walnut - Visalia Road	4	Arterial	13,020	B
Road 164/Road 168	Visalia Road - State Route 137	2	Collector	9,170	C
Road 192	Avenue 196 - Avenue 152	2	Collector	4,400	C
Road 192	Avenue 152 - Avenue 56	2	Collector	3,480	B
Road 196	State Route 216 - State Route 198	2	Collector	9,060	C
Road 204 (Spruce)	State Route 198 - State Route 65	4	Divided Arterial	30,670	C
Road 216	Avenue 232 - M296	2	Collector	1,360	B
Road 256	Avenue 196 - Reid	2	Collector	1,640	B
Road 264	Avenue 95 - Avenue 56	2	Collector	2,390	B
Hermosa	State Route 65 – Mirage (divided to Westwood)	4	Divided Arterial	8,000	B
Mooney Boulevard	State Route 137 - Laspina	4	Arterial	23,190	B
Main Street (Porterville)	State Route 190 - Olive	4	Arterial	22,070	B
Main Street	Olive – Morton	4	Arterial	22,990	B

**TABLE 5-3
GENERAL PLAN UPDATE ROADWAY SEGMENT ANALYSIS**

Roadway Segment	Limits	No. of Lanes	Facility Type	General Plan Update	
				AADT	LOS
Main Street	Morton – Henderson	4	Arterial	31,050	C
Main Street	Henderson – Grand	4	Arterial	20,430	B
Mirage	Hermosa – Lindmore	4	Arterial	6,130	B
Diagonal 242 (Orangebelt)	Avenue 220 - Avenue 196	2	Collector	10,300	C
Diagonal 242 (Orangebelt)	Avenue 196 - Avenue 184	2	Collector	10,500	C
Diagonal 242 (Orangebelt)	Avenue 184 - Linda Vista	2	Collector	10,200	C
Diagonal 242 (Orangebelt)	Linda Vista - North Grand	4	Arterial	11,010	B
Pine Street	G Street – Kaweah	2	Collector	2,140	B
Plano	Reid - State Route 190	4	Arterial	13,950	B
Reservation Road	Worth Road - Tule River Indian Reservation Border	2	Collector	6,320	C
Plano (Road 256)	State Route 190 - Avenue 116	2	Collector	7,000	C
Yokohl Valley Road	State Route 198 - Balch Park	2	Collector	1,830	B

Source: TCAG Regional Travel Demand Forecast Model – Year 2030.

Policies and implementation measures included as part of the General Plan Update that would minimize this impact are summarized below by general plan element. Policies from the draft Transportation and Circulation Element are designed to minimize transportation impacts through the establishment of design and LOS standards for a variety of circulation, traffic, transit, and non-motorized transportation modes. Other policies in the draft Land Use Element are designed to integrate land use and circulation concepts early during the design phases of County-wide development to minimize land use conflicts. However, even with implementation of the below mentioned policies, this impact is considered *potentially significant*.

Transportation and Circulation Element	
Policies designed to minimize transportation impacts through the establishment of design and LOS standards for a variety of circulation, traffic, transit, and non-motorized transportation modes, include the following:	
TC-1.1 Provision of an Adequate Public Road Network TC-1.2 County Improvement Standards TC-1.3 Regional Coordination TC-1.4 Funding Sources TC-1.5 Public Road System Maintenance TC-1.6 Intermodal Connectivity TC-1.8 Promoting Operational Efficiency TC-1.9 Highway Completion TC-1.10 Urban Interchanges	TC-1.11 Regionally Significant Intersections TC-1.13 Land Dedication for Roadways and Other Travel Modes TC-1.14 Roadway Facilities TC-1.15 Traffic Impact Study TC-1.16 County LOS Standards TC-1.17 Level of Service Coordination TC-1.18 Balanced System TC-1.19 Balanced Funding TC Implementation Measure #3A, #7A and #9A
Transportation and Circulation Element	Land Use Element
Policies designed to integrate land use and circulation concepts during the early planning and design phases of Countywide development to minimize land use conflicts include the following:	
TC-1.3 Regional Coordination TC-1.7 Intermodal Freight Villages TC-1.12 Scenic Highways and Roads TC-1.13 Land Dedication for Roadways and Other Travel Modes	LU-1.11 Roadway Access LU-4.4 Travel-Oriented Tourist Commercial Uses LU-5.4 Compatibility with Surrounding Land Use

Required Mitigation Measures

As discussed above under the “Methodology” section, a number of roadway improvements are identified that would improve roadway level of service conditions resulting from implementation of the General Plan Update. However, some of the roadway infrastructure improvements identified are on facilities under the jurisdiction of entities outside the County (such as Caltrans or the City of Visalia, etc.). Therefore, implementation of the proposed improvements would be subject to approval by other agencies, as well as to funding programs that are not fully developed at this time. Timely construction of the proposed improvements would require substantial coordination and cooperation between the County and other agencies.

In summary, the General Plan Update addresses its traffic effects through a combination of policies and the physical improvements identified above. Despite the policies as proposed deterioration in the traffic LOS as compared to current conditions is unavoidable partly due to city growth not directly controlled by this plan. The physical improvements would require cooperation and funding from a variety of entities inside and outside the County, so implementation of these improvements cannot be guaranteed solely through the County’s actions. As a result, this impact remains *significant*. No additional feasible mitigation is currently available.

Significance after Implementation of Mitigation for Impact TC-1

As stated above, no additional feasible mitigation measures are currently available to reduce this impact to a less than significant level. Consequently, this impact is considered *significant and unavoidable*.

Rail Transportation

The following section addresses impacts to rail transportation facilities resulting from implementation of the General Plan Update. No comments specific to rail transportation issues were received during the NOP public scoping phase of the General Plan Update.

Environmental and Regulatory Setting

The General Plan Update included the preparation of several major documents including preparation of a detailed Background Report, which serves to chronicle the existing environmental and regulatory setting conditions applicable to the County. A detailed discussion of the rail transportation setting can be found in the General Plan Background Report (see Appendix B, Chapter 5.0 “Transportation and Circulation”).

Methodology

Transportation and circulation needs are closely tied to the location and distribution of land uses. Section 65302(b) of the Government Code requires that a circulation element must be included in a general plan. The circulation element must address the general location and extent of existing and proposed major thoroughfares, transportation routes, terminals, and other local public utilities and facilities, all correlated with the land use element.

Rail transportation in Tulare County consists of freight movement only. However, passenger rail service is available at Allensworth State Park with a whistle-stop. Currently, AMTRAK buses provide service to those wishing to use passenger rail service in neighboring Kings County. As the population of Tulare County and California continue to grow, the demand for freight movement and passenger rail service will also continue to grow. Therefore, growth induced impacts are expected to occur.

Standards of Significance

The General Plan Update will establish development guidelines against which future projects will be judged for consistency. The significance criteria for this analysis were developed from criteria presented in Appendix G, “Environmental Checklist Form”, of the CEQA Guidelines and based on the professional judgment of the County of Tulare and its consultants. The project (or the project alternatives) would result in a significant impact if it would:

- Cause an increase in rail traffic which is considered substantial in relation to the existing capacity of the rail system.

Impacts and Mitigation Measures

Impact TC-2: The General Plan Update would result in substantial changes in accessibility to County-area railroad terminals and cargo transfer points.

Impact Summary

Level of Significance Before Mitigation: <i>Potentially Significant</i>
Required Mitigation Measures: New Policy TC-2.7 “Rail Facilities and Existing Development”
Level of Significance After Mitigation: <i>Less- than-significant</i>

Impact Analysis

A qualitative analysis has been applied to assess environmental impacts for rail transportation in Tulare County. Additional population growth in the county and throughout the state is expected to increase demand for freight movement through Tulare County. As a result, more freight will be hauled and more rail traffic will occur. Passenger rail usage will also experience increased ridership demands. Changes in accessibility to railroad terminals and cargo transfer points could be affected by population growth and land use changes resulting from implementation of the General Plan Update.

Policies and implementation measures included as part of the General Plan Update that would minimize this impact are summarized below by general plan element. Policies from the draft Transportation and Circulation Element are designed to minimize transportation impacts through

the establishment of design and LOS standards for a variety of circulation, traffic, transit, and non-motorized transportation modes. Additionally, Policy TC-2.4 also requires the County to continue coordinating with TCAG and the High Speed Rail Commission in efforts to locate the HSR corridor in Tulare County. Other policies (see Policy TC-2.5) are designed to protect important railroad right-of-way for future rail expansion activities. Policies in the draft Land Use Element are designed to integrate land use and circulation concepts early during the design phases of Countywide development to minimize land use conflicts (see Policy LU-5.4). However, even with implementation of the below mentioned policies, this impact is considered ***potentially Significant***.

Transportation and Circulation Element	
Policies designed to minimize transportation impacts through the establishment of design and LOS standards for a variety of circulation, traffic, transit, and non-motorized transportation modes, include the following:	
TC-1.6 Intermodal Connectivity TC-1.7 Intermodal Freight Villages TC-1.8 Promoting Operational Efficiency TC-2.1 Rail Service	TC-2.2 Rail Improvements TC-2.3 Amtrak Service TC-2.4 High Speed Rail (HSR) TC Implementation Measure #7A
Transportation and Circulation Element	Land Use Element
Policies designed to integrate land use and circulation concepts during the early planning and design phases of Countywide development to minimize land use conflicts include the following:	
TC-2.5 Railroad Corridor Preservation	LU-5.4 Compatibility with Surrounding Land Use

Required Mitigation Measures

In addition to the above mentioned policies, the following new Policy TC-2.7 “Rail Facilities and Existing Development” is required to address this impact:

- **TC-2.7 Rail Facilities and Existing Development.** The County shall ensure that new railroad rights-of-way or yards adjacent to existing residential or commercial areas are screened or buffered to reduce noise, air, and visual impacts [*New Policy – Draft EIR Analysis*].

Significance after Implementation of Mitigation for Impact TC-2

As stated above, the County will continue to ensure that a variety of measures are implemented (including the new Policy TC-2.7 “Rail Facilities and Existing Development” to minimize rail transportation impacts. Consequently, with implementation of the above mentioned policies and continued monitoring/compliance with the California Public Utilities Commission (CPUC), future expansion of AMTRAK service, and coordination with the HSR Commission, the General Plan impacts on rail transportation in Tulare County are considered ***less-than-significant***.

Aviation

The following section addresses impacts to County-wide aviation facilities resulting from implementation of the General Plan Update. No comments specific to aviation issues were received during the NOP public scoping phase of the General Plan Update. Specific comments related to airport compatibility and conformance with the Tulare County Comprehensive Airport Land use Plan were received and this issue is address in Chapter 3.4 “Land Use” of the EIR.

Environmental and Regulatory Setting

The General Plan Update included the preparation of several major documents including preparation of a very detailed Background Report, which serves to chronicle the existing environmental and regulatory setting conditions applicable to the County. A detailed discussion of the aviation setting can be found in the General Plan Background Report (see Appendix B, Chapter 5.0 “Transportation and Circulation”).

Methodology

Transportation and circulation needs are closely tied to the location and distribution of land uses. Section 65302(b) of the Government Code requires that a circulation element must be included in a general plan. The circulation element must address the general location and extent of existing and proposed major thoroughfares, transportation routes, terminals, and other local public utilities and facilities, all correlated with the land use element.

Aviation in Tulare County consists of nine (9) public use airports as discussed in the General Plan Background Report. As the population of Tulare County and California continue to grow, the demand for additional aviation services will also continue to grow. Therefore, growth induced impacts are expected to occur.

Standards of Significance

The proposed General Plan Update will establish development guidelines against which future projects will be judged for consistency. The significance criteria for this analysis were developed from criteria presented in Appendix G, “Environmental Checklist Form”, of the CEQA Guidelines and based on the professional judgment of the County of Tulare and its consultants. The project (or the project alternatives) would result in a significant impact if it would:

- Cause an increase in aviation usage which is considered substantial in relation to the existing capacity of the aviation system.

Impacts and Mitigation Measures

Impact TC-3: The General Plan Update would result in a substantial increase in Countywide aviation usage at local facilities.

Impact Summary

Level of Significance Before Mitigation: <i>Less than Significant</i>
Required Mitigation Measures: <i>No mitigation required.</i>
Level of Significance After Mitigation: <i>Not applicable</i>

Impact Analysis

A qualitative analysis has been applied to assess environmental impacts related to aviation in Tulare County. Implementation of the General Plan Update would result in additional population growth, which would result in increased demand for local aviation services. Impacts that could potentially occur with implementation of the General Plan include more frequent flights into and out of local airports.

The Tulare County Airport Land Use Commission (ALUC) assesses land use suitability around eight public use airports in the county. The Tulare County Comprehensive Airport Land Use Plan (CALUP) guides the ALUC in determining appropriate conforming land uses with its detailed findings and policies. The principle concerns of airport land use planning fall into the following categories: height restriction; safety of persons on the ground; noise compatibility; and over flight (air traffic patterns). Thoughtful planning in these areas will result in land use policies and regulations that reduce the public's exposure to safety hazards and aircraft noise; provide for safer operation of aircraft; and will help protect airports and the public resources they represent from the encroachment of incompatible land uses.

Each airport in Tulare County has a capital improvement program that identifies improvements to the airport for a five year period. In the capital improvement program, projects such as runway improvements, hangar procurement, security fencing, etc., are identified and updated regularly. Each capital improvement program identifies projects needed for expansion, if necessary. Implementation of the capital improvement program ensures that each airport is prepared to accommodate the demand associated with increased population growth.

Policies included as part of the General Plan Update that would minimize this impact are summarized below by general plan element. Policies from the draft Transportation and Circulation Element are designed to support continued enhancement and development of the County-wide airport system (see Policies TC-3.1, TC-3.2, and TC-3.3). Consequently, with implementation of the below mentioned policies, this impact is considered *less-than-significant*.

Transportation and Circulation Element	
Policies designed to minimize transportation impacts through the establishment of design and LOS standards for a variety of circulation, traffic, transit, and non-motorized transportation modes, include the following:	
TC-1.6 Intermodal Connectivity	TC-3.3 Airport Enhancement
TC-1.8 Promoting Operational Efficiency	TC-3.4 Airport Compatibility
TC-1.18 Balanced System	TC-3.5 Private Ownership
TC-1.19 Balanced Funding	TC-3.6 Airport Encroachment
TC-3.1 Enhancement of County-wide Airport System	TC-3.7 Multi-Modal Development
TC-3.2 Airport System Development	TC Implementation Measure #7A

Required Mitigation Measures

This impact is considered *less-than-significant*. No mitigation is required.

Public Transportation

The following section addresses impacts to County-wide public transportation service resulting from implementation of the General Plan Update. No comments specific to public transportation issues were received during the NOP public scoping phase of the General Plan Update.

Environmental and Regulatory Setting

The General Plan Update included the preparation of several major documents including preparation of a detailed Background Report, which serves to chronicle the existing environmental and regulatory setting conditions applicable to the County. A detailed discussion of the public transportation setting can be found in the General Plan Background Report (see Appendix B, Chapter 5.0 “Transportation and Circulation”).

Methodology

In order to determine impacts related to current and future demand for public transportation, short and long range transit development plans are prepared regularly for each transit provider in the County. Triannual performance audits are also conducted by TCAG in order to gauge the effectiveness of the plan. These plans identify existing ridership, service routes, identify future demands, establish performance standards, and contain capital improvement programs to accommodate anticipated transit demand.

In addition and in accordance with federal law, TCAG conducts an annual unmet transit needs hearing. At this hearing, all residents in the county have the opportunity to provide input regarding transit service. This hearing may result in additional or altered routes, expansion of operating hours, operational improvements, etc.

Standards of Significance

The General Plan Update will establish development guidelines against which future projects will be judged for consistency. The significance criteria for this analysis were developed from criteria presented in Appendix G, “Environmental Checklist Form”, of the CEQA Guidelines and based on the professional judgment of the County of Tulare and its consultants. The project (or the project alternatives) would result in a significant impact if it would:

- Cause an increase in transit usage which is considered substantial in relation to the existing capacity of the public transportation system.

Impacts and Mitigation Measures

Impact TC-4: The General Plan Update would result in a substantial increase in public transit usage.

Impact Summary

Level of Significance Before Mitigation: <i>Less than Significant</i>
Required Mitigation Measures: <i>No mitigation required.</i>
Level of Significance After Mitigation: <i>Not applicable</i>

Impact Analysis

A qualitative analysis has been applied to assess environmental impacts related to public transit in Tulare County. Implementation of the General Plan Update would result in additional population growth, which would result in increased demand for County-wide transit services.

Tulare County Area Transit (TCaT) is the County's transit provider. It serves rural communities and provides links to all of Tulare County's cities via a fleet of shuttle buses. Impacts due to increased growth will be identified through updates of short and long range transit development plans and the annual unmet transit needs hearing. As new population growth occurs and transit demand increases, additional transit services will be developed to ensure that adequate supply exists. Largely market driven, transit service will expand as needed and will be self mitigating.

Policies included as part of the General Plan Update that would minimize this impact are summarized below by general plan element. Policies from the draft Transportation and Circulation Element are designed to support continued coordination of local transportation programs to facilitate connectivity with City operated transit systems (see Policy TC-4.5) and support of TCAG for development of transit services outlined in the County's Transit Development Plan (see Policies TC-4.3 and TC-4.2). Additionally, Policy TC-4.7 promotes the reservation of transit stops in conjunction with development projects and Policy F-9.17 encourages the concentration of development along major travel routes to allow for future public transportation services. Consequently, with implementation of the below mentioned policies, this impact is considered *less-than-significant*.

Transportation and Circulation and Foothill Growth Management Plan Elements	
Policies designed to minimize transportation impacts through the establishment of design and LOS standards for a variety of circulation, traffic, transit, and non-motorized transportation modes, include the following:	
TC-1.3 Regional Coordination TC-1.4 Funding Sources TC-1.6 Intermodal Connectivity TC-1.18 Balanced System TC-1.19 Balanced Funding TC-2.3 Amtrak Service TC-2.4 High Speed Rail (HSR) TC-4.1 Transportation Programs	TC-4.2 Determine Transit Needs TC-4.3 Support Tulare County Area Transit TC-4.4 Nodal Land Use Patterns that Support Public Transit TC-4.5 Transit Coordination TC-4.6 San Joaquin Valley Intelligent Transportation System Strategic Deployment Plan TC-4.7 Transit Ready Development TC-5.5 Facilities TC Implementation Measure #7A F-9.17 Proximity to Transportation

Required Mitigation Measures

This impact is considered *less-than-significant*. No mitigation is required.

Bicycle Routes and Trails

The following section addresses impacts to County-wide bicycle routes and trails resulting from implementation of the General Plan Update. No comments specific to these issues were received during the NOP public scoping phase of the General Plan Update.

Environmental and Regulatory Setting

The General Plan Update included the preparation of several major documents including preparation of a detailed Background Report, which serves to chronicle the existing environmental and regulatory setting conditions applicable to the County. A detailed discussion of the non-motorized systems setting can be found in the General Plan Background Report (see Appendix B, Chapter 5.0 “Transportation and Circulation”).

Methodology

Transportation and circulation needs are closely tied to the location and distribution of land uses. Section 65302(b) of the Government Code requires that a circulation element must be included in a general plan. The circulation element must address the general location and extent of existing and proposed major thoroughfares, transportation routes, terminals, and other local public utilities and facilities, all correlated with the land use element.

Non-motorized system in Tulare County consists a variety of bicycle paths/routes/lanes and pedestrian trails/paths/sidewalks. As the population of Tulare County and California continue to grow, the demand for additional non-motorized systems will also continue to grow. Therefore, growth inducing impacts are expected to occur.

Standards of Significance

The General Plan Update will establish development guidelines against which future projects will be judged for consistency. The significance criteria for this analysis were developed from criteria presented in Appendix G, “Environmental Checklist Form”, of the CEQA Guidelines and based on the professional judgment of the County of Tulare and its consultants. The project (or the project alternatives) would result in a significant impact if it would:

- Cause an increase in bike and pedestrian usage which is considered substantial in relation to the existing capacity of the non-motorized system.

Impacts and Mitigation Measures

Impact TC-5: The General Plan Update could result in a substantial increase in bicycle and pedestrian activity.

Impact Summary

Level of Significance Before Mitigation: <i>Less than Significant</i>
Required Mitigation Measures: <i>No mitigation required.</i>
Level of Significance After Mitigation: <i>Not applicable</i>

Impact Analysis

A qualitative analysis has been applied to assess environmental impacts related to bicycle and pedestrian facilities in Tulare County. Implementation of the General Plan would result in additional residential and non-residential land use development. Implementation of the General Plan would result in increased demand for bicycle and pedestrian facilities. A portion of the people associated with the additional development would use bicycle and pedestrian facilities. Thus, the demand for bicycle and pedestrian facilities would increase.

Implementation of the draft Transportation and Circulation Element policies (see Policies TC-5.1 through TC-5.9) and of the Tulare County Regional Bicycle Plan will minimize growth inducing impacts that are anticipated to occur with implementation of the General Plan Update. In addition, design standards that encourage walking and bicycling are encouraged in the Land Use Element of the General Plan (see Policies LU-7.1, LU-7.3, and LU-7.4). Planning in the General Plan Update is guided by connectivity and integration of design standards that provide for bicycle and pedestrian facilities that encourage non-motorized modes of transportation. Consequently, with implementation of the below mentioned policies, this impact is considered *less-than-significant*.

Transportation and Circulation Element	
Policies designed to minimize transportation impacts through the establishment of design and LOS standards for a variety of circulation, traffic, transit, and non-motorized transportation modes, include the following:	
TC-5.1 Bicycle/Pedestrian Trail System	TC-5.5 Facilities
TC-5.2 Consider Non-Motorized Modes in Planning and Development	TC-5.6 Regional Bicycle Plan
TC-5.3 Provisions for Bicycle Use	TC-5.7 Designated Bike Paths
TC-5.4 Design Standards for Bicycle Routes	TC-5.8 Multi-Use Trails
	TC-5.9 Existing Facilities
Land Use Element	
Policies designed to integrate land use and circulation concepts during the early planning and design phases of County-wide development to minimize land use conflicts include the following:	
LU-7.1 Distinctive Neighborhoods	
LU-7.3 Friendly Streets	
LU-7.4 Streetscape Continuity	

Required Mitigation Measures

This impact is considered *less-than-significant*. No mitigation is required.

5.3 Public Facilities and Services

Wastewater

As a result of comments (see Table 1-2 of Chapter 1.0 “Introduction”) received during the NOP public scoping phase of the General Plan Update, the following sanitary sewer-related issues have been considered as part of the impact analysis. For example, the California Regional Water Quality Control Board stated that the County needs to regulate on-site wastewater treatment systems in a manner that is fully consistent with California Regional Water Quality Control Board Guidelines that are protective of ground and surface water quality.

Environmental and Regulatory Setting

The General Plan Update included the preparation of several major documents including preparation of a very detailed Background Report, which serves to chronicle the existing environmental and regulatory setting conditions applicable to the County. A detailed discussion of County-wide wastewater and sanitary sewer infrastructure issues can be found in the General Plan Background Report (see Appendix B, Section 7.3 “Wastewater”).

Methodology

Adequate sanitary sewer infrastructure is essential if Tulare County is to sustain growth and serve projected increases in employment and population. The main purpose of this section is to address wastewater infrastructure availability provided by government agencies throughout the unincorporated areas of the County. There are a multitude of sanitary sewer service providers in Tulare County including Sanitary Districts, Public Utility Districts, Community Service Districts, Sewer Maintenance Districts, and County Service Areas. With the exception of County Service Areas, these Districts are self governing and are not under direct County jurisdiction. The County must coordinate its plans for growth and development with these districts in order to assure that services can be provided on a timely basis to areas planned for development, including areas within designated UDBs.

Implementation of the General Plan Update would result in varying levels of impacts on each special district which provides sanitary sewer service to a particular community. The first step in the impact analysis was to establish significance criteria consistent with CEQA and Tulare County CEQA Guidelines that was used as a basis for identifying impacts.

After establishing the significance criteria, an overview of the sanitary sewer service providers in unincorporated communities within the County was compiled (see the section that follows). This overview includes a summary table that identifies the services provided by each special district (collection or collection and treatment), the current permitted capacity (based upon WDRs issued by the RWQCB and other available data), the current average dry weather flow, the level of treatment provided, and effluent disposal method. A brief description of each community sewer system is then provided which outlines available information including existing capacity, planned improvements, and potential constraints.

Following the overview of the community sewer systems, an overall impact analysis was performed, which identified potentially significant environmental impacts associated with the build-out of the General Plan Update along with the policies and implementation measures that would reduce these impacts. Impacts that were found to be significant and unavoidable are also identified.

Sanitary Sewer Service Overview

Table 5-4 provides a summary or overview of the sanitary sewer providers within the unincorporated areas of Tulare County in terms of services provided, contracted treatment agency, current permitted capacity, current average dry weather flow, level of treatment, and effluent disposal method. The State of California requires municipal treatment plants to plan their facilities expansion when actual flows reach 85 percent of the design flow.

A brief description of each community's sanitary sewer system identified in Table 5-4 is provided below in order to supplement the information presented in the table and identify specific issues of importance pertaining to each community's sewage system.

Cutler-Orosi Joint Powers Wastewater Authority

The Cutler-Orosi Joint Powers Wastewater Authority (JPWA) operates a wastewater treatment facility (WWTF) that serves the communities of Cutler, Orosi, East Orosi, Sultana, Seville, and Yetttem. The construction of the WWTF, completed in 1983, was funded 75% from a cost grant from the Environmental Protection Agency, 12.5% from a cost grant from the State Water Resources Control Board, and 12.5% from proceeds of revenue bonds sales.

The WWTF operates under the provisions of Waste Discharge Requirements (WDR) Order No. R5-2006-0092 issued by the RWQCB. Order No. R5-2006-0092 prescribes that the monthly average discharge shall not exceed 2.0 MGD. The current ADWF at the WWTF is 1.40 MGD, while the historical high flow recorded at the WWTF was 1.89 MGD. In September 2006, the Regional Water Quality Control Board (RWQCB) rescinded a Cease and Desist Order after improvements to the WWTF were completed, and a registered civil engineer submitted written certification that the WWTF would operate satisfactorily to a flow of 2.0 MGD.

The Cutler PUD and Orosi PUD are allocated capacity at the WWTF in terms of equivalent single family dwellings (ESDs) through an agreement between the two districts. Current allocations are 1,255 and 2,162 ESDs for the Cutler PUD and Orosi PUD, respectively. Other communities served by the WWTF are allocated capacity in terms of maximum month ADWF. ADWF capacities for the East Orosi and Seville communities are currently 0.050 and 0.060 MGD, respectively. The ADWF capacity allocation for the Yetttem zone of benefit is 0.042 MGD. The ADWF capacity allocation for the Sultana CSD is 0.080 MGD.

According to Cutler PUD and Orosi PUD staff, their sewer collection systems are very old and pipe leaks and breaks cause significant problems including groundwater inflow/infiltration and cross contamination with groundwater. During dry months, the sewer collection system experiences ex-filtration and during winter months, the collection system experiences inflow/infiltration of storm water. The Orosi PUD is implementing a phased sewer collection

system rehabilitation/replacement project, and has awarded a contract for the construction of the phase 1 improvements. The Cutler-Orosi JPWA will be able to more accurately predict the remaining capacity at the WWTF once repairs are made to leaking pipes throughout the collection systems that discharge to the WWTF.

**TABLE 5-4
SUMMARY OF SANITARY SEWER SERVICE FOR UNINCORPORATED AREAS OF TULARE COUNTY**

Service Provider	Services Provided	Contracted Treatment Agency	Permitted Capacity (MGD)	ADWF (MGD)	% Capacity	Available Capacity (Estimated Hookups)	Treatment Level	Effluent Disposal
Cutler PUD	Collection & Treatment	-	See Note 1	See Note 1	See Note 1	0	Secondary	Ag Irrigation
Earlimart PUD	Collection & Treatment	-	0.800	0.800	100%	0	Advanced Primary	Disposal Ponds
East Orosi CSD	Collection Only	Cutler-Orosi JPWA	0.060	0.053	88%	0	Secondary	Ag Irrigation
Goshen CSD	Collection Only	City of Visalia	0.500	0.315	63%	435	Secondary	Ag Irrigation
Ivanhoe PUD	Collection & Treatment	-	0.560	0.360	64%	650	Secondary	Pasture Irrigation
Lemon Cove SD	Collection & Treatment	-	0.020	0.012	60%	25	Primary	Disposal Ponds
London CSD	Collection & Treatment	-	0.300	0.200	67%	150	Secondary	Disposal Ponds
Orosi PUD	Collection & Treatment	-	See Note 1	See Note 1	See Note 1	0	Secondary	Ag Irrigation
Pixley PUD	Collection & Treatment	-	0.290	0.298	103%	0	Primary	Disposal Ponds
Poplar CSD	Collection & Treatment	-	0.310	0.220	71%	170	Advanced Primary	Ag Irrigation
Porter Vista PUD	Collection Only	City of Porterville	See Note 2	0.400	See Note 2	0	Secondary	Ag Irrigation
Richgrove CSD	Collection & Treatment	-	0.220	0.250	114%	0	Primary	Ag Irrigation
Springville PUD	Collection & Treatment	-	0.060	0.056	93%	0	Secondary	Disposal Ponds
Strathmore PUD	Collection & Treatment	-	0.400	0.150	38%	720	Primary	Ag Irrigation
Sultana CSD	Collection Only	Cutler-Orosi JPWA	0.080	0.085	106%	0	Secondary	Ag Irrigation
Terra Bella SMD	Collection & Treatment	-	0.300	0.280	93%	0	Advanced Primary	Ag Irrigation
Tipton CSD	Collection & Treatment	-	0.400	0.190	48%	600	Secondary	Ag Irrigation
Woodville PUD	Collection & Treatment	-	0.330	0.120	36%	680	Secondary	Disposal Ponds
CSA #1 - Delft Colony	Collection & Treatment	-	0.057	0.045	79%	20	Advanced Primary	Disposal Ponds

**TABLE 5-4
SUMMARY OF SANITARY SEWER SERVICE FOR UNINCORPORATED AREAS OF TULARE COUNTY**

Service Provider	Services Provided	Contracted Treatment Agency	Permitted Capacity (MGD)	ADWF (MGD)	% Capacity	Available Capacity (Estimated Hookups)	Treatment Level	Effluent Disposal
CSA #1 - El Rancho	Collection Only	City of Lindsay	0.012	0.010	83%	0	Secondary	Disposal Ponds
CSA #1 - Seville	Collection Only	Cutler-Orosi JPWA	0.050	0.048	96%	0	Secondary	Ag Irrigation
CSA #1 - Tonyville	Collection Only	City of Lindsay	0.060	0.028	47%	80	Secondary	Disposal Ponds
CSA #1 - Tooleville	Collection & Treatment	-	0.035	0.024	69%	25	Advanced Primary	Disposal Ponds
CSA #1 - Traver	Collection & Treatment	-	0.089	0.067	75%	40	Advanced Primary	Disposal Ponds
CSA #2 - Wells Tract	Collection Only	City of Woodlake	0.019	0.021	110%	0	Primary	Pasture Irrigation
CSA #1 - Yettem	Collection Only	Cutler-Orosi JPWA	0.042	0.015	36%	70	Secondary	Ag Irrigation

Notes:

- 1) The Cutler PUD and Orosi PUD are allocated capacity in terms of Equivalent Single Family Dwellings (ESDs). Current allocations are as follows: Cutler PUD=1,225, Orosi PUD=2,162 ESDs. East Orosi and Seville have contracted capacities of 0.060 and 0.050 MGD respectively. The contracted capacities for the communities of Yettem and Sultana are 0.042 MGD and 0.080 MGD, respectively.
- 2) The contracted capacity for the Porter Vista PUD is Unknown. The ADWF from Porter Vista PUD system is estimated at 0.400 MGD.
- 3) Permitted capacities were obtained from WDR Orders issued by the RWQCB and other available data. Current Average Dry Weather Flows (ADWF) were obtained from the Wastewater User Charge Survey Report F.Y. 2005-06 prepared by the State Water Resource Control Board (SWRCB) and other available data.
- 4) Available capacity (estimated hookups) based upon existing WWTF capacity (2005) and assumes no planned improvements. Available capacity estimates are derived from available data (i.e. adopted Municipal Service Reviews), or calculated using a ratio of existing connections to existing flow, where published data is not available.

The Cutler PUD, Orosi PUD, and other District's that discharge to the Cutler-Orosi Joint WWTF are currently under a sewer connection moratorium, and have waiting lists for additional sewer connections.

The Tulare County Redevelopment Agency (TCRA) is working with the Cutler PUD and Orosi PUD to correct deficiencies that would increase the capacity of the treatment facility. The TCRA, on behalf of the Cutler-Orosi JPWA submitted an application for Federal Assistance to construct improvements at the Cutler-Orosi WWTF. The United States Department of Agriculture (USDA) awarded \$2.9 million to TCRA to begin improvements to the WWTF. The improvements will modernize the facility and add capacity to bring the serviceable operational limits to 2.4 MGD.

Earlimart Public Utility District

The Earlimart Public Utility District (Earlimart PUD) operates a sanitary sewer collection, treatment, and disposal system that support's 1,485 connections including 1,424 residential connections, 57 commercial connections, and 4 school connections.

The Earlimart PUD operates a WWTF under the provisions of WDR Order No. 98-140 issued by the RWQCB. Order No. 98-140 prescribes that the monthly average discharge shall not exceed 0.8 MGD. The Earlimart PUD indicated that recent improvements to the plant including the construction of additional oxidation ponds have brought the plants capacity up to 1.24 MGD. As prescribed by Order No. 98-140, when a California registered civil engineer has certified that the WWTF can reliably treat 1.24 MGD, the monthly average discharge shall not exceed 1.24 MGD. The Earlimart PUD currently complies with the requirements specified in Order No. 98-140. Assuming the plant has been certified to reliably treat 1.24 MGD, the plant is operating at 65% of its capacity.

The Earlimart PUD has indicated that the daily flow during summer months is higher than during winter months indicating that there is no significant inflow/infiltration into the collection system. This is an indication that the collection system is in adequate operating condition. Although there is excess capacity at the WWTF, the Earlimart PUD indicated that the plant was constructed in 1956 and needs upgrading including electrical upgrades.

Goshen Community Services District

The Goshen Community Services District (Goshen CSD) is responsible for the planning and construction of a sewage collection system. The main sewer system for the Goshen community is comprised of a collection system that was constructed in the mid to late 1990s. The Goshen CSD has a current Wastewater Service Agreement with the City of Visalia for treatment of the Goshen CSD's wastewater.

Connection from the Goshen CSD's sewer system to the City of Visalia's sewer system is through a 24-inch gravity sewer under Camp Drive. The 24-inch line connects to the existing City SR 198-Airport lift station. The Goshen CSD constructed the 24-inch line as a part of the Goshen Sewer Project, although the line is part of the City's Master Planned Sewer System.

After the line was placed in operation, the City assumed responsibility for maintenance of the line as a part of the City conveyance system. The 24-inch line is planned to provide full capacity for the ultimate build-out of the Goshen UDB.

The Goshen CSD's wastewater collection system dumps into a lift station (owned and operated by the Goshen CSD) near the intersection of Avenue 305 and Effie Drive, which in turn pumps the wastewater into the 24-inch line in Camp Drive. The sewer lift station operates with two pumps, and has a design capacity of 500,000 gallons per day (GPD). The Wastewater Service Agreement between City of Visalia and the Goshen CSD allows for a current contracted average daily discharge to the City's treatment plant of 335,000 GPD. The Wastewater Service Agreement does provide for the purchase of additional capacity to be charged on a percentage increase basis.

The Goshen CSD is working towards the adoption of a Sewer System Master Plan, which will assist the Goshen CSD in expanding its collection system in line with development trends, and the needs of the community.

Ivanhoe Public Utility District

The Ivanhoe Public Utility District (Ivanhoe PUD) operates a sanitary sewer collection, treatment and disposal system that support's about 1,114 single and multi-family residential connections. It is estimated that there are approximately 1,200 total connections to the system.

The Ivanhoe PUD operates a WWTF under the provisions of WDR Order No. 98-090 issued by the RWQCB. Order No. 98-090 prescribes that the monthly average daily discharge shall not exceed 0.56 MGD. With a current ADWF of 0.36, the plant is currently operating at 64% of its capacity.

Based upon a review of monthly monitoring reports submitted to the RWQCB, the Ivanhoe PUD's wastewater inflows are typically higher during summer months than during winter months indicating that there is no significant inflow/infiltration into the collection system during the winter months. This is an indication that the collection system is in adequate operating condition.

Lemon Cove Sanitary District

The Lemon Cove Sanitary District operates a sanitary sewer collection, treatment and disposal system that support's approximately 50+ connections. A single 185 foot wide, 300 foot long, 4.5 foot deep bentonite sealed oxidation pond was constructed and planned disposal was by discharge to approximately 40 acres of adjacent pasture for non-milking cattle. The oxidation pond was later divided into two cells. The Lemon Cove Sanitary District has not discharged to the pasture since the facility was constructed, since the flow has not exceeded the evaporation and percolation capacity of the disposal pond.

The Lemon Cove Sanitary District's WWTF is operated under the provisions of WDR Order No. 94-348, issued by the RWQCB. Order No. 94-348 prescribes that the monthly average dry weather discharge flow shall not exceed 20,000 GPD. With a current ADWF of 12,000 GPD,

the plant is operating at 60% of its capacity. The Lemon Cove Sanitary District would need to expand the capacity of its WWTF to support any significant development project's within the communities urban development boundary.

London Community Service District

The London Community Service District (London CSD) operates a sanitary sewer collection, treatment and disposal system that supports approximately 430 connections.

The London CSD's WWTF is operated under the provisions of WDR Order No. 96-172 issued by the RWQCB. Order No. 96-172 prescribes that the monthly average discharge flow shall not exceed 0.3 MGD. According to WWTF records, and the London CSD District Engineer, the average dry weather flow at the WWTF is 0.20 MGD. According to the District's Engineer, improvements completed in 2000 with USDA Rural Development funding increased the plant's capacity to 0.50 MGD. Approximately 13.1 acres of District-owned peach orchards were converted to evaporation/ percolation ponds as a part of the project.

Pixley Public Utility District

The Pixley Public Utility District (Pixley PUD) operates a sanitary sewer collection, treatment and disposal system that support's approximately 800 connections including 25 commercial connections. Raw sewage is transported to a WWTF which is located just west of the Pixley airport and owned and operated by the Pixley PUD.

The Pixley PUD's WWTF is operated under the provisions of WDR Order No. 5-00-096 issued by the RWQCB. Treated effluent is stored in evaporation/percolation ponds and/or applied on 43 acres of pastureland that is owned and operated by the Pixley PUD. Non-milking cattle graze on the pastureland. Order No. 5-00-096 prescribes that the monthly average daily discharge shall not exceed 0.29 MGD. With an ADWF of 0.298 MGD, it is concluded that the WWTF is currently operating above its permitted capacity. The WWTF is currently operating under a Cease and Desist Order.

The Wastewater Treatment Facility Upgrade and Expansion Project – Project Feasibility Report (Provost & Pritchard, February 2005) outlines a major reconstruction proposal for the Pixley PUD's WWTF. The improved WWTF would be capable of treating 0.5 MGD. The Pixley PUD has applied for USDA grant and loan funding to implement the improvement plan. To accommodate growth resulting from the General Plan Update, the plant would need to be capable of treating 0.61 MGD by year 2030.

Poplar Community Service District

The Poplar Community Service District (Poplar CSD) operates a sanitary sewer collection, treatment and disposal system that support's approximately 640 connections. Raw sewage is collected and transported to a WWTF located southwest of the community.

The Poplar CSD's WWTF is operated under the provisions of WDR Order No. 98-214 issued by the RWQCB. Order No. 98-214 prescribes that the monthly average discharge flow shall not exceed 0.31 MGD. With a current ADWF of 0.22 MGD, the plant is operating at 71% of its

capacity. The Poplar CSD's WWTF is currently operating in full compliance with Order No. 98-214, issued by the RWQCB. Developments which have recently been approved within the existing Poplar CSD service boundary will use the remaining capacity at the WWTF. Based upon this realization, the Poplar CSD would need to expand the capacity of its WWTF to support additional growth associated with the build-out of the General Plan Update.

The Poplar CSD recycles its wastewater by irrigating 41-acres of alfalfa owned by the Poplar CSD. The land used for wastewater reclamation will increase in the near future, as the Poplar CSD recently purchased additional acreage for this purpose. The Poplar CSD's wastewater reclamation activities promote water conservation, groundwater recharge, and demonstrate the Poplar CSD's desire to conserve its potable water sources.

Porter Vista Public Utility District

The Porter Vista Public Utility District (Porter Vista PUD) operates a sanitary sewer collection system that transports raw sewage to the City of Porterville WWTF. Current flows from the Porter Vista PUD are estimated at 0.40 MGD. The City of Porterville WWTF is currently operating under a Cease and Desist Order. The City is currently implementing improvements that would bring the WWTF into compliance with RWQCB requirements.

Richgrove Community Service District

The Richgrove Community Service District (Richgrove CSD) operates a sanitary sewer collection, treatment and disposal system that support's approximately 523 connections. Raw sewage is collected and transported to a WWTF located northeast of the community.

The Richgrove CSD's WWTF is operated under the provisions of WDR Order No. 83-088 issued by the RWQCB. Order No. 83-088 prescribes that the average daily dry weather discharge shall not exceed 0.22 MGD. With an ADWF of 0.25 MGD, it is concluded that the WWTF is currently operating above its permitted capacity, indicating that additional sewer connections cannot be supported at this time.

The Richgrove CSD's wastewater collection and treatment facilities were constructed in 1984 and were funded by a USDA loan and grant package. The sanitary sewer collection and treatment facilities were built in order to correct sewage problems that were causing groundwater pollution resulting in public health hazards. Since the Richgrove CSD's collection system was constructed in 1984, it is likely that the system remains in good operating condition.

The Richgrove CSD is in the process of evaluating wastewater treatment options to bring the plant into compliance regarding flow to the plant, and to address other WWTF related issues. Recently completed plans have identified improvements to bring the WWTF into compliance with the RWQCB, and increase capacity. The Richgrove CSD is currently working to secure funding to implement planned improvements to the WWTF.

Springville Public Utility District

The Springville Public Utility District (Springville PUD) operates a sanitary sewer collection, treatment and disposal system that support's approximately 400 total connections, 375 which are currently active. Raw sewage is collected and transported to a WWTF located southeast of the community adjacent to and west of the Tule River.

The Springville PUD's WWTF is operated under the provisions of WDR Order No. 96-195 issued by the RWQCB. Order No. 96-195 prescribes that the monthly average dry weather discharge shall not exceed 0.06 MGD. With a current ADWF of 0.056 MGD, the WWTF is operating at 93% of its capacity. The RWQCB issued a Cease and Desist Order to the Springville PUD in 1996, and required the Springville PUD to find a way to reclaim treated effluent from its WWTF.

The Springville PUD imposed a sewer connection moratorium back in 1980 due to the limited capacity of its WWTF, effectively ending most new development within its boundaries that include the commercial and residential town center of Springville along Highway 190. To date, the Springville PUD has been unable to comply with the requirements of the Cease and Desist Order due to funding shortfalls and other setbacks. The Cease and Desist Order is still in effect as of the preparation of this EIR.

In June 1998, the Springville PUD developed a project that relied on irrigation as the primary means of effluent disposal. The Springville PUD customers approved, through a Proposition 218 process, increased sewer fees to address United States Department of Agriculture – Rural Development (USDA-RD) loan repayment and increased maintenance cost requirements associated with the project. In March 1999, the intended recipient of the recycled water terminated its participation in the project, leaving the Springville PUD without a mechanism for disposal of the treated effluent.

Currently, a new proponent has been retained to accept the treated effluent that will be used for agricultural irrigation purposes. The current project cost reflects a significant increase that is primarily due to the increase in pipeline length and additional costs for the storage of a portion of the effluent. The pipeline that is required to deliver the effluent to the disposal property is about three times the length of the previously proposed transmission pipeline. The Springville PUD had secured approximately \$1.18 million in USDA-RD funding that was to be used for the 1998 project. The Springville PUD intends on securing additional USDA-RD funding that will satisfy the increased construction costs of the new project. Construction of this project is estimated to take about one year from start to finish.

Based upon correspondence from the Springville PUD, it is estimated that the currently General Plan Update could support an additional 185 connections with allocations being based on capacity. Springville PUD staff has indicated that there is currently a waiting list with 131 requests for sewer connections.

The Springville PUD has issued permits to a few residents within the Springville PUD's service boundary to place septic tanks on the property with the provision that they would connect to the Springville PUD's sewer system once additional capacity becomes available. Other residences

will be allowed to stay with septic tanks, as the Springville PUD does not have sewer lines available in all areas of the Springville PUD service boundary, such as Rio Vista Drive.

Strathmore Public Utility District

The Strathmore Public Utility District (Strathmore PUD) operates a sanitary sewer collection, treatment and disposal system that support's approximately 480 connections. Raw sewage is collected in a series of collection pipes ranging in size from 6 to 12 inches (including Vitrified Clay Pipe and Cast Iron Pipe) and then transported to a WWTF that is owned and operated by the Strathmore PUD.

The Strathmore PUD's WWTF is operated under the provisions of WDR Order No. 85-024 issued by the RWQCB. Order No. 85-024 prescribes that the 30-day average daily dry weather discharge shall not exceed 0.40 MGD. With a current ADWF of 0.15 MGD, the WWTF is operating at 38% of its capacity.

Terra Bella Sewer Maintenance District

The Terra Bella Sewer Maintenance District (Terra Bella SMD) operates a sanitary sewer collection, treatment and disposal system. Raw sewage is collected and transported to a WWTF located north of the community.

The Terra Bella SMD's WWTF is operated under the provisions of WDR Order No. 95-029 issued by the RWQCB. Order No. 95-029 prescribes that the monthly average discharge flow shall not exceed 0.30 MGD. With a current ADWF of 0.28 MGD, the WWTF is operating at 93% of its capacity. This indicates that, at this time, there is very little to no capacity available for additional connections to the Terra Bella SMD's sewer system. Additional capacity will be needed in order to accommodate projected growth resulting from the General Plan Update.

Tipton Community Service District

The Tipton Community Service District (Tipton CSD) operates a sanitary sewer collection, treatment and disposal system that support's approximately 554 connections including 496 residential connections and 58 commercial connections. Raw sewage is collected in a series of collection pipes ranging in size from 4 to 12 inches and then transported to a WWTF that is owned and operated by the Tipton CSD.

The Tipton CSD's WWTF is operated under the provisions of WDR Order No. 85-170 issued by the RWQCB. Order No. 85-170 states that the estimated design capacity of the plant is 0.48 MGD, but prescribes that the monthly average daily discharge shall not exceed 0.40 MGD. With a current ADWF of 0.19 MGD, the WWTF is operating at 48% of its capacity.

Woodville Public Utility District

The Woodville Public Utility District (Woodville PUD) operates a sanitary sewer collection, treatment and disposal system that support's approximately 480 connections. Raw sewage is collected and transported to a WWTF located southwest of the community.

The Woodville PUD's WWTF is operated under the provisions of WDR Order No. 86-108 issued by the RWQCB. Order No. 86-108 prescribes that the monthly average daily dry weather discharge flow shall not exceed 0.33 MGD. With a current ADWF of 0.12 MGD, the WWTF is operating at 36% of its capacity.

County Service Area Nos. 1 & 2

County Service Area No. 1 includes the following zones of benefit in which sanitary sewer services exist, and are managed by the Tulare County Board of Supervisors.

- Delft Colony
- El Rancho
- Seville
- Tonyville
- Tooleville
- Traver
- Yettem

County Service Area #2 includes the Wells Tract zone of benefit, located east of the City of Woodlake.

The Delft Colony, Tooleville, and Traver communities have both sewer collection and treatment facilities that are owned and operated by County Service Area No. 1 through individual zones of benefit. The Delft Colony sanitary sewer collection, treatment and disposal system support's an estimated 125 connections. The Delft Colony WWTF is operated under the provisions of WDR Order No. 88-097 issued by the RWQCB. Order No. 88-097 prescribes that the monthly average daily dry weather discharge flow shall not exceed 0.057 MGD. With a current ADWF of 0.045 MGD, the WWTF is operating at 79% of its capacity.

The Tooleville sanitary sewer collection, treatment and disposal system support's an estimated 75 connections. The Tooleville WWTF is operated under the provisions of WDR Order No. 88-139 issued by the RWQCB. Order No. 88-139 prescribes that the monthly average daily dry weather discharge flow shall not exceed 0.035 MGD. With a current ADWF of 0.024 MGD, the WWTF is operating at 69% of its capacity.

The Traver sanitary sewer collection, treatment and disposal system support's an estimated 210 connections. The Traver WWTF is operated under the provisions of WDR Order No. 88-098 issued by the RWQCB. Order No. 88-098 prescribes that the monthly average daily dry weather discharge flow shall not exceed 0.089 MGD. With a current ADWF of 0.067 MGD, the WWTF is operating at 75% of its capacity.

The El Rancho and Tonyville communities have collection systems that discharge to the City of Lindsay WWTF. According to the Wastewater User Charge Survey Report (F.Y. 2005-06) published by the SWRCB, the ADWF generated by the El Rancho community is 0.010 MGD, while the ADWF generated by the Tonyville community is 0.028 MGD. The contracted capacities between the City of Lindsay WWTF and the El Rancho and Tonyville Zones of Benefit are 0.012 MGD, and 0.060 MGD, respectively.

The Wells Tract community has a collection system that discharges to the City of Woodlake WWTF. According to the Wastewater User Charge Survey Report (F.Y. 2005-06) published by the SWRCB, the ADWF generated by the Wells Tract community is 0.021 MGD. The contracted capacity between the City of Woodlake and the Wells Tract Zone of Benefit is 0.019 MGD.

The Seville and Yettem communities have collection systems that discharge to the Cutler-Orosi Joint WWTF. According to the Wastewater User Charge Survey Report (F.Y. 2005-06) published by the SWRCB, the ADWF generated by the Seville community is 0.048 MGD, while the ADWF generated by the Yettem community is 0.015 MGD. The contracted capacity between the Cutler-Orosi JPWA and the Seville Zone of Benefit is 0.05 MGD, and the contracted capacity between the Cutler-Orosi JPWA and the Yettem community is 0.042 MGD.

Standards of Significance

The General Plan Update will establish development guidelines against which future projects will be judged for consistency. The significance criteria for this analysis were developed from criteria presented in Appendix G, "Environmental Checklist Form", of the CEQA Guidelines and based on the professional judgment of the County of Tulare and its consultants. The project (or the project alternatives) would result in a significant impact if it would:

- Exceed wastewater treatment requirements of the Central Valley Regional Water Quality Control Board (CVRWQCB);
- Require additional capacity to serve the project's projected demand in addition to existing commitments.

Impacts and Mitigation Measures

Impact PFS-1: The General Plan Update would exceed wastewater treatment requirements of the RWQCB for certain service providers and/or result in a determination by the wastewater treatment provider that serves or may serve the project that it has inadequate capacity to serve the project's projected demand in addition to the provider's existing commitments.

Impact Summary

Level of Significance Before Mitigation: <i>Potentially Significant</i>
Required Mitigation Measures: <i>No feasible mitigation available</i>
Level of Significance After Mitigation: <i>Significant and Unavoidable</i>

Impact Analysis

Provision of adequate wastewater system capacity in urban areas of Tulare County is largely the responsibility of public agencies that are not under the jurisdiction of the County. These agencies must not only maintain their systems and facilities to serve existing users, but must also expand as needed to accommodate projected growth within each service area. It is not always possible to assure adequate capacity and facilities fifteen or twenty years in advance of growth due to funding limitations, permitting requirements, and environmental entitlements. For this reason, this analysis focuses on how much capacity will be needed in order to support projected General Plan growth for each wastewater treatment provider in the unincorporated areas of the County. For unincorporated areas not identified as "communities" within the General Plan, an assumed growth estimate of 2% across the board is applied for capacity analysis purposes. Wastewater capacity needs by wastewater treatment provider are summarized in Table 5-5.

**TABLE 5-5
YEAR 2030 WASTEWATER TREATMENT CAPACITY NEEDS**

Wastewater Treatment Provider	Existing Connections	Year 2030 ESDs (Projected Need)	Current ADWF (MGD)	Year 2030 Capacity Requirements (MGD)	Existing Permitted Capacity (MGD)	Year 2030 Capacity Surplus or (Deficit) (MGD)
Cutler PUD	1,050	2,300	0.420 ¹	0.830	1,255 ESDs	(1,045 ESDs)
Earlimart PUD	1,500	3,540	0.800	1.700	0.800	(0.900)
East Orosi CSD	100	175	0.053	0.090	0.060	(0.030)
Goshen CSD	625	1,300	0.315	0.590	0.500	(0.090)
Ivanhoe PUD	1,200	1,800	0.360	0.490	0.560	0.070
Lemon Cove SD	75	180	0.012	0.030	0.020	(0.010)
London CSD	450	510	0.200	0.210	0.300	0.090
Orosi PUD	1,925	4,000	0.770 ¹	1.440	2,162 ESDs	(1,838 ESDs)
Pixley PUD	800	1,800	0.298	0.610	0.290	(0.320)
Poplar CSD	650	775	0.220	0.240	0.310	0.070
Richgrove CSD	525	750	0.250	0.330	0.220	(0.110)
Springville PUD	400	675	0.056	0.090	0.060	(0.030)
Strathmore PUD	500	1,200	0.150	0.330	0.400	0.070
Sultana CSD	160	250	0.064 ¹	0.090	N/A	N/A
Terra Bella SMD	900	1,650	0.280	0.470	0.300	(0.170)
Tipton CSD	575	950	0.190	0.290	0.400	0.110
Woodville PUD	500	850	0.120	0.190	0.330	0.140
CSA #1 - Delft Colony	110	175	0.045	0.070	0.057	(0.013)
CSA #1 - El Rancho	30	50	0.012 ¹	0.020	N/A	N/A
CSA #1 - Seville	125	210	0.048	0.080	0.050	(0.030)
CSA #1 - Tonyville	80	130	0.032 ¹	0.050	N/A	N/A
CSA #1 - Tooleville	80	130	0.024	0.040	0.035	(0.005)
CSA #1 - Traver	200	350	0.067	0.110	0.089	(0.021)
CSA #2 - Wells Tract	75	130	0.030 ¹	0.050	N/A	N/A
CSA #1 - Yettem	75	130	0.030 ¹	0.050	N/A	N/A

Notes:

- 1) Existing number of connections are estimated based upon available information.
- 2) Year 2030 ESDs (Projected Need) is estimated based upon preferred General Plan Alternative, with necessary adjustments for analysis purposes.
- 3) Year 2030 capacity requirements are estimated by taking 90% of the current number of connections to current ADWF ratio.
- 4) N/A: Information Not Available

As indicated in Table 5-5, several of the wastewater treatment providers within the unincorporated areas of the County would need to increase the capacity of their WWTFs in order to accommodate projected growth resulting from the General Plan Update. This is not surprising, as previously mentioned, it is often difficult for small service provider's to provide capacity for growth projected out for twenty years or more due to funding limitations and other constraints. For this reason, many service providers are unable to provide additional capacity for future growth until such time that developments are proposed and can assist financially to upgrade the infrastructure (often through some type of reimbursement agreement with the respective service provider). As indicated in Table 5-5, six wastewater treatment providers have been identified as having clear capacity to accommodate projected growth. In addition to the unincorporated communities that have clear capacity to accommodate projected growth, it is also likely that the eight incorporated cities within the County would have capacity to accommodate projected growth due to advanced planning and capital improvement financing capabilities. It should also be noted that although this analysis is based upon the currently permitted capacity of each wastewater treatment provider, many service provider's have projects that are currently in the planning, implementation, or completion stages that would increase wastewater treatment capacities. Some of these projects are identified below.

- Cutler-Orosi Joint WWTF capacity and operational improvements (underway)
- Earlimart WWTF improvements increased capacity to 1.24 MGD (completed)
- London WWTF improvements increased capacity to 0.50 MGD (completed)
- Pixley WWTF improvements to increase capacity to 0.50 MGD (pending funding availability)
- Richgrove WWTF improvements to increase capacity and bring plant into compliance with the RWQCB (planning stages, pending funding availability)
- Springville WWTF wastewater reclamation project that would increase effluent disposal capacity (planning stages, pending funding availability)
- Evaluation of feasibility to construct a regional WWTF that would serve the communities of Earlimart, Pixley, and Tipton (preparation of feasibility study underway)
- New Package WWTF for the Traver community (pilot project, grant funding awarded, project planning underway)

The above are known projects in Tulare County that are currently planned, being implemented, or have recently been completed. It is anticipated that those projects which have been recently completed and resulted in increased capacity will lead to the issuance of a new permit by the RWQCB.

The General Plan Update includes several policies that would reduce sanitary sewer impacts by addressing the service providers' ability to meet increase capacity requirements resulting from projected growth during the planning process. Policies contained in the Planning Framework, Water Resources, and Public Services and Utilities Elements that would reduce impacts relating to increased sanitary sewer demands are listed below by general plan element.

Policies PF-1.4, PF-2.4, PF-2.4A, PF-2.4B, PF-2.5, and PF-3.3 would require the County to work with special districts that provide urban services as a part of the community and hamlet planning process. As a part of the community and hamlet planning process, the communities short and long term ability to provide necessary urban services is to be considered, which requires close coordination between the County, and special districts that provide urban services to the respective communities. These policies would ensure that development does not occur unless adequate infrastructure is available or can be made available for that area and that there are adequate provisions for long term maintenance. Policy PF-6.4 requires that UDBs be considered as the same area for which water and sewer system planning is to occur.

Policy WR-1.6 would encourage the use of treated wastewater and household grey water for irrigation of agricultural lands, recreation and open space areas, and large landscaped areas. These efforts, to be coordinated with wastewater treatment providers throughout the County, would not only reduce demand for groundwater, but would also to some degree, increase the effluent disposal capacity of wastewater treatment facilities without the need to acquire additional land for disposal. Policies WR-3.7 and WR-3.8 would reduce future wastewater demands through the development of an emergency water conservation plan and encouraging the development of educational programs (in conjunction with water purveyors) geared at promoting water conservation. These policies would require the County to incorporate provisions for the use of reclaimed water, water conserving appliances, drought tolerant landscaping, and other water conservation techniques into the County's building, zoning, and subdivision ordinances.

Policy PFS-1.3 requires the County to review development proposals with regard to their impacts on infrastructure and requires that new development pay its proportionate share of the costs of infrastructure improvements required to serve the project to the extent permitted by State law. At any time that sufficient capacity is not available, the supplier can notify the County of that fact and provide the basis for County denial of a project or projects until service capacity is available.

Policies PFS-1.5, PFS-1.6, PFS-1.7, and PFS-1.8 relate to the implementation of programs and/or procedures to ensure that funding mechanisms necessary to adequately cover the costs related to planning, capital improvements, maintenance, and operations of necessary public facilities and services are in place, whether provided by the County or another entity. These policies require close coordination between the County and special districts throughout the County that are charged with the responsibility of providing urban services. These policies would require the County to develop and adopt an impact fee program for new development to ensure the provision, operation, and on going maintenance of County owned public facilities and services. Policy PFS-1.2 requires the County to prepare capital improvement programs for all County-owned and operated facilities and services to ensure consistency with the General Plan in order to maintain

adequate levels of service to existing users. Policy PFS-3.7 encourages cooperation between the County and special districts when applying for State and Federal funding for major wastewater related expansions/upgrades when the improvements promote an efficient solution to wastewater treatment needs for the area and County.

Policy PFS-3.2 would ensure that the intensity and timing of proposed development is consistent with the availability of adequate wastewater treatment and disposal capacity. Policy PFS-3.3 would require that new development within a wastewater provider service area or zone of benefit connect to the wastewater system and pay appropriate fees for rights to capacity. The County may grant exceptions in extraordinary circumstances, but in these cases, the development would be required to connect to the wastewater system when capacity becomes available.

In conclusion, current project review procedures and policies and programs of the General Plan Update would strive to secure adequate wastewater services for unincorporated urban areas of the County through expansion and/or improvement of collection, treatment, and disposal systems as necessary to accommodate planned growth. These policies and programs would improve the likelihood that the increased demand for these services would be met, but their success depends upon the decisions of service providers who are not under jurisdiction of the County.

Overall, the uncertainty over long-term capacity of some service providers as previously noted and the lack of direct County jurisdiction over many of the wastewater service providers results in a level of unpredictability about the adequacy of capacity in some urban areas. Consequently, even with implementation of the below mentioned policies, this impact is considered *potentially significant*.

Planning Framework Element	Public Services and Utilities Element
Policies designed to minimize this impact through the early identification of required infrastructure and the orderly construction and rehabilitation of the facilities needed to serve existing and planned urban areas include the following:	
PF-1.4 Available Infrastructure PF-2.4 Community Plans PF-2.4A Collaborative Community Planning Partnerships PF-2.4B Land Use Consistency PF-2.5 Improvement Standards in Communities PF-3.3 Hamlet Plans PF-6.4 UDBs and Interagency Coordination	PFS-1.2 Maintain Existing Levels of Service PFS-1.3 Impact Mitigation PFS-1.5 Funding for Public Facilities PFS-1.6 Funding Mechanisms PFS-1.7 Coordination with Service Providers PFS-1.8 Funding for Service Providers PFS-3.2 Adequate Capacity PFS-3.3 New Development Requirements PFS-3.7 Financing
Water Resources Element	
Additional policies designed to minimize this impact through the provision and conservation of water resources and service include the following:	
WR-1.6 Expanded use of Reclaimed Water WR-3.7 Emergency Water Conservation Plan WR-3.8 Educational Programs	

Required Mitigation Measures

As stated above, the County will continue to implement a variety of policies designed to improve to coordinate with local sanitary sewer service providers to ensure the provision of an adequate level of sanitary sewer service. However, the long-term availability of wastewater capacity will depend upon decisions made by individual service providers, availability of State and Federal

funding assistance, timing and intensity of development, and other factors. Also, some of the wastewater treatment providers are currently operating under Cease and Desist Orders today. These factors lead to a level of unpredictability about the adequacy of future wastewater capacities in some urban areas of the County. In addition, the possible implementation of regional wastewater treatment projects could significantly affect the long term capacity available for some of the urban areas of the County. For these reasons, this impact remains *significant*. No additional feasible mitigation is currently available.

Significance after Implementation of Mitigation for Impact PFS-1

As state above, no additional feasible mitigation measures are currently available to reduce this impact to a less-than-significant level. Consequently, this impact is considered *significant and unavoidable*.

Impact PFS-2: The General Plan Update would require or result in the construction of new wastewater treatment facilities or expansion of existing facilities, the construction of which would cause significant environmental effects.

Impact Summary

Level of Significance Before Mitigation: <i>Potentially Significant</i>
Required Mitigation Measures: <i>Revised Policy PFS-1.4 “Standards of Approval” and the new Policy HS-8.12 “Noise Analysis”</i>
Level of Significance After Mitigation: <i>Significant and Unavoidable</i>

Impact Analysis

Implementation of the General Plan Update would result in additional County-wide residential and non-residential land use developments. This future development consistent with the General Plan Update would result in the need for new or expanded existing sanitary sewer facilities. These facilities could include wastewater collection, treatment, and disposal facilities, pipelines, pump stations, etc. The site specific impacts of these facilities cannot be determined until such time that the facilities are proposed and subject to environmental review. Typical impacts would likely be construction related noise, dust, grading and water pollution. The fact that wastewater facilities may be located near streams, ditches, or other surface water channels, would mean that impacts to fish and wildlife, erosion, and stream flow may also occur.

The General Plan Update includes several policies designed to address a variety of environmental impacts. Similar to any other development in areas of new growth, the construction of any future required sanitary sewer infrastructure could also result in a variety of environmental impacts (i.e., conversion of existing open space/agricultural lands, noise, traffic, light/glare, etc.) that can not be mitigated. Without definitive plans, it can not be determined at this time whether these

impacts would be substantial and are therefore characterized as potentially significant. The General Plan Update includes several policies designed to minimize these impacts including the premature conversion or preservation of existing agricultural/open space lands (see Policies LU-2.1, LU-2.4, AG-1.7, and ERM-1.2), analysis of air quality emissions (see AQ-1.5), visual resources (see SL-1.1), and traffic impacts (see TC-1.15).

Additionally, there are also a number of specific policies in the Air Quality and Water Resources Elements that would help limit potential impacts related to the construction of needed sanitary sewer infrastructure. Policy AQ-4.2 requires contractors to implement dust suppression measure during excavation, grading, and site preparation activities. Policy WR-1.10 discourages channel modification of streams and rivers where it would increase the rate of flow, rate of sediment transport, erosive capacity, or have adverse effect on aquatic life or modify necessary groundwater recharge. Policies WR-2.2, WR-2.3, and WR-2.4 relate specifically to monitoring construction activities through NPDES enforcement and requiring the use of BMPs and other mitigation measures designed to protect surface water and groundwater from the adverse effects of construction activities and urban runoff in coordination with the Water Quality Control Board. However, even with implementation of the below mentioned policies, this impact is considered *potentially significant*.

Land Use, Agriculture, and Transportation & Circulation Elements	Air Quality, Scenic Landscapes, Water Resources, and Environmental Resource Management Elements
Policies designed to minimize this impact through the development of new facilities that address all applicable public safety and environmental concerns include the following:	
LU-2.1 Agricultural Lands LU-2.4 Open Space Character LU-7.12 Historic Buildings and Areas AG-1.7 Preservation of Agricultural Lands TC-1.15 Traffic Impact Study	AQ-1.5 CEQA Compliance AQ-4.2 Dust Suppression Measures SL-1.1 Natural Landscapes WR-1.10 Channel Modification WR-2.2 NPDES Enforcement WR-2.3 Best Management Practices WR-2.4 Construction Site Sediment Control ERM-1.2 Development in Environmentally Sensitive Areas

Required Mitigation Measures

In addition to the above mentioned policies and implementation measures, the following revisions to Policy PFS-1.4 and the new Policy HS-8.12 “Noise Analysis” are required to address this impact:

- **PFS-1.4 Standards of Approval.** The County should not approve any development unless the following conditions are met:
 - The applicant can demonstrate all necessary infrastructure will be installed and adequately financed;
 - Infrastructure improvements are consistent with adopted County infrastructure plans and standards; ~~and~~
 - Funding mechanisms are provided to maintain, operate, and upgrade the facilities throughout the life of the project; *and*

- *Facilities shall be developed in compliance with all applicable regulations designed to address public safety and environmental impacts that may result through the construction, operation, and maintenance of these facilities. [New/Revised Policy – Draft EIR Analysis].*
- **HS-8.12 Noise Analysis.** *The County shall require a detailed noise impact analysis in areas where current or future exterior noise levels from transportation or stationary sources have the potential to exceed the adopted noise policies of the Noise Element, where there are development of new noise sensitive land uses or the development of potential noise generating land uses near existing sensitive land uses. The noise analysis shall be the responsibility of the project applicant and be prepared by a qualified acoustical engineer (i.e., a Registered Professional Engineer in the State of California, etc.). The analysis shall include recommendations and evidence to establish mitigation that will reduce noise exposure to acceptable levels. [New Policy – Draft EIR Analysis].*

As stated above, the County will continue to implement a variety of policies (including the revised Policy PFS-1.4 and the new Policy HS-8.12 “Noise Analysis”) designed to address the range of potential environmental impacts that may be associated with the construction and operation of future sanitary sewer facilities or infrastructure. However, it should be noted, the ability to mitigate these potential impacts is contingent upon a variety of factors including the severity of the impact, existing land use conditions, and the technical feasibility of being able to implement any proposed mitigation measures. Due to these uncertainties, potential impacts resulting from the construction and/or expansion of any required public utility facilities or infrastructure remain **significant**. No additional feasible mitigation is currently available.

Significance after Implementation of Mitigation for Impact PFS-2

As stated above, no additional feasible mitigation measures are currently available to reduce this impact to a less than significant level. Consequently, this impact is considered **significant and unavoidable**.

Storm Drainage

This section focuses on how development resulting from implementation of the General Plan Update would affect storm drainage and urban runoff (including water quality issues). The closely related issue of flooding concerns is addressed in Chapter 4.5 “Health and Safety”. No comments specific to stormwater drainage issues were received during the NOP public scoping phase of the General Plan Update.

Environmental and Regulatory Setting

The General Plan Update included the preparation of several major documents including preparation of a very detailed Background Report, which serves to chronicle the existing environmental and regulatory setting conditions applicable to the County. A detailed discussion of

County-wide storm drainage infrastructure issues can be found in the General Plan Background Report (see Appendix B, Section 7.4 “Storm Drainage”).

Methodology

The provision of ongoing storm water management is currently being accomplished through requirements set forth in the County Ordinance Code. In addition, efforts of the Tulare County Resource Management Agency to get a Storm Water Management Plan adopted and approved by the California State Water Resources Control Board (SWRCB) will improve the County’s ability to monitor and improve storm water quality.

Since the level of storm drainage infrastructure varies significantly throughout the unincorporated areas of the County, and due to the time intensive efforts of evaluating the storm drain infrastructure of each community (at a General Plan level), the impact analysis will focus on the current planning efforts of the County as a whole, and strategies to improve current planning efforts. The analysis identifies the current storm drainage system development strategy within the County, and what current strategies have led to, and a possible shifting of strategies that could result in more community-wide and/or regional storm water facilities that promote mixed use recreational/storm water facilities.

The first step in conducting the impact analysis was to establish significance criteria consistent with CEQA and Tulare County Guidelines that will be used as a basis for identifying impacts. After establishing the significance criteria, an overview of the current storm drainage infrastructure planning efforts of the County was developed. The results of this data collection effort are identified below.

Storm Drainage Infrastructure Overview

Most of the public storm water drainage infrastructure within the unincorporated area is County owned and managed by the County. The remaining systems are controlled by special districts. Storm drain infrastructure improvements are generally constructed in conjunction with transportation improvement projects and site development projects.

The largest storm drain system within unincorporated Tulare County is the Cutler-Orosi system. Within this system, runoff is collected through a series of pipes and pump stations, the majority of which is transported and discharged to Sand Creek. A portion of the Cutler-Orosi storm drain system connects to a State storm drain system that runs along SR63. It should be noted that development that occurred prior to 1972 generally does not have storm drainage infrastructure installed, as is the case for most of the unincorporated areas of the County. This has led to a need to improve such areas that lack drainage through redevelopment funding, or other sources of available funding.

Storm drainage infrastructure within smaller unincorporated communities generally consists of underground and surface collection facilities that transport the runoff to local (on-site) retention ponds and/or local streams. The County Ordinance Code requires that local retention facilities be

located adjacent to the probable route of any future (master planned) drainage facility that might be constructed in order to facilitate efficient connection to such drainage facility when it is constructed. However, only recently has storm drainage master planning been accomplished in some communities, which will eventually lead to more community-wide facilities, and the abandonment (and potential reuse) of local retention facilities.

The use of individual, on-site storm water controls for each development is the typical approach in most communities for controlling storm water quantity and quality. The developer finances the design and construction of these controls, while ongoing maintenance and operation is the responsibility of either the County or Special District through a dedicated easement or fee title. A potential alternative approach is to install a single (or a few if necessary) strategically located regional (community-size) storm water controls within a particular sub-watershed rather than require on-site controls. Community-side storm water controls are facilities designed to manage storm water runoff from multiple projects and/or properties through a local jurisdiction-sponsored program, where the individual properties may assist in the financing of the facility, and the requirement for on-site controls is either eliminated or reduced. A summary of some the advantages and disadvantages of community-wide storm water controls is provided in Table 5-6.

**TABLE 5-6
ADVANTAGES AND DISADVANTAGES OF REGIONAL (COMMUNITY-WIDE)
STORM WATER MANAGEMENT**

Measure of Effectiveness	Advantages	Disadvantages
Performance	Community-wide facility may allow more space intensive, but superior performing technology such as constructed wetlands or bio-swales.	If soil permits, infiltration technologies can perform best if decentralized throughout the basin – performance relies on sound maintenance practices.
Planning	Municipality has an opportunity to strategically locate investments to address priority water body or known water quality issues.	The municipality must take on the responsibility of determining where to site a facility based on priorities and opportunities. Large regional facilities may be difficult to site in urban areas.
Funding	Partnering may open up additional revenue sources to fund more effective regional facility.	Partnering may complicate facility financing and not fully fund the facility.
Maintenance	The municipality allocates staff to maintenance of a single (or few) public facilities, rather than several on-site facilities. Less mobilization required and increased assurance of maintenance over time.	Would require plan (agreement) to defer existing maintenance obligations of on-site facilities that would be abandoned as the result of a community-wide storm drainage system.
Community	In facility siting and design, municipality can assist in implementing community development plans for open space, aquatic health, and recreation.	Community disagreement about use of public resources and siting. Issues would need to be considered at the community plan level.

As shown in Table 5-6, major advantages of community-wide drainage facilities include more efficient and cost effective maintenance, less mobilization, and these community-wide facilities are more conducive to recreational facilities. Given the pros and cons outlined above, community-wide drainage strategies are not advantageous in all circumstances. In general, if a community-wide facility can offer environmental, cost or community benefits that outweigh the disadvantages, then a community approach should be considered.

The County plays an important role in the shaping of communities through general and community planning processes. Community plans or other long term development plans typically specify areas targeted for future higher density development and other areas designated as green space to provide parks and protect environmental resources. Counties can often integrate open space goals with regional drainage facility design to meet multiple goals in areas of limited space.

To successfully implement storm water management on a community-wide basis, a municipality must possess both (1) the authority to plan for and regulate development – typical of a local government, and (2) authority and responsibility for the quality and quantity of storm drainage, including compliance with any National Pollutant Discharge Elimination System (NPDES) municipal storm water permit – typical of storm drain utility provider. Tulare County has this confluence of authority and responsibility. Several funding options may be available for funding of community-wide drainage facilities. The County might opt to build and fund regional drainage facilities using general municipal revenue or drainage-specific funds. Below is a summary of potential funding mechanisms.

- Use general municipal revenue, not associated with drainage rates or development options.
- Use general drainage utility rates. Costs could be spread over a larger service base.
- Create differential drainage utility rates reflecting the drainage service provided in geographical areas. Higher fees could be targeted to areas receiving or needing more intensive service.
- Create drainage utility connection fees for new users of a community-wide facility. After a facility is built using municipal authority and funds, drainage utility fees are charged to new users of the community-wide facility.

The following list identifies some of the recent accomplishments of Tulare County in terms of improving storm water management in unincorporated areas, primarily, through Tulare County Redevelopment Agency funding.

- In Cutler-Orosi, curb, gutter, and sidewalk design and construction was completed for the entire State Highway 63 alignment through the communities.
- A master plan for a storm water drainage, air quality improvement, and recreation project was funded by a \$35,000 Community Development Block Grant Technical Assistance grant, including a biological study and some design work. Design work and construction of the storm water project was partially funded by CMAQ and USDA Rural Utility Services and Community Facilities. The project will be phased in three parts due to funding limitations, but additional funds are being sought.
- A perpetually full storm water drainage basin was pumped and 11 ponding basins were cleared and disked, eliminating public nuisances in the Earlimart community.

- The Earlimart PUD has agreed to a joint powers storm water authority with the Richgrove CSD and the Poplar CSD to share resources, operations, maintenance and emergency response, pending a successful community-wide election approving the establishment of an assessment district.
- In the Goshen community, the Tulare County Redevelopment Agency completed a storm water drainage, air quality improvement and recreation project with a new ponding basin near the intersection of Betty Drive and Camp Drive. The ponding basin will be developed into a park. The park/ponding basin will also contain a baseball diamond and a football/soccer field.
- In the Pixley community, the Tulare County Redevelopment Agency completed an assessment of the existing downtown storm water system, identifying potential problems, and developing potential solutions to these problems. Proposed improvements will alleviate existing safety hazards by reducing dust pollution, and by eliminating an unfenced collection/retention facility in the community.
- A master storm water drainage plan was completed for the Poplar-Cotton Center community.
- In the Richgrove community, a multi-year storm water drainage, air quality improvement, and recreation project is being implemented. Pipelines, drainage inlets, catch basins, dual purpose storm water basin/recreation park and associated facilities are being funded with loans of \$1.6 million from the USDA Community Facility and Rural Development programs, and a 2005 Community Development Block Grant Public Works grant.

Tulare County can continue to strengthen its storm water management practices through the establishment of additional assessment districts or zones of benefit; continuing to work with the development community on the funding of infrastructure improvements on a community-wide level; identifying potential multi-use storm water/recreational sites through the community planning process; and continuing to aggressively pursue outside funding sources for the implementation of infrastructure improvements.

Standards of Significance

The General Plan Update will establish development guidelines against which future projects will be judged for consistency. The significance criteria for this analysis were developed from criteria presented in Appendix G, “Environmental Checklist Form”, of the CEQA Guidelines and based on the professional judgment of the County of Tulare and its consultants. The project (or the project alternatives) would result in a significant impact if it would:

- Require or result in the construction of new stormwater drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects;

- Violate any water quality standards, waste discharge requirements, or otherwise substantially degrade water quality;
- Substantially alter the existing drainage pattern of the area, including through the alteration of the course of a stream or river, in a manner that would result in substantial erosion or siltation onsite or offsite;
- Substantially alter the existing drainage pattern of the area, including through the alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner that would result in flooding onsite or offsite; or
- Create or contribute runoff water that would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff.

Impacts and Mitigation Measures

Impact PFS-3: The General Plan Update would require or result in the construction of new stormwater drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects.

Impact Summary

Level of Significance Before Mitigation: <i>Potentially Significant</i>
Required Mitigation Measures: <i>Revised Policy PFS-1.4 "Standards of Approval" and the new Policy HS-8.12 "Noise Analysis"</i>
Level of Significance After Mitigation: <i>Significant and Unavoidable</i>

Impact Analysis

Implementation of the General Plan Update would result in additional County-wide residential and non-residential land use developments. This future development consistent with the General Plan Update would result in the need for increased storm drainage infrastructure. These facilities could include surface and underground conveyance systems, pump stations, and detention/retention facilities, etc. The site specific impacts of these facilities cannot be determined until such time that the facilities are proposed and subject to their own site-specific environmental review. Typical impacts would likely be construction related noise, dust, grading and water pollution. The fact that storm drain infrastructure may be located near streams, ditches, or other surface water channels, would mean that impacts to fish and wildlife, erosion, and stream flow may also occur.

The General Plan Update includes several policies designed to address a variety of environmental impacts. Similar to any other development in areas of new growth, the construction of any future required storm drainage infrastructure could also result in a variety of environmental impacts

(i.e., conversion of existing open space/agricultural lands, noise, traffic, light/glare, etc.) that can not be mitigated. However, without definitive plans, it can not be determined at this time whether these impacts would be substantial and are therefore characterized as potentially significant. The General Plan Update includes several policies designed to minimize these impacts including the premature conversion or preservation of existing agricultural/open space lands (see Policies LU-2.1, LU-2.4, AG-1.7, and ERM-1.2), analysis of air quality emissions (see AQ-1.5), visual resources (see SL-1.1), and traffic impacts (see TC-1.15).

Additionally, there are also a number of specific policies in the Air Quality and Water Resources Elements that would help limit potential impacts related to the construction of needed storm drainage infrastructure. Policy AQ-4.2 requires contractors to implement dust suppression measure during excavation, grading, and site preparation activities. Policy WR-1.10 discourages channel modification of streams and rivers where it would increase the rate of flow, rate of sediment transport, erosive capacity, or have adverse effect on aquatic life or modify necessary groundwater recharge. Policies WR-2.2, WR-2.3, and WR-2.4 relate specifically to monitoring construction activities through NPDES enforcement and requiring the use of BMPs and other mitigation measures designed to protect surface water and groundwater from the adverse effects of construction activities and urban runoff in coordination with the Water Quality Control Board. However, even with implementation of the below mentioned policies, this impact is considered *potentially significant*.

Land Use, Agriculture, and Transportation & Circulation Elements	Air Quality, Scenic Landscapes, Water Resources, and Environmental Resource Management Elements
Policies designed to minimize this impact through the development of new facilities that address all applicable public safety and environmental concerns include the following:	
LU-2.1 Agricultural Lands LU-2.4 Open Space Character LU-7.12 Historic Buildings and Areas AG-1.7 Preservation of Agricultural Lands TC-1.15 Traffic Impact Study	AQ-1.5 CEQA Compliance AQ-4.2 Dust Suppression Measures SL-1.1 Natural Landscapes WR-1.10 Channel Modification WR-2.2 NPDES Enforcement WR-2.3 Best Management Practices WR-2.4 Construction Site Sediment Control ERM-1.2 Development in Environmentally Sensitive Areas

Required Mitigation Measures

In addition to the above mentioned policies and implementation measures, the following revisions to Policy PFS-1.4 and the new Policy HS-8.12 “Noise Analysis” are required to address this impact:

- **PFS-1.4 Standards of Approval.** The County should not approve any development unless the following conditions are met:
 - The applicant can demonstrate all necessary infrastructure will be installed and adequately financed;
 - Infrastructure improvements are consistent with adopted County infrastructure plans and standards; ~~and~~

- Funding mechanisms are provided to maintain, operate, and upgrade the facilities throughout the life of the project; *and*
- *Facilities shall be developed in compliance with all applicable regulations designed to address public safety and environmental impacts that may result through the construction, operation, and maintenance of these facilities. [New/Revised Policy – Draft EIR Analysis].*
- **HS-8.12 Noise Analysis.** *The County shall require a detailed noise impact analysis in areas where current or future exterior noise levels from transportation or stationary sources have the potential to exceed the adopted noise policies of the Noise Element, where there are development of new noise sensitive land uses or the development of potential noise generating land uses near existing sensitive land uses. The noise analysis shall be the responsibility of the project applicant and be prepared by a qualified acoustical specialist. The analysis shall include recommendations and evidence to establish mitigation that will reduce noise exposure to acceptable levels. [New Policy – Draft EIR Analysis].*

As stated above, the County will continue to implement a variety of policies (including the revised Policy PFS-1.4 and the new Policy HS-8.12 “Noise Analysis”) designed to address the range of potential environmental impacts that may be associated with the construction and operation of future storm drainage infrastructure. However, it should be noted, the ability to mitigate these potential impacts is contingent upon a variety of factors including the severity of the impact, existing land use conditions, and the technical feasibility of being able to implement any proposed mitigation measures. Due to these uncertainties, potential impacts resulting from the construction and/or expansion of any required public utility facilities or infrastructure remain **significant**. No additional feasible mitigation is currently available.

Significance after Implementation of Mitigation for Impact PFS-3

As stated above, no additional feasible mitigation measures are currently available to reduce this impact to a less than significant level. Consequently, this impact is considered **significant and unavoidable**.

Impact PFS-4: The General Plan Update could substantially alter the existing drainage pattern of the area, including through the alteration of the course of a stream or river, in a manner which would result in substantial erosion or siltation on- or off-site or substantially increase the rate or amount of surface runoff in a manner which would result in on- or off-site flooding.

Impact Summary

Level of Significance Before Mitigation: <i>Less-than-Significant</i>
Required Mitigation Measures: <i>No Mitigation Required</i>
Level of Significance After Mitigation: <i>Not applicable</i>

Impact Analysis

Drainage runoff from developing areas or parcels is dependent on the percent of impervious surface assigned to individual parcels or projects. Development proposed under the Preferred Alternative especially on currently undeveloped areas, will increase the amount of impervious surfaces, thereby increasing the amounts and speed of runoff. Increased runoff volumes and speeds may increase erosion or siltation and result in localized nuisance flooding in areas without adequate drainage facilities.

Policies included as part of the General Plan Update that would minimize this impact are summarized below by general plan element. Policies ERM-7.3, PFS-4.1, PFS-4.4, and WR-2.1 through WR-2.8 protect soils from erosion, control stormwater, and minimize impacts on existing drainage facilities. Policies HS-5.2 through HS-5.11 direct development off floodplains to reduce flood hazards. Additionally, policy PFS-1.3 and Public Facilities and Services Implementation Measures #1, #2, #3 and #3A provide for the funding mechanism to provide additional or expanded services in conjunction with new development. With implementation of the below mentioned policies, this impact is considered *less-than-significant*.

Environmental Resource Management, Foothills, and Health and Safety Elements	Planning Framework, Public Facilities and Services, and Water Resources Elements
Policies designed to minimize this impact through adherence to appropriate levels of stormwater infrastructure planning, financing and construction include the following:	
ERM-7.3 Protection of Soils on Slopes F-9.2 Development Drainage Patterns F-9.6 Development in the Frazier Valley Watershed HS-5.9 Floodplain Development Restrictions	PF-5.2 Criteria for New Towns PFS-1.3 Impact Mitigation PFS-2.5 New Systems or Individual Wells PFS-3.1 Private Sewage Disposal Standards PFS-3.5 Wastewater System Failures PFS-3.7 Financing PFS-4.1 Stormwater Management Plans PFS-4.2 Site Improvements PFS-4.3 Development Requirements PFS-4.4 Stormwater Retention Facilities PFS-4.5 Detention/Retention Basins Design PFS-4.6 Agency Coordination PFS-4.7 NPDES Enforcement WR-1.9 Collection of Additional Surface Water Information WR-2.1 Protect Water Quality WR-2.2 NPDES Enforcement WR-2.3 Best Management Practices WR-2.4 Construction Site Sediment Control WR-2.5 Major Drainage Management WR-2.6 Degraded Water Resources WR-2.7 Industrial and Agricultural Sources WR-2.8 Point Source Control WR-2.9 Private Wells WR-3.10 Diversion of Surface Water WR Implementation Measure #14A and #14C
Policies designed to minimize this water quality impact through adherence to appropriate best management practices designed to address soil erosion include the following:	
F-9.7 Minimize Soil Disturbances F-9.8 Erosion Mitigation Measures F-9.12 Vegetation Removal	WR-2.3 Best Management Practices
Policies designed to minimize this impact through the preservation of floodplain areas and the management of new development in hazardous areas include the following:	

F-9.3 Development in the Floodplain HS-1.4 Building and Codes HS-1.5 Hazard Awareness and Public Education HS-1.11 Site Investigations HS-5.1 Development Compliance with Federal, State, and Local Regulations HS-5.2 Development in Floodplain Zones HS-5.3 Participation in Federal Flood Insurance Program HS-5.4 Multi-Purpose Flood Control Measures HS-5.5 Development in Dam and Seiche Inundation Zones HS-5.6 Impacts to Downstream Properties HS-5.7 Mapping of Flood Hazard Areas HS-5.9 Floodplain Development Restrictions HS-5.10 Flood Control Design HS-5.11 Natural Design HS-7.3 Maintain Emergency Evacuation Plans	PFS-4.1 Stormwater Management Plans PFS-4.3 Development Requirements PFS-4.6 Agency Coordination
Public Facilities and Services Implementation Measures designed to ensure funding for County utilities to provide adequate service levels.	
Public Facilities and Services Implementation Measure #1 Public Facilities and Services Implementation Measure #2 Public Facilities and Services Implementation Measure #3 Public Facilities and Services Implementation Measure #3A	

Required Mitigation Measures

This impact is considered *less-than-significant*. No additional mitigation measures are required.

Impact PFS-5: The General Plan Update could create or contribute runoff water which would exceed the capacity of existing stormwater drainage systems or provide substantial additional sources of polluted runoff.

Impact Summary

Level of Significance Before Mitigation: <i>Less-than-Significant</i>
Required Mitigation Measures: <i>No Mitigation Required</i>
Level of Significance After Mitigation: <i>Not applicable</i>

Impact Analysis

Flood control detention is considered the most viable option for mitigating the increase in runoff from new development areas, with the specific types and locations of these drainage facilities to be determined at the time development applications are submitted. Pollution associated with increased stormwater and urban runoff would affect local and regional surface and groundwater quality conditions. Unlike sewage, which is transported to a treatment facility, urban runoff flows untreated through the storm drainage system. Anything thrown, swept, or poured into the street, gutter, or a catch basin (the curbside openings that lead into the storm drainage system) flows directly into ponding basins or local channels and creeks. Pollutant loads can be particularly acute at the beginning of the rainy season, but can be a problem at any time due to the improper disposal of products associated with home, garden, or automotive use.

Policies included as part of the General Plan Update that would minimize this impact are the same as those described above under Impact PFS-4. Additionally, policy PFS-1.3 and Public Facilities and Services Implementation Measures #1, #2, #3 and #3A provide for the funding mechanism to provide

additional or expanded services in conjunction with new development. With implementation of the below mentioned policies, this impact is considered *less-than-significant*.

Environmental Resource Management, Foothills, and Health and Safety Elements	Planning Framework, Public Facilities and Services, and Water Resources Elements
Policies designed to minimize this impact through adherence to appropriate levels of stormwater infrastructure planning, financing and construction include the following:	
ERM-7.3 Protection of Soils on Slopes F-9.2 Development Drainage Patterns F-9.6 Development in the Frazier Valley Watershed HS-5.9 Floodplain Development Restrictions	PF-5.2 Criteria for New Towns PFS-1.3 Impact Mitigation PFS-2.5 New Systems or Individual Wells PFS-3.1 Private Sewage Disposal Standards PFS-3.5 Wastewater System Failures PFS-3.7 Financing PFS-4.1 Stormwater Management Plans PFS-4.2 Site Improvements PFS-4.3 Development Requirements PFS-4.4 Stormwater Retention Facilities PFS-4.5 Detention/Retention Basins Design PFS-4.6 Agency Coordination PFS-4.7 NPDES Enforcement WR-1.9 Collection of Additional Surface Water Information WR-2.1 Protect Water Quality WR-2.2 NPDES Enforcement WR-2.3 Best Management Practices WR-2.4 Construction Site Sediment Control WR-2.5 Major Drainage Management WR-2.6 Degraded Water Resources WR-2.7 Industrial and Agricultural Sources WR-2.8 Point Source Control WR-2.9 Private Wells WR-3.10 Diversion of Surface Water WR Implementation Measure #14A and #14C
Policies designed to minimize this water quality impact through adherence to appropriate best management practices designed to address soil erosion include the following:	
F-9.7 Minimize Soil Disturbances F-9.8 Erosion Mitigation Measures F-9.12 Vegetation Removal	WR-2.3 Best Management Practices
Policies designed to minimize this impact through the preservation of floodplain areas and the management of new development in hazardous areas include the following:	
F-9.3 Development in the Floodplain HS-1.4 Building and Codes HS-1.5 Hazard Awareness and Public Education HS-1.11 Site Investigations HS-5.1 Development Compliance with Federal, State, and Local Regulations HS-5.2 Development in Floodplain Zones HS-5.3 Participation in Federal Flood Insurance Program HS-5.4 Multi-Purpose Flood Control Measures HS-5.5 Development in Dam and Seiche Inundation Zones HS-5.6 Impacts to Downstream Properties HS-5.7 Mapping of Flood Hazard Areas HS-5.9 Floodplain Development Restrictions HS-5.10 Flood Control Design HS-5.11 Natural Design HS-7.3 Maintain Emergency Evacuation Plans	PFS-4.1 Stormwater Management Plans PFS-4.3 Development Requirements PFS-4.6 Agency Coordination
Public Facilities and Services Implementation Measures designed to ensure funding for County utilities to provide adequate service levels.	
Public Facilities and Services Implementation Measure #1 Public Facilities and Services Implementation Measure #2 Public Facilities and Services Implementation Measure #3 Public Facilities and Services Implementation Measure #3A	

Required Mitigation Measures

This impact is considered *less-than-significant*. No additional mitigation measures are required.

Solid Waste

This section focuses on impacts resulting from the generation, handling, and storage of solid waste materials associated with implementation of the General Plan Update. Impacts resulting from the generation, transportation, and storage of hazardous materials are addressed in Chapter 4.5 “Health and Safety”. No comments specific to solid waste issues were received during the NOP public scoping phase of the General Plan Update.

Environmental and Regulatory Setting

The General Plan Update included the preparation of several major documents including preparation of a very detailed Background Report, which serves to chronicle the existing environmental and regulatory setting conditions applicable to the County. A detailed discussion of County-wide solid waste collection and disposal options can be found in the General Plan Background Report (see Appendix B, Section 7.5 “Solid and Hazardous Waste”).

Methodology

The assessment of solid and hazardous waste is a qualitative determination of whether the General Plan Update includes adequate provisions to ensure continued service that meets acceptable standards.

Standards of Significance

The General Plan Update will establish development guidelines against which future projects will be judged for consistency. The significance criteria for this analysis were developed from criteria presented in Appendix G, “Environmental Checklist Form”, of the CEQA Guidelines and based on the professional judgment of the County of Tulare and its consultants. The project (or the project alternatives) would result in a significant impact if it would:

- Produce substantive solid waste that would exceed the permitted capacity of a landfill serving the County; or
- Conflict with federal, state, and local statutes and regulations related to solid waste.

Impacts and Mitigation Measures

Impact PFS-6: The General Plan Update would produce substantial amounts of solid waste that could exceed the permitted capacity of a landfill serving the County.

Impact Summary

Level of Significance Before Mitigation: <i>Potentially Significant</i>
Required Mitigation Measures: <i>None feasible</i>
Level of Significance After Mitigation: <i>Significant and Unavoidable</i>

Impact Analysis

Solid waste produced in Tulare County in 2006 was estimated to be 430,000 tons. The average estimated solid waste generation rates for residential, commercial, and industrial land uses in 2006 are as follows:

- Residential. 145,684 tons/year;
- Self Haul. 121,217 tons/year;
- Commercial. 109,392 tons/year; and
- Industrial. 53,707 tons/year.

Tulare County operates three active landfills: Visalia, Woodville, and Teapot Dome. These landfills serve all of Tulare County as well as parts of surrounding counties. Approximately 184,000 tons/year of solid waste from Tulare County is transported to surrounding county landfills. In addition, there are seven transfer stations located throughout the isolated rural areas of the county for the convenience of those residents who live outside of waste collection service areas.

Currently, the average American produces 4.6 pounds of solid waste per day (EPA 2006). Based on this average rate, population growth associated with the General Plan Update would result in an additional 89,830 tons per year of solid waste, with industrial and commercial land uses producing additional amounts of solid waste per year. Current estimates of solid waste disposal, total annual production of solid waste by 2030 is expected to amount to an estimated 319,830 tons per year or 880 tons per day. Application of a 50% diversion rate (compliance with AB 939) would result in the diversion of some waste per year; however, growth associated with the General Plan Update would result in the additional transfer of waste to the County’s landfills which may cause one or more facilities to exceed its permitted daily waste acceptance capacity. Alternative disposal locations or methods may be required to safely ensure that adequate waste disposal capacity is met for buildout of the proposed General Plan update.

Policies and implementation measures included as part of the General Plan Update that would address the continued provision of solid waste handling services are summarized below from the draft Public Services and Utilities Element. For example, policy PFS-5.6 indicates the County will require evidence that there is adequate capacity within the solid waste system for the processing, recycling, transmission, and disposal of solid waste prior to approving new

development. Policies PFS-5.3 through PFS-5.5, and Implementation Measure #7 require the County to promote a variety of solid waste reduction measures including the public/private usage of recycled materials. Additionally, policy PFS-1.3 and Public Facilities and Services Implementation Measures #1, #2, #3 and #3A provide for the funding mechanism to provide additional or expanded services in conjunction with new development. However, even with implementation of the below mentioned policies and implementation measure, this impact is considered *potentially significant*.

Public Facilities and Services Element	
Policies designed to minimize this impact through the continued provision of solid waste services and recycling activities include the following:	
PFS-1.3 Impact Mitigation PFS-5.1 Land Use Compatibility with Solid Waste Facilities PFS-5.2 Notification PFS-5.3 Solid Waste Reduction PFS-5.4 County Usage of Recycled Materials and Products PFS-5.5 Private Use of Recycled Products	PFS-5.6 Ensure Capacity PFS-5.7 Provisions for Solid Waste Storage, Handling, and Collection PFS-5.8 Hazardous Waste Disposal Capabilities PFS-5.9 Agricultural Waste
Public Facilities and Services Implementation Measures designed to ensure funding for County utilities to provide adequate service levels.	
Public Facilities and Services Implementation Measure #1 Public Facilities and Services Implementation Measure #2 Public Facilities and Services Implementation Measure #3 Public Facilities and Services Implementation Measure #3A Public Facilities and Services Implementation Measure #6 Public Facilities and Services Implementation Measure #7	

Required Mitigation Measures

As stated above, the General Plan Update includes a number of policies and implementation measures designed to promote future County-wide recycling efforts and ensure the continued provision of solid waste recovery and collections services. Additionally, the County will continue to implement solid waste reduction programs in compliance with AB 939. However, to accommodate future solid waste needs resulting from additional growth associated with buildout of the General Plan Update, additional landfill capacity or waste disposal locations may be required for the County. The incorporated cities in Tulare County oversee solid waste collection within their city limits. Private companies offer solid waste collection services in other unincorporated areas of the county. It is assumed that these companies would continue to maximize the use of existing disposal options and plan for future waste disposal opportunities once existing disposal options reach their capacity, although future waste disposal opportunities may require greater handling costs depending on their location and method of transfer. Consequently, because of the uncertain availability of where and what these future waste disposal options may be by 2030, this impact remains *significant*. No additional feasible mitigation measures are currently available.

Significance after Implementation of Mitigation for Impact PFS-6

As stated above, no additional feasible mitigation measures are currently available to reduce this impact to a less than significant level. Consequently, this impact is considered *significant and unavoidable*.

Impact PFS-7: The General Plan Update would comply with all federal, State, and Local Statutes and Regulations related to solid waste.

Impact Summary

Level of Significance Before Mitigation: <i>Less-than-Significant</i>
Required Mitigation Measures: <i>No mitigation required</i>
Level of Significance After Mitigation: <i>Not applicable</i>

Impact Analysis

In compliance with AB 939, the County continues to divert solid waste from local landfills through various conservation, recycling, and composting measures, including curbside recycling programs, household hazardous waste weekly collection site, and waste oil collection.

Policies and implementation measures included as part of the General Plan Update that would address the continued need to promote local and State solid waste and recycling programs are summarized below from the draft Public Services and Utilities Element. For example, policy PFS-5.6 indicates the County will require evidence that there is adequate capacity within the solid waste system for the processing, recycling, transmission, and disposal of solid waste prior to approving new development. Policies PFS-5.3 through PFS-5.5, and Implementation Measure #7 require the County to promote a variety of solid waste reduction measures including the public/private usage of recycled materials. Additionally, policy PFS-1.3 and Public Facilities and Services Implementation Measures #1, #2, #3, and #3A provide for the funding mechanism to provide additional or expanded services in conjunction with new development. Further, various Water Resources and Air Quality policies included in the Goals and Policies Report are designed to prevent degradation of air and water quality by a number of sources, including potential impacts due to solid waste transport and disposal (see Policies AQ-1.3, AQ-1.4, AQ-4.5, WR-2.1, WR-2.2, WR-2.3, WR-2.6, and WR-2.8). With implementation of the below mentioned policies, this impact is considered *less-than-significant*.

Public Facilities and Services Element	
Policies designed to minimize this impact through the continued provision of solid waste services and recycling activities include the following:	
PFS-1.3 Impact Mitigation PFS-5.1 Land Use Compatibility with Solid Waste Facilities PFS-5.2 Notification PFS-5.3 Solid Waste Reduction PFS-5.4 County Usage of Recycled Materials and Products PFS-5.5 Private Use of Recycled Products	PFS-5.6 Ensure Capacity PFS-5.7 Provisions for Solid Waste Storage, Handling, and Collection PFS-5.8 Hazardous Waste Disposal Capabilities PFS-5.9 Agricultural Waste
Water Resources and Air Quality policies designed to minimize this impact through the protection of air and water quality include the following:	
AQ-1.3 Cumulative Air Quality Impacts AQ-1.4 Air Quality Land Use Compatibility AQ-4.5 Public Awareness	WR-2.1 Protect Water Quality WR-2.2 NPDES Enforcement WR-2.3 Best Management Practices WR-2.6 Degraded Water Resources WR-2.8 Point Source Control

Public Facilities and Services Implementation Measures designed to ensure funding for County utilities to provide adequate service levels.
--

Public Facilities and Services Implementation Measure #1 Public Facilities and Services Implementation Measure #2 Public Facilities and Services Implementation Measure #3 Public Facilities and Services Implementation Measure #3A Public Facilities and Services Implementation Measure #6 Public Facilities and Services Implementation Measure #7

Required Mitigation Measures

This impact is considered *less-than-significant*. No additional mitigation measures are required.

Communications Systems

As noted in the General Plan Background Report (see Appendix B of this EIR), a total of five telephone companies currently provide services in Tulare County: AT&T, Ducor, SBC, Sprint, and Verizon. These companies provide long distance calling, wireless services, Internet access, and other business solutions to residential and commercial consumers. The primary impact associated with communications services on the County results from the installation of communication infrastructure. Hard lines must be allowed rights-of-way and the continued growth of cellular telephones will require improved service areas and more cell towers. In addition, fiber optic cable has been installed in the urban areas of the county, mainly within incorporated cities. Newly emerging technologies, such as wireless internet, will play a role in the advancing information industries that will continue to grow.

No environmental issues were identified relating to the provision of local and regional communications systems. However, aesthetic and land use conflict issues related to the future placement of new infrastructure (including above ground and below ground cell towers, transmission lines, etc.) in the County are addressed in Chapter 4.2, “Scenic Resources. Except for the kinds of impacts addressed in those chapters, the provision of communications infrastructure typically does not cause other kinds of environmental impacts. The wiring needed for various communications systems is typically laid in streets at the time they are constructed (adding no additional impacts beyond those associated with road construction), and new homes and other structures are typically wired as they are built.

Fire Protection and Law Enforcement

This section evaluates potential impacts to the provision of fire protection and law enforcement services to the County resulting from implementation of the General Plan Update. For additional information on the related topics of urban/wildland fire hazards and other emergency operation-related issues please see Chapter 4.5 “Health and Safety” of this EIR. No comments specific to fire protection and/or law enforcement issues were received during the NOP public scoping phase of the General Plan Update.

Environmental and Regulatory Setting

The General Plan Update included the preparation of several major documents including preparation of a very detailed Background Report, which serves to chronicle the existing environmental and regulatory setting conditions applicable to the County. A detailed discussion of County-wide fire prevention/law enforcement issues can be found in the General Plan Background Report (see Appendix B, Section 7.7 “Law Enforcement” and Section 7.8 “Fire Protection”).

Methodology

The assessment of fire protection/law enforcement services is a qualitative review of the existing services available to the County and a determination of whether the General Plan Update includes adequate provisions to ensure continued service that meets acceptable standards.

Standards of Significance

The General Plan Update will establish development guidelines against which future projects will be judged for consistency. The significance criteria for this analysis were developed from criteria presented in Appendix G, “Environmental Checklist Form”, of the CEQA Guidelines and based on the professional judgment of the County of Tulare and its consultants. The project (or the project alternatives) would result in a significant impact if it would:

- Increase the need or use of existing fire protection or law enforcement facilities such that substantial physical deterioration of the facility would occur or be accelerated in order to maintain acceptable service ratios, response times; or
- Include fire protection or law enforcement facilities or require the construction or expansion of existing fire protection or law enforcement facilities that might have an adverse physical effect on the environment.

Impacts and Mitigation Measures

Impact PFS-8: The General Plan Update would result in a substantial adverse physical impact to the continued provision of fire protection services in the County.

Impact Summary

Level of Significance Before Mitigation: <i>Potentially Significant</i>
Required Mitigation Measures: <i>Revised Public Facilities and Services Implementation Measure #3</i>
Level of Significance After Mitigation: <i>Less-than-Significant</i>

Impact Analysis

As noted in the General Plan Background Report (see Appendix B of this EIR), the California Department of Forestry and Fire Protection/Tulare County Fire Department (CDFFP/TCFD) serve 145,128 of Tulare County's population. Dispatchers reported 14,022 responses in 2002, averaging 38.4 calls a day. Fire occurrence data generated by the department indicate a direct relationship between high use areas of the county and fire occurrence. The population increase in the mountain areas have caused increased wildland urban interface problems as well. Structures are being built throughout wildland areas wherein vegetation fires can spread rapidly. Providing adequate fire protection to those structures has become a major undertaking. The CDFFP/TCFD uses the 2003 Tulare Unit's Fire Management Plan to guide fire protection and prevention throughout the County. The department uses an "attack" time protocol of less than 10 minutes to respond to 90 percent of the calls on the valley floor and less than 15 minutes on 75 percent of calls in the foothill and mountain areas.

Implementation of the General Plan Update would increase the overall demand on fire protection services to the County. Future growth in accordance with buildout of the General Plan Update is expected to generate the typical range of service calls, including structure fires, car fires, and electrical fires. New fire facilities, vehicles, equipment, and personnel will be required in order to provide adequate response times to serve future growth. Therefore, the County's costs to maintain equipment and facilities and to train and equip personnel would also increase. Additionally, growth in existing rural areas would also increase the demand for fire protection services in those areas. However, the additional personnel and materials costs would be offset through the increased revenue, and fees, generated by future development. In addition, future projects will be reviewed by the County on an individual basis and will be required to comply with requirements (i.e., impact fees, etc.) in effect at the time building permits are issued.

Policies and implementation measures included as part of the General Plan Update that address the need for additional fire prevention services are summarized below by draft General Plan element. For example, Policies HS-1.10, HS-7.3 through HS-7.6 require the County to plan for and expand a variety of public services (including fire protection services and facilities) consistent with community needs. Policy PFS-7.5 indicates the County shall strive to maintain fire department staffing and response time goals consistent with National Fire Protection Association (NFPA) standards. Policies HS-7.1, HS-7.2, HS-6.14, HS-7.1, HS-7.7 and PFS-7.4 promote the implementation of a coordinated emergency response plan both locally and regionally. Policies HS-1.4, HS-6.1 and HS-6.5 through HS-6.12 provide requirements regarding fire safety and building standards for new development. Additionally, policy PFS-1.3 and Public Facilities and Services Implementation Measures #1, #2, #3 and #3A provide for the funding mechanism to provide additional or expanded services in conjunction with new development. To address their own unique fire protection issues within the County's specific planning areas (i.e., Mountain, Foothill, etc.); additional policies (see PFS-7.6, F-11.2, and F-11.3) are also included. However, even with implementation of the below mentioned policies and implementation measures, this impact is considered *potentially significant*.

Health and Safety, Land Use, Planning Framework, Public Facilities and Services and Foothills Elements	
Policies designed to minimize this impact through the continued provision of fire protection services and emergency response planning include the following:	
HS-1.4 Building and Codes HS-1.5 Hazard Awareness and Public Education HS-1.6 Public Safety Programs HS-1.8 Response Times Planning in GIS HS-1.9 Emergency Access HS-1.10 Emergency Services Near Assisted Living Housing HS-6.1 New Building Fire Hazards HS-6.2 Development in Fire Hazard Zones HS-6.3 Consultation with Fire Service Districts HS-6.4 Encourage Cluster Development HS-6.5 Fire Risk Recommendations HS-6.6 Wildland Fire Management Plans HS-6.7 Water Supply System HS-6.8 Private Water Supply HS-6.9 Fuel Modification Programs HS-6.10 Fuel Breaks HS-6.11 Fire Buffers HS-6.12 Weed Abatement HS-6.14 Coordination with Cities	HS-7.1 Coordinate Emergency Response Services with Government Agencies HS-7.2 Mutual Aid Agreement HS-7.3 Maintain Emergency Evacuation Plans HS-7.4 Upgrading for Streets and Highways HS-7.5 Emergency Centers HS-7.6 Search and Rescue HS-7.7 Joint Exercises PF-5.2 Criteria for New Towns PFS-1.3 Impact Mitigation PFS-2.1 Water Supply PFS-7.1 Fire Protection PFS-7.2 Fire Protection Standards PFS-7.3 Visible Signage for Roads and Buildings PFS-7.4 Interagency Fire Protection Cooperation PFS-7.5 Fire Staffing and Response Time Standards PFS-7.8 Cost Sharing PFS-7.12 Locations of Fire and Sheriff Stations/Sub-stations PFS Implementation Measure #11
Similar policies designed to minimize this impact through the continued provision of fire protection services and emergency response planning within the various planning areas include the following:	
PFS-7.6 Provision of Station Facilities and Equipment F-11.2 Provision of Safety Services F-11.3 Fire and Crime Protection Plan	
Public Facilities and Services Implementation Measures designed to ensure funding for County programs to provide adequate service levels.	
Public Facilities and Services Implementation Measure #1 Public Facilities and Services Implementation Measure #2 Public Facilities and Services Implementation Measure #3 Public Facilities and Services Implementation Measure #3A Public Facilities and Services Implementation Measure #9	

Required Mitigation Measures

In addition to the above mentioned policies and implementation measures, the following revision to Public Facilities and Services Implementation Measure #3 is required to ensure that this impact is reduced to a less than significant level:

- PFS Implementation Measure #3.** The County shall develop and adopt an impact fee program for new development to ensure the provision, operation, and on-going maintenance of appropriate public facilities and services (*including, but not limited to, fire stations and equipment, police stations and equipment, ambulance or dispatch service, utility infrastructure, recreational, and library facilities*). [*New Implementation Program – Draft EIR Analysis*].

Significance after Implementation of Mitigation for Impact PFS-8

As stated above, the County will continue to ensure that future development projects mitigate impacts to the provision of adequate fire protection services through the various policies and implementation measures included in the General Plan. Therefore, implementation of the General Plan Update including the adoption of the policies and implementation measures listed above and the revised Public Facilities and Services Implementation Measure #3 would result in a ***less-than-significant*** impact.

Impact PFS-9: The General Plan Update would result in a substantial adverse physical impact to the continued provision of law enforcement services in the County.

Impact Summary

Level of Significance Before Mitigation: <i>Potentially Significant</i>
Required Mitigation Measures: <i>Revised Public Facilities and Services Implementation Measure #3</i>
Level of Significance After Mitigation: <i>Less-than-Significant</i>

Impact Analysis

As noted in the General Plan Background Report, the Tulare County Sheriff's Department currently has 448 sworn officers serving its unincorporated population (145,128), and generates a level of service ratio of 3.2 officers per 1,000 residents. The ratio is above the accepted standard of 2.0 officers per 1,000 residents set by the Federal Bureau of Investigation.

Implementation of the General Plan Update would increase the overall demand on law enforcement services to the County. Future growth in accordance with buildout of the General Plan Update is expected to generate the typical range of service calls. New police facilities, vehicles, equipment, and personnel will be required in order to provide adequate response times to serve future growth. Therefore, the County's costs to maintain equipment and facilities and to train and equip personnel would also increase. Additionally, growth in existing rural areas would also increase the demand for law enforcement services in those areas. However, the additional personnel and materials costs would be offset through the increased revenue, and fees, generated by future development. In addition, future projects will be reviewed by the County on an individual basis and will be required to comply with requirements (i.e., impact fees, etc.) in effect at the time building permits are issued.

Policies and implementation measures included as part of the General Plan Update that address the need for additional law enforcement services are summarized below by draft General Plan element. For example, Policies HS-1.10, HS-7.3 through HS-7.6 require the County to plan for and expand a variety of public services (including law enforcement services and facilities) consistent with community needs. Policies HS-1.8, PFS-7.9, PFS-7.10, PFS-7.12 and PFS-7.13 identify specific law enforcement standards, response times, staffing ratios and other siting criteria to be followed by the County. Policies HS-7.1, HS-7.2, HS-7.7 and PFS-7.11 promote the implementation of a coordinated emergency response plan both locally and. Additionally, policy PFS-1.3 and Public Facilities and Services Implementation Measures #1, #2, #3 and #3A provide for the funding mechanism to provide additional or expanded services in conjunction with new development. To address their own unique fire protection issues within the County's specific planning areas (i.e., Mountain, Foothill, etc.), additional policies (see F-11.2, and F-11.3) are also included. However, even with implementation of the below mentioned policies and implementation measures, this impact is considered *potentially significant*.

Health and Safety Element	Public Facilities and Services, Planning Framework and Foothills Elements
Policies designed to minimize this impact through the continued provision of law enforcement services and emergency response planning include the following:	
HS-1.8 Response Times Planning in GIS HS-1.10 Emergency Services Near Assisted Living Housing HS-7.1 Coordinate Emergency Response Services with Government Agencies HS-7.2 Mutual Aid Agreement HS-7.3 Maintain Emergency Evacuation Plans HS-7.4 Upgrading for Streets and Highways HS-7.5 Emergency Centers HS-7.6 Search and Rescue HS-7.7 Joint Exercises	PF-5.2 Criteria for New Towns PFS-1.3 Impact Mitigation PFS-7.3 Visible Signage for Roads and Buildings PFS-7.9 Law Enforcement Staffing Ratios PFS-7.10 Sheriff Response Time PFS-7.11 Interagency Law Enforcement Protection Cooperation PFS-7.12 Locations of Fire and Sheriff Stations/Sub-stations PFS-7.13 Design Features for Crime Prevention and Reduction PFS Implementation Measure #10
Similar policies designed to minimize this impact through the continued provision of fire protection services and emergency response planning within the various planning areas include the following:	
F-11.2 Provision of Safety Services F-11.3 Fire and Crime Protection Plan	
Public Facilities and Services Implementation Measures designed to ensure funding for County programs to provide adequate service levels.	
Public Facilities and Services Implementation Measure #1 Public Facilities and Services Implementation Measure #2 Public Facilities and Services Implementation Measure #3 Public Facilities and Services Implementation Measure #3A	

Required Mitigation Measures

In addition to the above mentioned policies and implementation measures, the following revision to Public Facilities and Services Implementation Measure #3 is required to ensure that this impact is reduced to a less than significant level:

- PFS Implementation Measure #3.** The County shall develop and adopt an impact fee program for new development to ensure the provision, operation, and on-going maintenance of appropriate public facilities and services (*including, but not limited to, fire stations and equipment, police stations and equipment, utility infrastructure, recreational and library facilities*). *[New Implementation Program – Draft EIR Analysis]*.

Significance after Implementation of Mitigation for Impact PFS-9

As stated above, the County will continue to ensure that future development projects mitigate impacts to the provision of adequate fire protection services through the various policies and implementation measures included in the General Plan. Therefore, implementation of the General Plan Update including the adoption of the policies and implementation measures listed above and the revised Public Facilities and Services Implementation Measure #3 would result in a *less-than-significant* impact.

Impact PFS-10: The General Plan Update would include fire protection/law enforcement facilities or require the construction/expansion of facilities which would have an adverse physical effect on the environment.

Impact Summary

Level of Significance Before Mitigation: <i>Potentially Significant</i>
Required Mitigation Measures: <i>Revised Policy PFS-1.4 “Standards of Approval” and the new Policy HS-8.12 “Noise Analysis”</i>
Level of Significance After Mitigation: <i>Significant and Unavoidable</i>

Impact Analysis

Implementation of the General Plan Update would result in additional County-wide residential and non-residential land use developments. This future development consistent with the General Plan Update would result in the need for increased fire protection/law enforcement facilities and/or infrastructure. The site specific impacts of these facilities cannot be determined until such time that the facilities are proposed and subject to their own site-specific environmental review. Typical impacts would likely be construction related noise, dust, grading and water pollution. The fact that storm drain infrastructure may be located near streams, ditches, or other surface water channels, would mean that impacts to fish and wildlife, erosion, and stream flow may also occur.

The General Plan Update includes several policies designed to address a variety of environmental impacts. Similar to any other development in areas of new growth, the construction of any future required fire protection/law enforcement infrastructure could also result in a variety of environmental impacts (i.e., conversion of existing open space/agricultural lands, noise, traffic, light/glare, etc.) that can not be mitigated. However, without definitive plans, it can not be determined at this time whether these impacts would be substantial and are therefore characterized as potentially significant. The General Plan Update includes several policies designed to minimize these impacts including the premature conversion or preservation of existing agricultural/open space lands (see Policies LU-2.1, LU-2.4, AG-1.7, and ERM-1.2), analysis of air quality emissions (see AQ-1.5), visual resources (see SL-1.1), and traffic impacts (see TC-1.15).

Additionally, there are also a number of specific policies in the Air Quality and Water Resources Elements that would help limit potential impacts related to the construction of needed fire protection/law enforcement infrastructure. Policy AQ-4.2 requires contractors to implement dust suppression measure during excavation, grading, and site preparation activities. Policy WR-1.10 discourages channel modification of streams and rivers where it would increase the rate of flow, rate of sediment transport, erosive capacity, or have adverse effect on aquatic life or modify necessary groundwater recharge. Policies WR-2.2, WR-2.3, and WR-2.4 relate specifically to monitoring construction activities through NPDES enforcement and requiring the use of Best Management Practices (BMPs) and other mitigation measures designed to protect surface water and groundwater from the adverse effects of construction activities and urban runoff in coordination with the Water Quality Control Board. However, even with implementation of the below mentioned policies, this impact is considered ***potentially significant***.

Land Use, Agriculture, and Transportation & Circulation Elements	Air Quality, Scenic Landscapes, Water Resources, and Environmental Resource Management Elements
Policies designed to minimize this impact through the development of new facilities that address all applicable public safety and environmental concerns include the following:	
LU-2.1 Agricultural Lands LU-2.4 Open Space Character LU-7.12 Historic Buildings and Areas AG-1.7 Preservation of Agricultural Lands TC-1.15 Traffic Impact Study	AQ-1.5 CEQA Compliance AQ-4.2 Dust Suppression Measures SL-1.1 Natural Landscapes WR-1.10 Channel Modification WR-2.2 NPDES Enforcement WR-2.3 Best Management Practices WR-2.4 Construction Site Sediment Control ERM-1.2 Development in Environmentally Sensitive Areas

Required Mitigation Measures

In addition to the above mentioned policies and implementation measures, the following revisions to Policy PFS-1.4 and the new Policy HS-8.12 “Noise Analysis” are required to address this impact:

- **PFS-1.4 Standards of Approval.** The County should not approve any development unless the following conditions are met:

 - The applicant can demonstrate all necessary infrastructure will be installed and adequately financed;
 - Infrastructure improvements are consistent with adopted County infrastructure plans and standards; ~~and~~
 - Funding mechanisms are provided to maintain, operate, and upgrade the facilities throughout the life of the project; *and*
 - *Facilities shall be developed in compliance with all applicable regulations designed to address public safety and environmental impacts that may result through the construction, operation, and maintenance of these facilities. [New/Revised Policy – Draft EIR Analysis].*
- **HS-8.12 Noise Analysis.** *The County shall require a detailed noise impact analysis in areas where current or future exterior noise levels from transportation or stationary sources have the potential to exceed the adopted noise policies of the Noise Element, where there are development of new noise sensitive land uses or the development of potential noise generating land uses near existing sensitive land uses. The noise analysis shall be the responsibility of the project applicant and be prepared by a qualified acoustical specialist. The analysis shall include recommendations and evidence to establish mitigation that will reduce noise exposure to acceptable levels. [New Policy – Draft EIR Analysis].*

As stated above, the County will continue to implement a variety of policies (including the revised Policy PFS-1.4 and the new Policy HS-8.12 “Noise Analysis”) designed to address the range of potential environmental impacts that may be associated with the construction and operation of future fire protection/law enforcement infrastructure. However, it should be noted, the ability to mitigate these potential impacts is contingent upon a variety of factors including the severity of the impact, existing land use conditions, and the technical feasibility of being able to implement any proposed mitigation measures. Due to these uncertainties, potential impacts resulting from the construction and/or expansion of any required public service/utility facilities or infrastructure remain **significant**. No additional feasible mitigation is currently available.

Significance after Implementation of Mitigation for Impact PFS-10

As stated above, no additional feasible mitigation measures are currently available to reduce this impact to a less than significant level. Consequently, this impact is considered *significant and unavoidable*.

Community Facilities

This section evaluates potential impacts to the provision of a variety of community facilities including schools, libraries, and other County administrative services resulting from implementation of the General Plan Update. No comments specific to community facilities were received during the NOP public scoping phase of the General Plan Update.

Environmental and Regulatory Setting

The General Plan Update included the preparation of several major documents including preparation of a very detailed Background Report, which serves to chronicle the existing environmental and regulatory setting conditions applicable to the County. A detailed discussion of County-wide community services and facilities can be found in the General Plan Background Report (see Appendix B, Section 7.9 “Schools”, Section 7.11 “Court Services,” Section 7.12 “Library Services,” Section 7.13 “Hospital and Ambulance Services,” and Section 7.14 “Social Services”).

Methodology

The assessment of community facilities is a qualitative review of the existing services available to the County and a determination of whether the General Plan Update includes adequate provisions to ensure continued service that meets acceptable standards.

Standards of Significance

The General Plan Update will establish development guidelines against which future projects will be judged for consistency. The significance criteria for this analysis were developed from criteria presented in Appendix G, “Environmental Checklist Form”, of the CEQA Guidelines and based on the professional judgment of the County of Tulare and its consultants. The project (or the project alternatives) would result in a significant impact if it would:

- Increase the need or use of existing school services or facilities such that substantial physical deterioration of the facility would occur or be accelerated.
- Include community services or facilities or require the construction or expansion of existing community facilities that might have an adverse physical effect on the environment.

Impacts and Mitigation Measures

Impact PFS-11: The General Plan Update would result in a substantial adverse physical impact to the continued provision of school services in the County

Impact Summary

Level of Significance Before Mitigation: <i>Potentially Significant</i>
Required Mitigation Measures: <i>New policy PFS-8.6 “School Funding” and revisions to Public Facilities and Services Implementation Measure #3</i>
Level of Significance After Mitigation: <i>Less-than-Significant</i>

Impact Analysis

As noted in the General Plan Background Report (see Appendix B of this EIR), a total of 48 school districts provide education throughout Tulare County. Of the 48 school districts, seven are unified school districts providing educational services for kindergarten through 12th grade. The remaining 41 districts consist of 36 elementary school districts and four high school districts. Many districts have only one school. Total enrolment in Tulare County public schools has increased from about 80,000 to 88,300 students during a nine-year span from 1993 to 2002. On average, the growth rate has remained steady with annual increases approximating two percent.

Implementation of the General Plan Update would result in an additional 261,979 residents through buildout of the General Plan Update. This increased population will result in increased student generation. Consequently, new facilities and personnel will be required in order to provide adequate service for future growth. The continued provision of adequate funding sources (i.e., developer fees, etc.) and the dedication of future school sites will be necessary to ensure continued development of future school facilities.

Policies and implementation measures included as part of the General Plan Update that address the need for additional school services are summarized below by draft General Plan element. For example, Policy PFS-8.1 requires the County to work with local school districts to develop solutions for overcrowded schools and financial constraints of constructing new facilities. Policies LU-6.1, LU-6.3, LU-6.4, require the County to coordinate the future planning, siting, and construction of new school facilities with the appropriate school district to ensure that adequate levels of service are maintained. Additionally, policy PFS-1.3 and Public Facilities and Services Implementation Measures #1, #2, and #3 provide for the funding mechanism to provide additional or expanded services in conjunction with new development. However, even with implementation of the below mentioned policies, this impact is considered *potentially significant*.

Economic Development, Environmental Resource Management, Planning Framework, and Scenic Landscapes Elements	Land Use and Public Facilities and Services Elements
Policies designed to minimize this impact through the continued provision of school services include the following:	
ED-4.2 Workforce Education ED-4.6 Vocational Training in Secondary Schools ERM-5.5 Co-located Facilities PF-5.2 Criteria for New Towns SL-3.1 Community Centers and Neighborhoods	LU-3.3 High-Density Residential Locations LU-5.6 Industrial Use Buffer LU-6.1 Public Activity Centers LU-6.3 Schools in Neighborhoods LU-6.4 Schools District Coordination PFS-1.3 Impact Mitigation PFS-8.1 Work with Local School Districts PFS-8.2 Joint Use Facilities and Programs PFS-8.3 Location of School Sites PFS-8.4 Library Facilities and Services
Public Facilities and Services Implementation Measures designed to ensure funding for County programs to provide adequate service levels.	
Public Facilities and Services Implementation Measure #1 Public Facilities and Services Implementation Measure #2 Public Facilities and Services Implementation Measure #3 Public Facilities and Services Implementation Measure #3A	

Required Mitigation Measures

In addition to the above mentioned policies, the following new policy PFS-8.6 “School Funding” and the following revisions to Public Facilities and Services Implementation Measure #3 are required to ensure that this impact is reduced to a less than significant level:

- PFS-8.6 School Funding.** To the extent allowed by State law, the County may require new projects to mitigate impacts on school facilities, in addition to the use of school fees. The County will also work with school districts, developers, and the public to evaluate alternatives to funding/providing adequate school facilities. *[New Implementation Program – Draft EIR Analysis]*.
- PFS Implementation Measure #3.** The County shall develop and adopt an impact fee program for new development to ensure the provision, operation, and on-going maintenance of appropriate public facilities and services (*including, but not limited to, fire stations and equipment, police stations and equipment, utility infrastructure, recreational and library facilities*). *[New Implementation Program – Draft EIR Analysis]*.

Significance after Implementation of Mitigation for Impact PFS-11

To the extent allowed by State law, the County will continue to ensure that future development projects mitigate impacts on school facilities. State law, however, does severely limit the County’s ability to require proponents of new development to mitigate the impacts of new student populations on existing school facilities. Under Government Code Section 65996, Tulare County is limited to charging the statutorily created school impact fee to offset impacts to local school districts generated by General Plan Updates. Section 65996 also prohibits the disapproval of development projects based on the inadequacy of school facilities. The statute further provides that, with payment of the state-mandated school impact fees, impacts on school facilities are

deemed to mitigate to less than significant levels. For these reasons, implementation of the General Plan Update including the adoption of the policies and implementation measures listed above (including the new policy PFS-8.6 “School Funding” and the revised Public Facilities and Services Implementation Measure #3) would result in a *less-than-significant* impact.

Impact PFS-12: The General Plan Update would result in a substantial adverse physical impact to the continued provision of library services in the County.

Impact Summary

Level of Significance Before Mitigation: <i>Potentially Significant</i>
Required Mitigation Measures: <i>Revised Public Facilities and Services Implementation Measure #3</i>
Level of Significance After Mitigation: <i>Less-than-Significant</i>

Impact Analysis

As noted in the General Plan Background Report (see Appendix B of this EIR), the Tulare County Public Library System is comprised of interdependent branches, grouped by services, geography and usage patterns to provide efficient and economical services to the residents of the county. At present, there are 14 small libraries and one main branch.

Implementation of the General Plan Update would increase the overall demand on library services to the County. Future growth in accordance with buildout of the General Plan Update is expected to generate additional demand on library services. New facilities, books, and personnel will be required in order to provide adequate service for future growth. Therefore, the County’s costs to build and maintain new facilities and personnel would also increase. However, the additional personnel and materials costs would be offset through the increased revenue, and fees, generated by future development. In addition, future projects will be reviewed by the County on an individual basis and will be required to comply with requirements (i.e., impact fees, etc.) in effect at the time building permits are issued.

Policies and implementation measures included as part of the General Plan Update that address the need for additional library and other community services are summarized below by draft General Plan element. For example, Policy PFS-8.4 indicates the County shall encourage expansion of library facilities and services as necessary to meet public needs. Policies ERM-5.5 and LU-6.1 indicate the County shall encourage the development of centrally located public activity centers that include parks, schools, libraries, and community centers in communities. Additionally, policy PFS-1.3 and Public Facilities and Services Implementation Measures #1, #2, #3 and #3A provide for the necessary funding mechanisms to provide additional or expanded services in conjunction with new development. However, even with implementation of the below mentioned policies, this impact is considered *potentially significant*.

Environmental Resource Management, Land Use and Planning Framework Elements	Public Facilities and Services Element
Policies designed to minimize this impact through the continued provision of community services include the following:	
ERM-5.5 Co-located Facilities LU-6.1 Public Activity Centers PF-5.2 Criteria for New Towns	PFS-1.3 Impact Mitigation PFS-8.4 Library Facilities and Services
Public Facilities and Services Implementation Measures designed to ensure funding for County programs to provide adequate service levels.	
Public Facilities and Services Implementation Measure #1 Public Facilities and Services Implementation Measure #2 Public Facilities and Services Implementation Measure #3 Public Facilities and Services Implementation Measure #3A	

Required Mitigation Measures

In addition to the above mentioned policies and implementation measures, the following revision to Public Facilities and Services Implementation Measure #3 is required to ensure that this impact is reduced to a less than significant level:

- PFS Implementation Measure #3.** The County shall develop and adopt an impact fee program for new development to ensure the provision, operation, and on-going maintenance of appropriate public facilities and services (*including, but not limited to, fire stations and equipment, police stations and equipment, utility infrastructure, recreational and library facilities*). [*New Implementation Program – Draft EIR Analysis*].

Significance after Implementation of Mitigation for Impact PFS-12

As stated above, the County will continue to ensure that future development projects mitigate impacts to the provision of adequate library and other community services through the various policies and implementation measures included in the General Plan. Therefore, implementation of the General Plan Update including the adoption of the policies and implementation measures listed above and the revised Public Facilities and Services Implementation Measure #3 would result in a *less-than-significant* impact.

Impact PFS-13: The General Plan Update would include community facilities or require the construction/expansion of facilities which would have an adverse physical effect on the environment.

Impact Summary

Level of Significance Before Mitigation: <i>Potentially Significant</i>
Required Mitigation Measures: <i>Revised Policy PFS-1.4 “Standards of Approval” and the new Policy HS-8.12 “Noise Analysis”</i>
Level of Significance After Mitigation: <i>Significant and Unavoidable</i>

Impact Analysis

Implementation of the General Plan Update would result in additional County-wide residential and non-residential land use developments. This future development consistent with the General Plan Update would result in the need for increased community facilities and/or infrastructure. The site specific impacts of these facilities cannot be determined until such time that the facilities are proposed and subject to their own site-specific environmental review. Typical impacts would likely be construction related noise, dust, grading and water pollution. The fact that storm drain infrastructure may be located near streams, ditches, or other surface water channels, would mean that impacts to fish and wildlife, erosion, and stream flow may also occur.

The General Plan Update includes several policies designed to address a variety of environmental impacts. Similar to any other development in areas of new growth, the construction of any future required community facilities could also result in a variety of environmental impacts (i.e., conversion of existing open space/agricultural lands, noise, traffic, light/glare, etc.) that can not be mitigated. However, without definitive plans, it can not be determined at this time whether these impacts would be substantial and are therefore characterized as potentially significant. The General Plan Update includes several policies designed to minimize these impacts including the premature conversion or preservation of existing agricultural/open space lands (see Policies LU-2.1, LU-2.4, AG-1.7, and ERM-1.2), analysis of air quality emissions (see AQ-1.5), visual resources (see SL-1.1), and traffic impacts (see TC-1.15).

Additionally, there are also a number of specific policies in the Air Quality and Water Resources Elements that would help limit potential impacts related to the construction of needed community facilities. Policy AQ-4.2 requires contractors to implement dust suppression measure during excavation, grading, and site preparation activities. Policy WR-1.10 discourages channel modification of streams and rivers where it would increase the rate of flow, rate of sediment transport, erosive capacity, or have adverse effect on aquatic life or modify necessary groundwater recharge. Policies WR-2.2, WR-2.3, and WR-2.4 relate specifically to monitoring construction activities through NPDES enforcement and requiring the use of BMPs and other mitigation measures designed to protect surface water and groundwater from the adverse effects of construction activities and urban runoff in coordination with the Water Quality Control Board. However, even with implementation of the below mentioned policies, this impact is considered *potentially significant*.

Land Use, Agriculture, and Transportation & Circulation Elements	Air Quality, Scenic Landscapes, Water Resources, and Environmental Resource Management Elements
Policies designed to minimize this impact through the development of new facilities that address all applicable public safety and environmental concerns include the following:	
LU-2.1 Agricultural Lands LU-2.4 Open Space Character LU-7.12 Historic Buildings and Areas AG-1.7 Preservation of Agricultural Lands TC-1.15 Traffic Impact Study	AQ-1.5 CEQA Compliance AQ-4.2 Dust Suppression Measures SL-1.1 Natural Landscapes WR-1.10 Channel Modification WR-2.2 NPDES Enforcement WR-2.3 Best Management Practices WR-2.4 Construction Site Sediment Control ERM-1.2 Development in Environmentally Sensitive Areas

Required Mitigation Measures

In addition to the above mentioned policies and implementation measures, the following revisions to Policy PFS-1.4 and the new Policy HS-8.12 “Noise Analysis” are required to address this impact:

- **PFS-1.4 Standards of Approval.** The County should not approve any development unless the following conditions are met:
 - The applicant can demonstrate all necessary infrastructure will be installed and adequately financed;
 - Infrastructure improvements are consistent with adopted County infrastructure plans and standards; ~~and~~
 - Funding mechanisms are provided to maintain, operate, and upgrade the facilities throughout the life of the project; *and*
 - *Facilities shall be developed in compliance with all applicable regulations designed to address public safety and environmental impacts that may result through the construction, operation, and maintenance of these facilities. [New/Revised Policy – Draft EIR Analysis].*
- **HS-8.12 Noise Analysis.** *The County shall require a detailed noise impact analysis in areas where current or future exterior noise levels from transportation or stationary sources have the potential to exceed the adopted noise policies of the Noise Element, where there are development of new noise sensitive land uses or the development of potential noise generating land uses near existing sensitive land uses. The noise analysis shall be the responsibility of the project applicant and be prepared by a qualified acoustical specialist. The analysis shall include recommendations and evidence to establish mitigation that will reduce noise exposure to acceptable levels. [New Policy – Draft EIR Analysis].*

As stated above, the County will continue to implement a variety of policies (including the revised Policy PFS-1.4 and the new Policy HS-8.12 “Noise Analysis”) designed to address the range of potential environmental impacts that may be associated with the construction and operation of future community facilities. However, it should be noted, the ability to mitigate these potential impacts is contingent upon a variety of factors including the severity of the impact, existing land use conditions, and the technical feasibility of being able to implement any proposed mitigation measures. Due to these uncertainties, potential impacts resulting from the construction and/or expansion of any required public service/utility facilities or infrastructure remain **significant**. No additional feasible mitigation is currently available.

Significance after Implementation of Mitigation for Impact PFS-13

As stated above, no additional feasible mitigation measures are currently available to reduce this impact to a less than significant level. Consequently, this impact is considered *significant and unavoidable*.

Energy Facilities

This section discusses energy consumption and addresses the potential for wasteful, inefficient, or unnecessary use of energy from implementation of the General Plan Update. As a result of comments (see Table 1-2 of Chapter 1.0 “Introduction”) received during the NOP public scoping phase of the General Plan Update, the following energy conservation issues have been considered as part of the impact analysis. For example, the Sierra Club: Kern-Kaweah Chapter suggested that the General Plan consider green building design, energy efficient buildings, and the use of solar panels along with other alternative energy sources.

Environmental and Regulatory Setting

The General Plan Update included the preparation of several major documents including preparation of a very detailed Background Report, which serves to chronicle the existing environmental and regulatory setting conditions applicable to the County. A detailed discussion of County-wide energy facilities and issues can be found in the General Plan Background Report (see Appendix B, Section 7.6 “Natural Gas and Electric Service”).

Methodology

The assessment of energy impacts is a qualitative analysis of the existing services available to the County and a determination of whether the General Plan Update includes adequate provisions to ensure continued service that meets acceptable standards.

Standards of Significance

The General Plan Update will establish development guidelines against which future projects will be judged for consistency. The significance criteria for this analysis were developed from criteria presented in Appendix G, “Environmental Checklist Form”, of the CEQA Guidelines and based on the professional judgment of the County of Tulare and its consultants. The project (or the project alternatives) would result in a significant impact if it would:

- Result in wasteful, inefficient, or unnecessary consumption of energy by residential, commercial, industrial, or public uses; and/or
- Result in the construction of additional energy infrastructure facilities, the construction of which could cause significant environmental effects.

Impacts and Mitigation Measures

Impact PFS-14: The General Plan Update would not result in the wasteful, inefficient, or unnecessary consumption of energy by residential, commercial, industrial, or public uses.

Impact Summary

Level of Significance Before Mitigation: <i>Less-than-Significant</i>
Required Mitigation Measures: <i>No mitigation required</i>
Level of Significance After Mitigation: <i>Not applicable</i>

Impact Analysis

As noted in the General Plan Background Report (see Appendix B of this EIR), Southern California Edison provides electric service to the majority of Tulare County, including the majority of the San Joaquin Valley and the foothills. Natural gas service is primarily provided by The Gas Company (formerly Southern California Gas Company). Pacific Gas & Electric also serves northern Tulare County's electric needs on limited basis. The electrical facilities network includes both overhead and underground lines, with new development required to install underground service lines.

Implementation of the General Plan Update is projected to increase the County's population by approximately 107,000 new residents by 2030, which will increase the demand for additional energy. The development of new residential, commercial, and industrial uses will also contribute to the need for additional energy supplies and utility infrastructure. However, all utility providers indicate that additional service should be available for new development, depending on the necessary load of the services requested (see Appendix B "General Plan Background Report").

Policies and implementation measures included as part of the General Plan Update that would address the need for additional public utilities are summarized below by General Plan Element. Policies AQ-3.5, LU-7.15 and ERM-4.1 through ERM-4.4 promote the continued participation in energy conservation programs and the promotion of energy conservation measures including the use of solar power, planting of shade trees, the use of green building techniques, and cool roofs. With implementation of the below mentioned policies, this impact is considered *less-than-significant*.

Air Quality, Land Use, and Public Services and Facilities Elements	Environmental Resource Management Element
Policies designed to minimize this impact through the conservation of existing energy supplies include the following:	
AQ-3.5 Alternative Energy Design LU-7.15 Energy Conservation PFS-1.3 Impact Mitigation	ERM-4.1 Energy Conservation and Efficiency Measures ERM-4.2 Streetscape and Parking Area Improvements for Energy Conservation ERM-4.3 Local and State Programs ERM-4.4 Promote Energy Conservation Awareness

Required Mitigation Measures

This impact is considered *less-than-significant*. No additional mitigation measures are required.

Impact PFS-15: The General Plan Update may require the construction or expansion of additional energy infrastructure facilities, the construction of which could cause significant environmental effects.

Impact Summary

Level of Significance Before Mitigation: <i>Potentially Significant</i>
Required Mitigation Measures: <i>Revised Policy PFS-1.4 “Standards of Approval” and the new Policy HS-8.12 “Noise Analysis”</i>
Level of Significance After Mitigation: <i>Significant and Unavoidable</i>

Impact Analysis

Similar to any other development in areas of new growth, the construction of any future required utility infrastructure could also result in a variety of environmental impacts (i.e., conversion of existing open space/agricultural lands, odors, noise, traffic, light/glare, etc.) that can not be mitigated. However, without definitive plans, it can not be determined at this time whether these impacts would be substantial and are therefore characterized as potentially significant. The General Plan Update includes several policies designed to minimize these impacts including the premature conversion or preservation of existing agricultural/open space lands (see Policies LU-2.1, LU-2.4, AG-1.7, and ERM-1.2), analysis of air quality emissions (see AQ-1.5), visual resources (see SL-1.1), and traffic impacts (see TC-1.15).

Additionally, there are also a number of specific policies in the Air Quality and Water Resources Elements that would help limit potential impacts related to the construction of needed utility infrastructure. Policy AQ-4.2 requires contractors to implement dust suppression measure during excavation, grading, and site preparation activities. Policy WR-1.10 discourages channel modification of streams and rivers where it would increase the rate of flow, rate of sediment transport, erosive capacity, or have adverse effect on aquatic life or modify necessary groundwater recharge. Policies WR-2.2, WR-2.3, and WR-2.4 relate specifically to monitoring construction activities through NPDES enforcement and requiring the use of BMPs and other mitigation measures designed to protect surface water and groundwater from the adverse effects of construction activities and urban runoff in coordination with the Water Quality Control Board. However, even with implementation of the below mentioned policies, this impact is considered *potentially significant*.

Land Use, Agriculture, and Transportation & Circulation Elements	Air Quality, Scenic Landscapes, Water Resources, and Environmental Resource Management Elements
Policies designed to minimize this impact through the development of new facilities that address all applicable public safety and environmental concerns include the following:	
LU-2.1 Agricultural Lands LU-2.4 Open Space Character LU-7.12 Historic Buildings and Areas AG-1.7 Preservation of Agricultural Lands TC-1.15 Traffic Impact Study	AQ-1.5 CEQA Compliance AQ-4.2 Dust Suppression Measures SL-1.1 Natural Landscapes WR-1.10 Channel Modification WR-2.2 NPDES Enforcement WR-2.3 Best Management Practices WR-2.4 Construction Site Sediment Control ERM-1.2 Development in Environmentally Sensitive Areas

Required Mitigation Measures

In addition to the above mentioned policies and implementation measures, the following revisions to Policy PFS-1.4 and the new Policy HS-8.12 “Noise Analysis” are required to address this impact:

- **PFS-1.4 Standards of Approval.** The County should not approve any development unless the following conditions are met:
 - The applicant can demonstrate all necessary infrastructure will be installed and adequately financed;
 - Infrastructure improvements are consistent with adopted County infrastructure plans and standards; ~~and~~
 - Funding mechanisms are provided to maintain, operate, and upgrade the facilities throughout the life of the project; *and*
 - *Facilities shall be developed in compliance with all applicable regulations designed to address public safety and environmental impacts that may result through the construction, operation, and maintenance of these facilities. [New/Revised Policy – Draft EIR Analysis].*
- **HS-8.12 Noise Analysis.** *The County shall require a detailed noise impact analysis in areas where current or future exterior noise levels from transportation or stationary sources have the potential to exceed the adopted noise policies of the Noise Element, where there are development of new noise sensitive land uses or the development of potential noise generating land uses near existing sensitive land uses. The noise analysis shall be the responsibility of the project applicant and be prepared by a qualified acoustical specialist. The analysis shall include recommendations and evidence to establish mitigation that will reduce noise exposure to acceptable levels. [New Policy – Draft EIR Analysis].*

As stated above, the County will continue to implement a variety of policies (including the revised Policy PFS-1.4 and the new Policy HS-8.12 “Noise Analysis”) designed to address the range of potential environmental impacts that may be associated with the construction and

operation of any required County utility infrastructure. However, it should be noted, the ability to mitigate these potential impacts is contingent upon a variety of factors including the severity of the impact, existing land use conditions, and the technical feasibility of being able to implement any proposed mitigation measures. Due to these uncertainties, potential impacts resulting from the construction and/or expansion of any required County public service/utility facilities or infrastructure remain *significant*. No additional feasible mitigation is currently available.

Significance after Implementation of Mitigation for Impact PFS-15

As stated above, no additional feasible mitigation measures are currently available to reduce this impact to a less than significant level. Consequently, this impact is considered *significant and unavoidable*.